29.—FORESTS AND FOREST PRODUCTS

[Data in this section relate to continental United States only except those for national forests which include Alaska, or Alaska and Puerto Rico, as indicated]

No. 656.—FORESTS: Estimated Original Area, Area in 1930, Stand of Saw Timber, and Annual Growth, 1930, by Regions

Note.—Data in the following table are necessarily approximate. The original area and area in 1930 refer only to land capable of producing commercial timber in commercial quantities, and do not include the low-grade woodland and scrub; the 11,000,000 acres in parks, monuments, etc., are excluded from the forest area in 1930. Annual growth relates to acreage specified as growing area, other areas having no growth in excess of decay

Region	Original area (thousand acres)	Area (thousand acres), 1930						
		Total	Saw timber			Cordwood	Fair to satisfactory restocking	Poor to nonrestocking
			Total	Old growth	Second growth			
Total	**816,158**	**494,898**	**188,645**	**98,855**	**89,790**	**120,881**	**102,073**	**83,299**
New England [1]	38,908	27,273	13,860	7,976	5,884	4,843	6,145	2,425
Middle Atlantic [2]	69,610	27,139	7,294	26	7,268	10,518	5,998	3,329
Lake [3]	104,320	55,895	5,095	2,664	2,431	8,880	28,165	13,755
Central [4]	163,840	64,249	21,224	1,664	19,560	25,592	12,245	5,188
South [5]	298,640	190,758	57,265	14,338	42,927	52,702	37,236	43,555
Pacific coast [6]	77,120	66,685	44,140	38,892	5,248	6,683	6,190	9,672
North Rocky Mountain [7]	33,490	32,329	17,026	15,172	1,854	5,704	5,933	3,666
South Rocky Mountain [8]	30,230	30,570	22,741	18,123	4,618	5,959	161	1,709

Region	Stand of saw timber (millions of board feet), 1930			Annual growth of usable material on commercial forest areas, 1930					
				Combined saw-timber and cordwood growth (millions of cubic feet)			Saw-timber growth (millions of board feet)		
	Total	Softwoods	Hardwoods	Total	Softwoods	Hardwoods	Total	Softwoods	Hardwoods
Total	**1,667,803**	**1,485,850**	**181,953**	**8,912**	**4,810**	**4,102**	**11,731**	**8,311**	**3,420**
New England [1]	57,875	32,811	25,064	427	162	265	764	410	354
Middle Atlantic [2]	26,150	8,245	17,905	634	114	520	575	172	403
Lake [3]	35,887	9,193	26,694	644	167	477	116	12	104
Central [4]	34,622	2,900	31,722	1,128	83	1,045	727	41	686
South [5]	199,297	121,449	77,848	4,784	2,994	1,790	6,799	4,946	1,853
Pacific coast [6]	1,041,628	1,038,909	2,719	680	675	5	1,785	1,765	20
North Rocky Mountain [7]	146,388	146,388	----------	416	416	--------	576	576	--------
South Rocky Mountain [8]	125,956	125,955	1	199	199	--------	389	389	--------

[1] Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut.
[2] New York, New Jersey, Pennsylvania, Delaware, and Maryland.
[3] Michigan, Wisconsin, Minnesota, and North Dakota.
[4] Ohio, Indiana, Illinois, West Virginia, Kentucky, Tennessee, Iowa, and Missouri. Data for Kansas and Nebraska are not available, but these omissions from the central region estimates are unimportant.
[5] Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Arkansas, Louisiana, Texas, and Oklahoma.
[6] California, Oregon, and Washington.
[7] Idaho and Montana.
[8] Wyoming, Colorado, South Dakota, New Mexico, Arizona, Utah, and Nevada.

Source: Forest Service, Department of Agriculture.

No. 657.—STAND OF SAW TIMBER (ESTIMATED): By Region and Kind of Wood, 1930

[Quantity in millions of board feet]

Kind of wood	Total	New England	Middle Atlantic	Lake	Central	South	Pacific coast	North Rocky Mountain	South Rocky Mountain
Grand total	**1,667,803**	**57,875**	**26,150**	**35,887**	**34,622**	**199,297**	**1,041,628**	**146,388**	**125,956**
Eastern hardwoods, total	**179,233**	**25,064**	**17,905**	**26,694**	**31,722**	**77,848**			
Oak	60,753	1,048	4,783	6,017	16,315	32,590			
Birch, beech, and maple	49,943	20,973	8,555	13,459	4,401	2,555			
Red gum	15,488		71		874	14,543			
Tupelo	6,342				116	6,226			
Yellow poplar	5,172	18	203		1,635	3,316			
Cottonwood and aspen	4,437	2,022	20	887	222	1,286			
Others	37,098	1,003	4,273	6,331	8,159	17,332			
Eastern softwoods, total	**174,598**	**32,811**	**8,245**	**9,198**	**2,900**	**121,449**			
Southern yellow pine	118,132		597		1,433	116,102			
Spruce and fir	21,533	18,720	1,564	843	175	231			
White and Norway pine	14,672	8,390	3,530	2,392	159	201			
Hemlock	12,198	3,675	2,462	4,612	765	684			
Cypress	4,140				263	3,877			
Others	3,923	2,026	92	1,346	105	354			
Western hardwoods, total	**2,720**						**2,719**		**1**
Western softwoods, total	**1,311,252**						**1,038,909**	**146,388**	**125,955**
Douglas fir	530,197						484,138	33,933	12,126
Western yellow pine	251,560						178,051	31,938	41,571
True firs	131,933						109,196	14,594	8,143
Western hemlock	86,464						86,464		
Spruce	61,582						12,782	12,513	36,287
Redwood	57,233						57,233		
Lodgepole pine	43,276						2,143	14,556	26,577
Sugar pine	35,516						35,516		
Western larch	26,118						8,043	18,075	
Western white pine	19,508						3,944	15,564	
Others	67,865						61,399	5,215	1,251

No. 658.—NATIONAL FORESTS: Area and Standing Timber

Note.—In October 1934 it was estimated that there were 17,000,000 acres of State forests, including forest preserves of New York, Hawaiian and Puerto Rican forest reserves, State parks, and other forest lands belonging to States; also 5,000,000 acres of municipal and county forests and parks

State	Net area, 145 forests, June 30, 1934 (acres)	Standing timber, Dec. 31, 1930	
		Saw timber (million board feet)	Cordwood on cordwood area (1,000 cords)
Total	**162,591,124**	**633,340**	**149,142**
Cont'l U.S.	**141,236,381**	**552,465**	**141,526**
Alabama	[1] 135,248	254	5
Arizona	11,388,053	14,059	
Arkansas	[1] 1,296,305	1,442	
California	19,175,640	102,251	62
Colorado	13,543,050	38,251	8,495
Florida	[1] 594,907	171	702
Georgia	[1] 346,502	398	554
Idaho	19,620,454	58,275	21,191
Illinois	10,710		
Louisiana	78,395	5	62
Maine	33,781	52	
Michigan	[1] 649,781	85	160
Minnesota	[1] 1,195,645	1,104	4,458
Montana	16,127,836	30,565	57,680
Nebraska	206,026		
Nevada	4,985,104	228	18
New Hampshire	500,955	1,067	1,253
New Mexico	8,544,053	9,028	
North Carolina	[1] [2] 447,052	503	1,080
Oklahoma	122,268		
Oregon	13,434,222	152,638	16,113
Pennsylvania	[1] 372,584	94	608
South Carolina	48,247	103	90
South Dakota	1,072,095	2,910	1,635
Tennessee	[1] 392,343	369	263
Utah	7,523,763	7,283	681
Vermont	31,381		
Virginia	[1] 610,963	777	3,470
Washington	9,607,280	102,309	12,525
West Virginia	332,380	75	480
Wisconsin	[1] 328,094	11	15
Wyoming	8,481,264	28,158	9,926
Alaska	21,342,300	80,875	7,616
Puerto Rico	12,443		

[1] Includes acreage actually acquired under the Weeks law, as amended by the Clarke-McNary law.
[2] Includes 8,394 acres transferred from the Treasury Department.

Source of tables 657 and 658: Forest Service, Department of Agriculture.

No. 659.—NATIONAL FORESTS: Acreage of Land Acquired or Approved for Purchase Under the Weeks Law, as Amended by the Clarke-McNary Law, to June 30, 1934

State and national forest or purchase unit	Total	Area approved for purchase	Area acquired
Total	9,589,213	4,495,772	5,093,441
Cont'l U. S.	9,587,305	4,493,864	5,093,441
Alabama: Alabama	125,524	7,985	117,539
Arkansas, total	660,917	310,594	350,323
Ouachita (part)	380,740	188,035	192,705
Ozark	280,177	122,559	157,618
Florida, total	528,074	281,651	246,423
Apalachicola	252,833	252,833	
Choctawhatchee	77,751	4,254	73,497
Ocala	43,063	17,480	25,583
Osceola	154,427	7,084	147,343
Georgia, total	401,523	55,033	346,490
Cherokee (part)	252,929	51,688	201,241
Nantahala (part)	148,594	3,345	145,249
Illinois, total	40,546	40,546	
Illini	24,497	24,497	
Shawnee	16,049	16,049	
Kentucky: Cumberland	144,123	143,934	189
Louisiana, total	379,407	288,150	91,257
Catahoula	227,403	166,973	60,430
Evangeline	57,512	44,650	12,862
Kisatchie	24,415	6,450	17,965
Vernon	70,077	70,077	
Maine: White Mountain (part)	37,616	3,835	33,781
Michigan, total	968,334	593,424	374,910
Hiawatha	272,023	181,519	90,504
Huron	123,953	26,603	97,350
Manistee	119,317	119,317	
Marquette	170,483	95,816	74,667
Ottawa	282,558	170,169	112,389
Minnesota, total	538,048	311,808	226,240
Chippewa	137,230	136,793	437
Mesaba	100,691	51,560	49,131
Superior	300,127	123,455	176,672
Mississippi, total	670,018	531,386	138,632
Biloxi	108,405	108,405	
Bienville	85,917	85,917	
Chickasawhay	122,611	122,611	
Holly Springs	50,697	50,697	
Homochitto	127,009	68,016	58,993
Leaf River	174,115	94,476	79,639
Mississippi—Cont'd.			
McNeil Experimental Forest	1,264	1,264	
Missouri, total	359,214	348,771	10,443
Clark	146,653	146,653	
Fristoe	140,008	129,565	10,443
Gardner	8,068	8,068	
Gasconade	43,055	43,055	
Pond Fork	12,383	12,383	
Wappapello	9,047	9,047	
New Hampshire: White Mountain (part)	621,952	120,997	500,955
North Carolina, total	474,409	35,821	438,588
Cherokee (part)	11,570	3,193	8,377
Nantahala (part)	166,798	16,448	150,350
Pisgah (part)	296,041	16,180	279,861
Oklahoma: Ouachita (part)	136,334	75,546	60,788
Pennsylvania: Allegheny	401,003	26,372	374,631
South Carolina, total	244,358	154,721	89,637
Nantahala (part)	49,254	1,007	48,247
Wambaw	195,104	153,714	41,390
Tennessee, total	415,600	23,261	392,339
Cherokee (part)	208,209	2,683	205,526
Pisgah (part)	40,083	2,908	37,175
Unaka (part)	167,308	17,670	149,638
Vermont: Green Mountain	64,397	33,016	31,381
Virginia, total	701,842	91,014	610,828
George Washington (part)	573,360	26,089	547,271
Monongahela (part)	44,898	34,484	10,414
Unaka (part)	83,584	30,441	53,143
West Virginia, total	652,671	320,291	332,380
George Washington (part)	85,315	15,191	70,124
Monongahela (part)	567,356	305,100	262,256
Wisconsin, total	1,021,395	695,708	325,687
Chequamegon	591,604	370,379	221,225
Nicolet	429,791	325,329	104,462
Puerto Rico: Luquillo	1,908	1,908	

Source: Forest Service, Department of Agriculture.

No. 660.—NATIONAL FORESTS: Summary of Operations

Note.—Data for revenue for all years and for the first three items for 1933 are for fiscal years ended June 30; all other data are for calendar years. Figures include data for national forests in Alaska

Item	1928	1929	1930	1931	1932	1933	1934
Timber sales:							
Number	13,791	13,864	15,093	15,873	14,362	14,268	16,433
Quantity ... M ft.[1]	[2]2,689,916	1,050,894	[3]3,370,417	605,306	352,584	356,792	462,089
Timber cut under sales ... do	1,336,614	1,421,188	1,254,963	793,816	383,721	389,500	598,751
Free timber given:							
Number of users	38,165	42,135	53,930	81,618	125,472	134,038	113,821
Timber cut ... M ft.[1]	82,442	86,768	116,096	167,680	270,244	265,812	248,243
Value ... dolls	90,111	97,518	116,786	162,017	226,947	237,044	210,175
Grazing, kinds of stock:[3]							
Cattle ... No	1,335,903	1,322,465	1,315,882	1,338,373	1,361,160	1,366,538	1,389,387
Goats ... do	17,070	15,487	13,496	14,645	12,438	11,045	9,124
Swine ... do	1,206	853	540	431	528	533	314
Horses ... do	51,956	48,171	41,961	37,335	35,105	31,797	29,549
Sheep ... do	6,497,081	6,650,719	6,700,846	6,593,583	6,308,500	6,150,921	6,151,489

For footnotes see next page.

No. 660.—National Forests: Summary of Operations—Continued

Item	1928	1929	1930	1931	1932	1933	1934
Revenue, total ... dolls.	5,441,601	6,299,802	6,751,553	4,993,320	2,294,247	2,626,049	3,314,691
From—							
Timber [4] ... do.	3,325,245	4,108,595	4,389,893	2,607,618	1,049,108	782,808	1,522,356
Water power ... do.	101,798	113,228	107,493	112,308	116,352	00,192	124,946
Special uses ... do.	285,684	287,119	300,257	301,712	293,157	278,182	297,831
Grazing ... do.	1,713,730	1,740,290	1,942,914	1,960,642	829,960	1,498,209	1,358,688
All other ... do.	15,144	50,570	10,996	11,040	5,670	6,658	10,870

[1] Board measure.
[2] Amount sold is to be cut during a period of years; hence greater than amount cut in these years.
[3] Number actually grazed under permit.
[4] Includes receipts from timber and turpentine sales, timber settlement and trespass.

Source: Forest Service, Department of Agriculture.

No. 661.—FOREST FIRES: Area, Number, and Damage

Note.—Data were compiled from reports by the National Forest Supervisors and from those of cooperating States. Figures for fires on national parks were excluded prior to 1931 and on Indian reservations prior to 1932

Year	Area needing protection	Area protected	Area unprotected [1]	Number of fires		Area burned		Damage [2]	
				On protected area	On unprotected area [1]	On protected land	On unprotected land [1]	On protected area	On unprotected area [1]
	1,000 acres	*1,000 acres*	*1,000 acres*			*1,000 acres*	*1,000 acres*	*1,000 dollars*	*1,000 dollars*
1928	555,822	367,605	188,216	39,260	136,674	4,111	39,431	8,447	74,096
1929	[3] 599,565	[3] 395,675	203,890	44,076	90,819	4,876	41,354	14,139	87,917
1930	607,921	399,142	208,779	70,832	120,148	5,809	46,457	14,597	51,371
1931	617,324	400,783	216,541	62,174	125,040	6,406	45,200	17,018	50,069
1932	625,865	405,248	220,617	60,500	105,899	3,652	38,410	7,879	45,581
1933	661,619	442,955	218,664	53,287	87,435	3,723	40,167	17,318	42,957
1934	674,704	465,146	209,558	69,318	93,345	4,173	37,648	8,100	37,273

[1] Figures are based upon partial information only, from incomplete reports. Reliable data are not available prior to organized protection.
[2] Figures do not take into account the vast amount of intangible and indirect damage resulting from forest fires, such as that through decay of damaged timbers, replacements of desirable species of trees by less desirable but more fire-resistant ones, soil deterioration and erosion, loss of wild life, uncertain stream flow, interrupted tourist traffic, and the like.
[3] The increase in total acreage is primarily nonforest land.

Source: Forest Service, Department of Agriculture.

No. 662.—FOREST FIRES: Number, Area Burned, and Damage, by Causes, Protected Areas Only

Year	Lightning	Railroads	Campers	Smokers	Débris burning	Incendiary	Lumbering	Miscellaneous	Unknown
Number of fires:									
1929	4,312	3,652	3,837	9,507	5,337	7,930	1,839	4,165	3,497
1930	5,217	4,625	5,011	17,460	9,180	14,394	1,626	6,987	6,332
1931	3,784	2,966	5,287	14,579	7,454	15,472	1,082	6,256	5,294
1932	3,399	2,383	4,969	15,538	7,582	16,410	583	5,337	4,299
1933	3,347	2,182	4,098	14,707	6,859	12,097	801	5,929	3,267
1934	6,229	3,070	4,595	15,806	9,632	17,515	902	5,929	5,640
Area burned (acres):									
1929	355,940	119,060	319,480	807,340	585,940	1,652,870	359,420	447,010	229,260
1930	106,630	259,120	294,960	1,044,460	736,460	1,766,090	175,540	623,310	802,250
1931 [1]	221,160	141,580	396,830	927,620	644,910	2,224,570	146,900	1,002,420	672,350
1932 [1]	29,460	59,190	413,310	554,530	423,680	1,493,760	60,280	304,560	270,150
1933 [1]	36,530	79,640	253,150	574,430	383,850	995,240	326,440	585,790	229,110
1934 [1]	401,500	133,150	162,420	568,000	637,410	1,445,060	118,720	380,300	222,700
Damage (dollars):									
1929 [1]	1,723,920	580,410	784,450	2,358,440	859,440	3,732,750	2,401,950	1,144,030	500,530
1930 [1]	331,720	1,005,450	572,310	2,344,420	1,706,590	2,934,020	449,880	1,639,630	3,200,570
1931 [1]	1,660,310	769,260	825,190	1,936,000	1,243,060	4,786,410	888,690	3,185,610	1,237,420
1932 [1]	41,270	156,230	784,180	1,794,700	942,360	2,082,140	87,910	537,220	988,670
1933 [1]	68,240	246,520	388,960	888,500	586,940	3,138,280	10,505,210	840,550	388,710
1934 [1]	453,350	286,080	322,550	2,186,230	970,760	2,053,170	320,080	770,550	482,880

[1] Totals by causes for these years are less than total area burned or total damage, shown in tables 661 and 663 because of incomplete reports. See also note 2, Table 661, regarding data for damage.

Source: Forest Service, Department of Agriculture.

No. 663.—FOREST FIRES: Classification of Area Burned and Damage, Protected Areas Only

AREA BURNED

Year	Productive forest (acres)			Nonproductive area (acres)				Grand total (acres)
	Mature or merchantable	Young growth	Total	Protection		No protection or forest value	Total	
				Forest	Other			
1928	746, 250	2, 028, 550	2, 774, 800	78, 370	1, 165, 180	92, 340	1, 335, 890	4, 110, 690
1929	953, 720	2, 337, 580	3, 291, 300	340, 750	855, 470	388, 800	1, 585, 020	4, 876, 320
1930	1, 322, 160	3, 399, 800	4, 721, 960	65, 870	759, 180	262, 310	1, 087, 360	5, 809, 320
1931	1, 272, 470	2, 874, 690	4, 147, 160	278, 710	1, 577, 950	402, 050	2, 258, 710	6, 405, 870
1932	726, 730	2, 054, 720	2, 781, 450	136, 430	561, 570	172, 760	870, 760	3, 652, 210
1933	816, 560	1, 937, 080	2, 753, 640	71, 460	626, 710	271, 110	969, 280	3, 722, 920
1934	874, 770	2, 044, 660	2, 919, 430	889, 320		364, 290	1, 253, 610	4, 173, 040

DAMAGE [1]

Year	Timber	Reproduction	Forage	Other	Total	Protection forest value	Grand total
1928	$2, 463, 050	$2, 551, 130	$612, 660	$2, 305, 690	$7, 932, 530	$514, 310	$8, 446, 840
1929	5, 965, 850	3, 664, 750	403, 100	2, 911, 650	12, 945, 350	1, 193, 200	14, 138, 550
1930	5, 895, 240	6, 007, 200	325, 690	1, 771, 100	13, 999, 230	598, 050	14, 597, 280
1931	6, 821, 070	5, 491, 850	215, 820	2, 751, 750	15, 280, 490	1, 737, 610	17, 018, 100
1932	2, 760, 770	2, 577, 800	125, 970	1, 831, 030	7, 295, 570	583, 920	7, 879, 490
1933	12, 189, 920	3, 295, 840	146, 600	1, 287, 000	16, 919, 360	399, 080	17, 318, 440
1934	2, 747, 450	2, 992, 190	164, 850	1, 334, 540	7, 239, 030	861, 230	8, 100, 350

[1] See footnote 2, table 661.

No. 664.—ESTIMATED QUANTITY OF TIMBER REMOVED ANNUALLY FROM FORESTS

Note.—Data, except for timber destroyed by disease, insects, etc., are based upon the average of the years 1925–1929; timber destroyed by disease, insects, etc., average of the years 1919–1929

Product and waste	Unit of measure	Quantity in thousands	Total volume removed, including cordwood [1] (M cubic feet)	Equivalent in lumber which could have been sawed from total volume removed (M feet b. m.)		
				Total	Softwoods	Hardwoods
Aggregate			**16, 306, 207**	**59, 133, 839**	**44, 254, 914**	**14, 878, 925**
Products, total			**14, 495, 308**	**54, 641, 444**	**40, 228, 682**	**14, 412, 762**
Lumber	Foot, b.m.[2]	38, 000, 000	7, 371, 372	38, 000, 000	30, 957, 920	7, 042, 080
Fuelwood	Cord	61, 266	4, 002, 635	7, 047, 000	4, 146, 000	2, 901, 000
Ties, hewed	Piece	53, 215	633, 034	2, 025, 165	835, 553	1, 189, 612
Fence posts	do	395, 946	628, 836	1, 299, 459	654, 438	645, 021
Pulpwood	Cord	5, 336	588, 666	1, 473, 620	1, 316, 815	156, 805
Mine timbers (round)	Cu. ft	184, 875	231, 780	155, 988	43, 626	112, 362
Veneer logs	Foot, l. s	920, 034	230, 607	1, 033, 708	332, 691	701, 017
Slack staves	Piece	979, 610	109, 345	487, 861	179, 780	308, 081
Slack heading	Set	67, 766	42, 452	203, 016	129, 737	73, 279
Slack hoops	Piece	138, 939	10, 053	41, 626		41, 626
Logs and bolts in manufactures.	Foot, l. s	593, 328	156, 575	677, 960	109, 443	568, 517
Tight staves	Piece	307, 167	97, 116	460, 378	224, 822	235, 556
Tight heading	Set	26, 609	43, 733	199, 372	74, 138	125, 234
Shingles	Piece	6, 298, 100	138, 558	629, 810	629, 810	
Export logs and hewn timbers.	Foot, l. s	307, 570	60, 514	340, 535	320, 503	20, 032
Poles	Piece	3, 443	37, 571	149, 374	131, 859	17, 515
Distillation wood	Cord	1, 283	36, 367	88, 970	11, 300	77, 670
Piling	Piece	1, 363	28, 978	141, 527	108, 497	33, 030
Tanning extract wood	Cord	418	26, 173	118, 950		118, 950
Excelsior wood	do	179	20, 943	67, 125	21, 750	45, 375
Destroyed by fire			870, 690	1, 390, 233	1, 250, 948	139, 285
Destroyed by disease, insects, wind, and drought.			940, 209	3, 102, 162	2, 775, 284	326, 878

[1] The cordwood data in this item include trees of less than saw-timber size on saw-timber and cordwood areas.

[2] Lumber tally measure.

Source of tables 663 and 664: Forest Service, Department of Agriculture. Data in table 664 are based in part upon forest products statistics of the Bureau of the Census, Department of Commerce.

No. 665.—LUMBER: Reported Production, by Species, and Average Value

Note.—For 1889, 1914, 1921, 1923, 1925, and 1927 custom mills are excluded and beginning with 1911 for each year except 1919 mills cutting less than 50,000 board feet are excluded. Custom mills are much less important in recent years than formerly

[Quantities in millions of board feet; average mill values per 1,000 board feet]

Year (calendar)	Production			Average mill value	Year (calendar)	Production			Average mill value
	Total	Hardwood	Softwood			Total	Hardwood	Softwood	
1869	12,756			(1)	1922	31,569	4,925	26,644	$26.15
1879	18,091			(1)	1923	37,166	6,262	30,904	31.78
1889	23,842			$11.41	1924	35,931	6,525	29,406	28.57
1899	[2]35,078	8,634	26,146	11.13	1925	38,339	6,628	31,710	28.02
1909	44,510	10,613	33,897	15.38	1926	36,936	6,467	30,469	27.34
1912	39,158	8,632	30,526	15.35	1927	34,532	6,090	28,442	25.80
1913	38,387	8,084	30,303	(1)	1928	34,142	5,797	28,345	25.61
1914	37,346	7,939	29,407	(1)	1929	36,886	7,073	29,813	26.94
1915	37,012	7,527	29,485	14.04	1930	26,051	4,729	21,323	22.81
1916	39,807	8,475	31,332	15.32	1931	16,523	2,671	13,852	18.56
1917	35,831	6,657	29,174	20.32	1932	10,151	1,406	8,746	15.12
1918	31,890	6,223	25,667	24.79	1933	13,961	2,062	11,899	18.55
1919	34,552	7,145	27,407	30.21					
1920	33,799	6,989	26,810	38.42					
1921	26,961	4,775	22,186	23.47					

Species	Production by species								
	1899	1909	1919	1927	1929	1930	1931	1932	1933
Softwoods:									
Yellow pine	9,659	16,277	13,063	10,891	11,630	7,450	4,430	3,069	4,446
Douglas fir	1,737	4,856	5,902	8,443	8,689	6,453	4,648	2,904	3,969
White pine	7,742	3,900	1,724	1,344	1,248	1,109	716	433	532
Hemlock	3,421	3,051	1,755	2,071	2,099	1,517	960	337	416
Ponderosa pine (Western yellow pine)	945	1,500	1,755	2,799	3,288	2,594	1,822	1,288	1,690
Spruce	1,442	1,749	980	529	564	442	234	156	198
Cypress	496	956	656	610	532	491	332	165	158
Redwood	360	522	410	570	486	403	211	136	164
Cedar	233	346	332	306	309	238	150	86	111
Larch	51	421	388	288	245	174	85	50	48
White fir		89	223	280	307	207	121	52	67
Sugar pine	54	97	134	282	349	205	106	48	85
Balsam fir		109	68	16	38	8	11	4	3
Lodgepole pine		24	16	13	31	30	25	19	12
All other softwood	9								
Hardwoods:									
Oak	4,438	4,414	2,708	2,013	2,574	1,662	954	516	698
Maple	633	1,107	857	774	824	601	328	160	221
Gum, red and sap	285	707	851	1,101	1,104	694	343	202	386
Yellow poplar	1,115	859	329	335	436	258	172	86	111
Chestnut	207	664	546	264	268	151	89	48	50
Birch	133	452	375	327	374	284	172	73	81
Beech		511	359	154	187	138	81	42	44
Basswood	308	399	184	146	133	96	57	21	37
Elm	457	347	194	161	176	110	57	20	33
Cottonwood	415	266	144	104	165	158	77	49	108
Ash	269	291	155	137	152	116	68	34	54
Hickory	97	334	170	52	57	30	14	8	11
Tupelo		97	144	267	307	254	135	89	123
Walnut	39	46	39	65	72	36	23	9	22
Sycamore	30	57	28	29	58	26	23	8	11
All other hardwood	209	62	61	163	186	113	77	40	72

[1] Not available.
[2] Includes 298,000,000 board feet of lumber not reported by kinds of wood.

Sources: Bureau of the Census, Department of Commerce, and Forest Service, Department of Agriculture.

No. 666.—LUMBER: Reported Production by Regions and States

[In millions of board feet. See headnote, table 665]

Region and State	1889	1899	1909	1919	1929	1930	1931	1932	1933
United States	**23,842**	**35,078**	**44,510**	**34,552**	**36,886**	**26,051**	**16,523**	**10,151**	**13,961**
Northeastern	**4,726**	**5,709**	**5,197**	**2,584**	**1,232**	**994**	**603**	**388**	**417**
Maine	597	785	1,112	596	258	222	152	102	105
New Hampshire	277	572	650	339	192	182	94	61	101
Vermont	384	376	352	218	120	94	61	40	30
Massachusetts	212	344	361	167	72	82	43	39	24
Connecticut	49	108	168	87	30	21	13	5	7
New York	925	878	681	358	160	110	74	39	36
New Jersey	34	74	62	37	16	12	7	5	5
Pennsylvania	2,133	2,333	1,463	630	314	209	123	73	93
Maryland	82	184	268	113	55	48	29	18	12
Rhode Island	8	19	25	11	7	7	3	3	3
Delaware	23	36	55	27	10	8	4	4	1
Central	**3,130**	**5,643**	**5,487**	**3,016**	**2,347**	**1,367**	**821**	**417**	**530**
Ohio	565	990	543	280	176	108	53	32	38
Indiana	755	1,037	556	282	170	98	53	27	42
Illinois	222	388	170	65	38	25	18	8	8
Missouri	402	724	660	321	228	127	75	35	41
West Virginia	302	778	1,473	763	633	406	247	135	185
Kentucky	423	775	861	512	339	189	111	51	47
Tennessee	460	951	1,224	792	764	414	263	128	169
Southern States	**3,718**	**8,404**	**14,796**	**12,704**	**12,484**	**8,140**	**4,721**	**2,973**	**4,510**
Georgia	575	1,312	1,342	894	1,386	753	460	264	473
Florida	412	790	1,202	1,137	1,137	876	577	320	439
Alabama	589	1,101	1,691	1,799	2,059	1,342	732	544	757
Mississippi	454	1,206	2,573	2,390	2,669	1,484	863	531	792
Arkansas	538	1,624	2,111	1,772	1,348	869	508	277	514
Louisiana	304	1,115	3,552	3,164	2,232	1,607	949	567	836
Texas	843	1,232	2,099	1,380	1,452	1,045	556	405	594
Oklahoma	3	22	226	168	200	163	77	65	105
North Carolina Pine States	**1,129**	**2,712**	**5,177**	**3,374**	**2,979**	**2,018**	**1,263**	**964**	**1,256**
Virginia	416	959	2,102	1,098	708	495	311	227	321
North Carolina	515	1,287	2,178	1,654	1,202	815	501	383	513
South Carolina	199	466	898	622	1,068	707	450	354	422
Lake States	**8,251**	**8,750**	**5,476**	**2,692**	**1,771**	**1,326**	**712**	**290**	**394**
Michigan	4,300	3,018	1,890	876	571	467	257	111	160
Minnesota	1,084	2,342	1,562	700	357	222	95	58	49
Wisconsin	2,866	3,389	2,025	1,116	843	637	360	120	186
Pacific States	**2,028**	**2,901**	**6,905**	**8,818**	**14,149**	**10,670**	**7,494**	**4,545**	**6,147**
Washington	1,064	1,429	3,863	4,961	7,302	5,502	3,908	2,261	3,106
Oregon	446	735	1,899	2,577	4,784	3,654	2,628	1,604	2,256
California and Nevada	[1] 518	738	[1] 1,144	1,280	2,063	1,514	[1] 958	681	[1] 785
Rocky Mountain States	**249**	**556**	**1,292**	**1,299**	**1,843**	**1,462**	**873**	**554**	**674**
Montana	90	256	309	287	389	297	158	111	125
Idaho	28	65	646	765	1,029	840	500	248	316
Arizona	5	36	63	74	175	95	85	58	90
New Mexico	26	31	92	87	148	143	59	72	89
Colorado	80	134	142	65	72	55	48	39	34
Utah	14	18	13	12	5	6	6	5	8
Wyoming	6	17	29	9	26	25	17	21	11
All other	**612**	**401**	[2] **179**	**65**	**81**	**73**	**37**	**21**	**34**
Iowa	571	352	132	18			[3] 7	2	[4] 4
Kansas	4	11	[2] 16	3	20	13	4	1	(5)
Nebraska	9	5					(5)		
North Dakota	7	2							
South Dakota	21	32	31	43	61	59	27	17	30
PERCENTAGE DISTRIBUTION									
United States	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Northeastern States	19.8	16.3	11.7	7.5	3.3	3.8	3.6	3.8	3.0
Central States	13.1	16.1	12.3	8.7	6.4	5.2	5.0	4.1	3.8
Southern States	15.6	24.0	33.3	36.8	33.8	31.3	28.6	29.3	32.3
North Carolina Pine States	4.7	7.7	11.6	9.8	8.1	7.7	7.6	9.5	9.0
Lake States	34.6	24.9	12.3	7.8	4.8	5.1	4.3	2.8	2.8
Pacific States	8.5	8.3	15.5	25.5	38.4	41.0	45.4	44.8	44.1
Rocky Mountain States	1.1	1.6	2.9	3.7	5.0	5.6	5.3	5.5	4.8
All other	2.6	1.1	.4	.2	.2	.3	.2	.2	.2

[1] California only; for 1909 Nevada included with "All other." [2] Includes Nevada. [3] Includes Nebraska. [4] Includes Kansas. [5] Included with Iowa.

Sources: Bureau of the Census, Department of Commerce, and Forest Service, Department of Agriculture

No. 667.—LUMBER: Average Mill Value per 1,000 Board Feet

Kind of wood	1899	1909	1919	1925	1927	1928	1929	1930	1931	1932	1933
All kinds [1]	$11.13	$15.38	$30.21	$28.02	$25.80	$25.61	$26.94	$22.81	$18.56	$15.12	$18.55
SOFTWOODS											
Balsam fir	(2)	13.99	32.23	26.65	25.92	25.40	25.49	26.72	19.34	19.32	19.79
Cedar	10.91	19.95	33.80	38.80	34.39	38.32	34.83	31.14	24.08	24.55	25.91
Cypress	13.32	20.46	38.38	40.90	39.91	36.18	35.29	33.10	30.64	24.62	26.30
Douglas fir	8.67	12.44	24.62	20.94	19.45	19.02	20.05	16.91	12.05	10.61	13.57
Hemlock	9.98	13.95	29.16	21.58	19.06	18.84	18.90	17.04	14.13	12.39	14.27
Larch (tamarack)	8.73	12.68	23.39	18.25	17.69	18.34	18.35	17.18	14.18	10.76	13.34
Lodgepole pine	(2)	16.25	29.98	20.22	20.82	19.29	17.97	17.64	14.46	12.45	16.23
Ponderosa pine (western yellow pine)	9.70	15.39	27.75	27.70	26.04	26.35	26.47	23.52	20.48	16.88	18.57
Redwood	10.12	14.80	30.04	33.99	33.81	31.39	31.00	30.33	29.82	24.33	26.29
Spruce	11.27	16.91	30.76	27.98	26.59	26.50	28.64	23.66	23.00	17.73	18.89
Sugar pine	12.30	18.14	35.99	44.79	43.22	39.06	43.08	38.10	28.76	26.26	27.95
White fir	(2)	13.10	25.66	22.51	19.92	20.00	20.63	17.57	14.94	12.23	15.30
White pine	12.69	18.16	32.83	32.58	29.90	28.71	29.87	27.81	24.71	21.58	21.45
Yellow pine	8.46	12.69	28.71	26.46	23.77	24.62	25.66	21.06	16.99	13.32	17.91
HARDWOODS											
Ash	15.84	24.44	52.69	48.46	43.82	45.61	43.14	39.72	41.06	28.74	33.23
Basswood	12.84	19.50	40.03	39.76	39.84	39.72	39.88	35.31	28.54	23.81	29.19
Beech	(2)	13.25	29.98	29.21	27.21	28.63	28.39	25.89	22.93	17.97	22.75
Birch	12.50	16.95	35.79	41.68	41.03	40.30	39.35	36.39	30.95	26.26	29.02
Chestnut	13.37	16.12	32.30	30.37	29.35	31.09	29.51	23.91	22.50	17.87	23.01
Cottonwood	10.37	18.05	32.24	26.70	30.92	27.54	29.70	22.73	19.54	16.49	22.18
Elm	11.47	17.52	36.39	36.41	36.22	37.89	35.28	30.20	25.37	19.07	23.09
Gum, red and sap	9.63	13.20	32.68	31.39	32.81	31.91	34.42	27.67	22.68	16.84	23.01
Hickory	18.78	30.80	44.37	39.25	37.08	38.83	40.33	33.00	32.65	29.85	26.27
Maple	11.83	15.77	35.56	39.18	35.35	36.31	36.93	34.45	28.80	22.82	30.51
Oak	13.78	20.50	37.87	37.00	35.72	35.23	38.43	29.29	27.68	22.84	28.53
Sycamore	11.04	14.87	30.32	31.11	29.31	30.06	30.07	26.54	22.40	18.71	22.78
Tupelo	(2)	11.87	28.42	24.66	24.45	25.51	25.39	23.47	19.05	17.40	22.01
Walnut	36.49	43.79	72.13	111.53	111.64	112.54	119.15	100.75	90.44	57.87	77.61
Yellow poplar	14.03	25.39	41.65	43.44	38.58	40.90	41.66	35.19	30.02	26.02	29.91

[1] Includes species not shown separately. [2] No data.

Sources: Bureau of the Census, Department of Commerce, and Forest Service, Dept. of Agriculture.

No. 668.—VENEERS: Timber Consumed in Manufacturing Veneers

[In thousands of feet, log scale]

State	1927	1929	1931	1933
Total	961,561	1,112,910	696,350	700,234
Alabama	41,424	43,221	24,364	26,918
Arkansas	57,611	63,303	36,001	24,908
California	18,379	28,698	14,463	16,551
Florida	77,321	96,199	56,657	67,097
Georgia	38,646	40,388	29,762	34,911
Illinois	11,414	15,821	8,539	6,546
Indiana	25,092	30,779	17,147	14,182
Kentucky	24,193	21,437	11,121	10,281
Louisiana	35,012	47,617	31,030	22,898
Michigan	20,811	20,434	11,316	9,786
Mississippi	80,218	75,427	43,798	48,318
New York	27,364	37,377	18,723	15,336
North Carolina	78,171	96,417	52,266	51,216
Oregon	32,091	55,644	23,978	32,616
South Carolina	35,311	48,960	28,194	24,627
Tennessee	25,586	24,710	15,642	17,743
Texas	29,216	32,488	30,965	22,980
Virginia	33,319	24,688	32,314	34,122
Washington	140,319	181,826	135,370	159,990
Wisconsin	37,864	38,724	21,160	10,573
All other	92,199	88,692	53,540	48,445

Kind of wood [1]	1925	1927	1929	1931
Domestic, total	720,865	943,993	1,095,244	688,815
Basswood	9,413	11,885	13,920	7,028
Beech	4,708	11,268	17,358	14,130
Birch	51,490	51,331	47,715	23,213
Cottonwood	39,869	43,456	51,742	43,707
Douglas fir	101,869	101,220	162,415	101,293
Elm	8,503	16,945	19,459	20,937
Maple	23,922	24,706	35,617	24,563
Oak	20,661	19,502	20,409	8,908
Red gum	237,465	250,247	285,035	201,297
Spruce	20,033	53,642	38,198	40,364
Tupelo	48,311	113,729	88,123	59,116
Walnut	17,573	20,786	26,893	8,524
Yellow pine	45,818	92,153	119,785	60,128
Yellow poplar	50,770	56,899	71,989	38,151
All other	40,460	76,224	96,586	37,456
Imported, total	13,734	17,568	17,666	7,535
Mahogany	7,471	11,954	3,741	2,437
Spanish cedar	5,149	4,829	3,917	2,044
All other	1,114	785	10,008	3,054

[1] Data by "kind of wood" not called for on schedule for 1933.

Source: Bureau of the Census, Department of Commerce.

No. 669.—LATH AND SHINGLES: PRODUCTION

[Lath in thousands and shingles in squares.]

Shingles were reported in thousands prior to 1933 and were converted to squares on the basis of 800 shingles to the square.

Year (calendar)	Lath	Shingles	Year (calendar)	Lath	Shingles
1899	2,523,998	15,127,521	1926	3,083,130	7,510,433
1909	3,703,195	18,634,214	1927	2,372,333	8,054,835
1919	1,724,078	11,490,880	1928	1,903,887	7,004,613
1920	1,952,983	7,695,520	1929	1,705,858	7,638,340
1921	1,970,696	8,553,984	1930	1,097,255	4,955,138
1922	2,940,714	10,164,053	1931	614,250	3,392,465
1923	3,328,013	9,383,586	1932	406,089	2,639,125
1924	2,961,200	8,577,981	1933	408,192	3,662,250
1925	3,161,137	9,155,034			

State	Lath				Shingles			
	1929	1931	1932	1933	1929	1931	1932	1933
Alabama	33,478	11,686	8,870	2,915	12,370	4,029	2,560	2,438
Arkansas	13,906	4,492	2,485	8,553	6,010	4,333	3,171	200
California	54,166	15,418	9,392	7,829	139,294	38,370	20,999	61,121
Florida	107,036	51,316	30,348	30,626	48,739	23,925	7,180	7,208
Georgia	12,457	4,668	600	3,905	31,216	9,848	11,293	1,087
Idaho	92,813	37,358	13,676	18,393	22,610	--------	5,415	13,966
Louisiana	71,458	25,760	29,887	18,033	17,131	25,676	23,323	24,572
Maine	73,767	4,792	10,529	14,644	120,183	80,335	48,489	38,486
Michigan	17,520	5,566	2,176	2,252	44,999	9,630	6,204	13,666
Minnesota	56,653	15,651	6,421	9,979	63	125	--------	--------
Mississippi	87,937	23,298	21,186	25,683	13,948	3,301	3,743	1,575
Montana	17,002	6,761	4,361	7,411	25	125	291	286
North Carolina	8,206	1,545	331	907	30,301	8,326	3,748	45
Oregon	236,716	103,015	61,535	69,170	413,340	278,221	227,446	306,524
South Carolina	4,071	1,846	550	527	12,514	6,026	3,849	14,313
Texas	46,830	9,781	11,680	12,844	5,220	686	1,000	1,031
Virginia	8,497	5,526	3,617	5,144	41	--------	88	--------
Washington	568,819	235,243	164,447	134,595	6,666,718	2,866,164	2,265,729	3,135,961
West Virginia	77,501	15,098	7,748	9,569	--------	--------	535	230
Wisconsin	67,066	19,801	6,550	9,604	47,014	32,710	2,543	38,178
All other	49,959	15,629	9,700	15,609	6,606	635	1,523	1,363

No. 670.—COOPERAGE STOCK: PRODUCTION OF STAVES, HEADING, AND HOOPS

NOTE.—Production of wooden hoops in 1923 was 153,954,000; in 1925, 149,167,000; in 1927, 134,596,000; in 1929, 133,054,000; in 1931, 94,311,000; and in 1933, 61,161,000, nearly all elm

Year and kind of wood	Staves (thousands)		Heading (thousand sets)	
	Tight	Slack[2]	Tight	Slack
1909	379,231	2,029,548	20,691	140,234
1919	353,825	1,121,324	24,274	87,381
1923	222,507	893,682	19,342	80,477
1925	240,023	937,597	23,052	71,371
1927	324,127	961,782	26,445	59,337
1929	357,353	1,039,450	30,329	72,591
1931	204,624	537,177	20,090	43,375
1933[1]	154,575	426,585	13,031	37,461
1931				
Ash	3,826	21,710	324	(3)
Basswood	(3)	(3)	(3)	787
Beech	--------	(3)	--------	600
Cottonwood	--------	22,884	--------	927
Douglas fir	44,946	20,799	5,638	627
Elm	--------	36,366	--------	(3)
Gum	18,397	160,375	920	3,721
Oak	78,968	6,394	6,752	583
Pine	32,072	198,125	4,269	28,271
Spruce	22,936	41,788	1,776	5,864
Tupelo	(3)	8,334	--------	(3)
All other	3,479	20,402	411	1,995

Class and kind of wood	1931	1933	1931	1933
	Tight staves (thousands)		Tight heading (thous. sets)	
Total	204,624	154,575	20,090	13,031
Oil, tierce, and pork, total	93,621	80,099	7,662	4,664
Softwood	20,796	13,452	1,167	546
Hardwood	72,825	66,647	6,495	4,118
Spirit and wine, total	11,262	17,806	989	1,247
Softwood	444	90	125	7
Hardwood	10,818	17,716	864	1,240
Beer, hardwood	(4)	9,896	--------	1,409
All other and not specified, total	99,741	46,774	11,439	5,711
Softwood	80,847	25,277	10,749	2,704
Hardwood	18,894	21,497	690	3,007
	Slack staves (thous. pieces)		Slack heading (thous. sets)	
Total	537,177	426,585	43,375	37,461
Softwood	267,405	266,748	35,405	32,898
Hardwood	269,046	159,837	7,225	4,563
Undistributed	726	--------	745	--------

[1] Data not available by species for 1933. [2] Reported in pieces. [3] Included in "All other."
[4] Data for "Beer, hardwood" included with figure for "Hardwood" under "All other and not specified."

Sources of tables 669 and 670: Bureau of the Census, Department of Commerce, and Forest Service, Department of Agriculture.

No. 671.—PULPWOOD: Consumption by Mills, and Mill Cost

Note.—Figures include both domestic and imported wood. The cost is f. o. b. pulp mill

Year	Quantity, all species (cords)	Cost: Total (1,000 dollars)	Cost: Average per cord	Year	Quantity, all species (cords)	Cost: Total (1,000 dollars)	Cost: Average per cord	Year	Quantity, all species (cords)	Cost: Total (1,000 dollars)	Cost: Average per cord
1899	1,986,310	9,838	$4.95	1923	5,872,870	95,306	$16.23	1930	7,195,524	88,684	$12.32
1909	4,001,607	34,478	8.62	1925	6,093,821	94,340	15.48	1931	6,722,766	73,524	10.94
1914	4,470,763	39,408	8.81	1927	6,750,935	95,452	14.14	1932	5,633,123	51,769	9.19
1919	5,477,832	87,386	15.95	1928	7,160,100	97,024	13.55	1933	6,581,674	48,508	7.37
1921	4,557,179	91,589	20.10	1929	7,645,011	100,054	13.09	1934	6,796,659	52,506	7.73

Kind of wood	Total consumption (cords) 1919	1929	1930	1931	1932	1933	1934
Total	5,477,832	7,645,011	7,195,524	6,722,766	5,633,123	6,581,674	6,796,659
Spruce:							
Domestic	2,313,419	2,074,267	1,844,937	1,651,051	1,423,836	1,495,061	1,535,299
Imported	873,795	1,029,913	888,255	676,339	608,171	576,000	638,127
Hemlock:							
Domestic }	795,154	1,309,170	1,222,961	1,185,272	806,230	1,112,556	1,428,116
Imported }		15,379		5,776			
Yellow pine (southern)	234,463	1,036,272	1,030,273	1,294,503	1,279,832	1,560,414	1,459,171
Poplar:							
Domestic	180,160	329,466	291,897	266,603	192,461	353,438	241,001
Imported	158,220	157,829	159,092	94,238	85,693		92,271
Balsam fir:							
Domestic	181,840	317,552	330,548	338,790	243,224	261,466	290,385
Imported	106,974	45,412	48,935	55,601	47,835	41,465	86,647
Jack pine [1]	51,581	205,760	200,970	159,273	154,214	178,974	218,116
Beech, birch, and maple [2]	184,111	76,950	68,848	69,681	65,958	93,032	83,996
Tamarack (larch) [2]	44,042	51,835	40,054	35,433	15,652	21,844	12,267
Yellow poplar [2]	72,605	129,697	107,795	73,504	74,151	(3)	73,492
Gum [2]	30,355	39,685	41,825	22,440	17,553	(3)	(3)
White fir [2]	31,138	111,054	90,652	109,277	70,968	154,847	98,166
Other wood	44,894	153,485	232,980	126,942	105,868	252,436	303,161
Slabs and mill waste	175,081	561,285	595,502	558,043	441,477	480,141	236,444

[1] Principally domestic. [2] Domestic only. [3] Included with "Other wood."

No. 672.—WOOD PULP: Total Production, and by States and Processes

Note.—In 1934, 1,203,961 tons of mechanical pulp were not steamed and 94,243 tons steamed; of the sulphite and sulphate pulp, 1,816,480 tons were unbleached and 909,758 bleached

Year	Tons [1]	Year	Tons [1]	Year	Tons [1]	Year	Tons [1]
1899	1,179,525	1921	2,875,601	1929	4,862,885	1933	4,276,204
1909	2,495,523	1923	3,788,672	1930	4,630,308	1934	4,436,128
1914	2,893,150	1925	3,962,217	1931	4,409,344		
1919	3,517,952	1927	4,313,403	1932	3,760,267		

State and process [1]	1909	1919	1929	1931	1932	1933	1934
Principal States:							
Maine	620,705	916,764	981,433	889,416	764,834	778,670	833,107
Louisiana		(2)	246,590	260,765	289,021	382,983	339,602
New York	679,534	811,958	662,988	466,510	353,867	393,615	364,872
Wisconsin	324,509	506,549	733,617	586,271	476,228	515,470	494,300
Pennsylvania	135,525	215,686	213,083	160,023	130,149	123,758	127,541
New Hampshire	212,599	232,134	212,774	(2)	(2)	78,802	(2)
Michigan	64,369	106,194	178,015	150,111	153,323	153,674	169,270
Minnesota	37,295	129,560	189,664	148,369	134,509	154,522	137,096
Washington	(2)	83,575	523,948	530,016	420,529	583,770	709,380
Vermont	59,356	85,945	26,307	25,601	(2)	18,000	14,040
Virginia	48,641	(2)	206,050	223,417	207,660	241,803	235,221
California }	83,692	123,990	256,546	237,532	187,133	189,332	240,167
Oregon }				681,313	643,014	661,805	771,532
Other States	229,298	305,597	431,870				
Process:							
Mechanical	1,179,266	1,518,829	1,649,112	1,459,355	1,203,322	1,201,796	1,298,204
Sulphite	1,017,631	1,419,829	1,737,085	1,453,194	1,167,263	1,353,088	1,472,306
Soda	298,626	411,693	520,729	374,054	290,703	[3] 457,790	[3] 411,686
Sulphate		120,378	915,478	1,036,113	1,031,817	1,263,530	1,253,932
Semichemical			[4] 40,481	[4] 86,628	67,162	(3)	(3)

[1] Beginning 1914 includes screenings except data by process for 1919. [2] Not shown separately.
[3] Soda includes semichemical pulp, also for 1933, data for a small quantity of pulp not covered by items specified to avoid disclosing production of individual establishments.
[4] Includes data for a small quantity of pulp not covered by items specified.

Source of tables 671 and 672: Bureau of the Census, Department of Commerce.

No. 673.—PAPER AND PAPER BOARDS: CENSUS STATISTICS OF PRODUCTION

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

Product	Quantity						Value			
	1927	1929	1931	1932 [1]	1933	1934 [1]	1927	1929	1931	1933
Paper and paper boards, total	10,002	11,140	9,382	7,998	9,190	9,186	872,207	903,301	631,106	521,553
Standard newsprint, in rolls and sheets	1,517	1,409	1,203	1,047	928	990	98,782	80,707	63,654	32,206
Hanging	113	101	86	61	66	92	9,035	7,294	5,800	3,346
Poster, novel, newstablet, lining, etc.	183	151	136	(2)	156	(2)	15,573	11,743	9,624	8,035
Catalog		112	89	64	63	62		9,571	7,064	4,250
Book	1,329	1,498	1,209	946	1,080	1,055	160,869	168,272	120,283	83,244
Cover	26	28	24	14	13	17	5,938	6,430	4,372	2,104
Writing (fine)	509	608	488	424	478	415	105,148	113,224	77,865	61,330
Wrapping	1,525	1,606	1,402	1,244	1,440	1,357	162,580	163,442	110,885	95,768
Boards	3,774	4,451	3,848	3,303	4,076	4,073	211,264	227,742	149,112	161,181
Tissue	316	388	395	359	407	399	46,617	53,300	45,041	37,711
Absorbent	64	91	77	58	80	79	13,331	16,973	14,774	12,082
Building	626	659	395	294	328	328	40,062	39,376	18,129	14,060
All other	21	39	31	183	74	319	3,008	5,228	4,501	6,236

[1] Value not reported.
[2] Included with "All other."
Source: Bureau of the Census, Department of Commerce.

No. 674.—TURPENTINE AND ROSIN PRODUCTION

Year [1]	Turpentine (gallons)			Rosin (barrels of 500 pounds)		
	Total	From gum [2]	From wood [3]	Total	From gum [2]	From wood [3]
1899	37,733,500	37,733,500	(4)	2,434,933	2,434,933	(4)
1904	31,129,236	30,687,051	442,185	1,964,674	1,964,674	(4)
1909	[5] 29,714,132	28,988,954	706,868	1,827,760	1,827,760	(4)
1914	[5] 27,648,939	26,980,981	575,557	[5] 1,649,160	1,615,643	29,022
1919	19,228,174	17,693,841	1,534,333	1,269,717	1,138,660	131,057
1925	27,261,425	[6] 23,922,250	[7] 3,339,175	1,903,370	[6] 1,578,866	[7] 324,504
1926	29,483,055	[8] 25,500,000	[9] 3,983,055	2,105,480	[8] 1,740,000	[9] 365,480
1927	35,882,258	31,549,082	4,333,176	2,524,000	2,071,813	452,187
1928	31,894,800	[8] 28,000,000	[9] 3,894,800	2,296,654	[8] 1,865,000	[9] 431,654
1929	35,940,124	31,320,871	4,619,253	2,454,186	1,975,631	478,555
1930 [7]	34,193,691	29,938,466	4,255,225	2,425,125	1,986,208	438,917
1931	27,499,514	24,349,024	3,150,490	1,904,397	1,570,885	333,512
1932 [10]	22,414,650	19,500,000	2,914,650	1,655,923	1,300,000	355,923
1933	29,152,200	25,500,000	3,652,200	2,149,019	1,700,000	449,019
1934 [10]	28,903,800	25,000,000	3,903,800	2,164,640	1,665,000	499,640

State [11]	Production from crude gum							
	Turpentine (gallons)				Rosin (barrels of 500 pounds)			
	1919	1929	1930	1931	1919	1929	1930	1931
Alabama	2,037,005	1,993,410	1,721,575	,847,880	120,839	123,798	115,027	115,048
Florida	6,992,489	9,847,151	9,159,916	7,802,435	486,432	623,188	621,032	518,259
Georgia	3,997,310	15,938,491	15,465,216	12,523,749	234,690	1.002,446	1,013,461	799,683
Mississippi	1,749,812	1,267,776	1,062,323	636,301	115,984	81,683	65,899	41,521
Louisiana	1,885,231	1,032,900	1,192,484	567,534	112,900	70,580	80,202	38,290
Texas	906,404				60,179			
North Carolina and South Carolina	125,590	1,241,143	1,336,952	971,125	7,636	73,936	90,587	58,084

[1] The figures of turpentine and rosin from crude gum from 1925 through 1932, and for 1934, and from wood for 1925, 1926, 1928, 1930, 1932, and 1934 refer to the crop year ended Mar. 31 of the year following. All other figures relate to calendar years.
[2] Compiled from data reported by establishments engaged in the turpentine and rosin industry.
[3] Compiled from data reported by establishments engaged in the wood-distillation industry.
[4] Not reported.
[5] Includes for 1909 and 1914, 18,310 gallons and 92,401 gallons, respectively, of turpentine and for 1914, 4,495 barrels of rosin reported by establishments engaged in the manufacture of lumber and timber products.
[6] Compiled by the Turpentine and Rosin Producers' Association.
[7] Compiled by the Bureau of Chemistry and Soils, Department of Agriculture.
[8] Estimated: Savannah Naval Stores Review, and Bureau of Chemistry, Department of Agriculture.
[9] Compiled by J. E. Lockwood, Hercules Powder Co., for 1926; by the Producers' Committee, J. E. Lockwood, secretary, for 1928.
[10] Naval Stores Review.
[11] Data are not available by States for 1932, 1933, and 1934.
Source: Bureau of the Census, Department of Commerce, except as noted.

30.—FISHERIES

No. 675.—QUANTITY AND VALUE OF THE PRODUCTS OF THE FISHERIES OF SPECIFIED SECTIONS

NEW ENGLAND STATES

Calendar year	Total		Maine		New Hampshire	
	1,000 pounds	1,000 dollars	1,000 pounds	1,000 dollars	1,000 pounds	1,000 dollars
1880	----------	12,503.0	----------	2,742.6	----------	170.6
1902	534,075	12,406.3	242,390	2,918.8	1,593	50.0
1908	530,029	15,139.0	173,843	3,257.0	677	53.0
1919	467,340	19,838.7	147,956	3,889.0	529	32.7
1928	603,598	25,619.9	123,326	4,231.1	239	45.5
1929	694,286	29,072.5	162,939	4,897.2	378	52.1
1930	701,351	27,493.5	143,824	4,329.4	1,069	69.1
1931	540,298	20,140.3	116,235	3,443.4	775	66.9
1932	480,521	14,001.3	90,602	2,413.3	744	57.7
1933	499,936	13,485.6	98,498	2,307.1	524	57.1

Calendar year	Massachusetts		Rhode Island		Connecticut	
1880	----------	7,959.8	----------	696.8	----------	933.2
1902	230,646	6,482.4	21,614	1,155.7	37,832	1,799.4
1908	244,313	7,095.0	44,254	1,752.0	66,942	2,982.0
1919	246,951	10,859.7	48,251	3,296.6	23,653	1,700.6
1928	380,169	15,648.8	27,666	2,397.9	72,198	3,296.6
1929	447,689	18,052.5	28,401	2,435.3	54,879	3,635.4
1930	442,474	16,289.1	25,972	2,287.3	88,012	4,518.6
1931	355,834	12,951.0	21,683	1,662.8	45,771	2,016.2
1932	347,593	8,928.3	20,536	1,491.4	21,046	1,110.6
1933	373,670	9,507.0	17,366	1,001.3	9,878	613.1

MIDDLE ATLANTIC STATES

Calendar year	Total		New York		New Jersey		Pennsylvania		Delaware	
	1,000 pounds	1,000 dollars	1,000 pounds	1,000 dollars	1,000 pounds	1,000 dollars	1,000 pounds	1,000 dollars	1,000 pounds	1,000 dollars
1880	408,202	8,677.0	329,453	4,225.7	65,151	3,176.6	1,680	277.0	11,918	997.7
1901	357,888	9,104.7	228,092	3,894.3	117,931	4,755.5	6,030	251.5	5,835	203.4
1908	221,450	8,280.0	71,474	4,390.0	74,827	3,069.0	4,380	280.0	70,769	541.0
1921	332,932	11,667.4	210,377	4,986.9	96,937	5,983.4	595	44.6	25,023	652.4
1929	190,773	14,137.6	47,259	5,061.7	110,002	8,730.7	42	9.3	33,470	335.9
1930	193,868	13,063.7	45,495	4,933.7	97,275	7,474.4	17	2.8	51,081	652.8
1931	164,899	9,211.2	50,994	2,974.1	92,846	5,854.2	76	4.7	20,983	378.2
1932	141,221	4,654.0	64,866	2,333.3	72,595	2,217.8	32	1.7	3,729	101.1
1933	169,754	4,811.1	39,911	2,452.6	93,264	2,146.3	52	3.0	36,527	209.2

CHESAPEAKE BAY STATES

Calendar year	Total		Maryland		Virginia	
	1,000 pounds	1,000 dollars	1,000 pounds	1,000 dollars	1,000 pounds	1,000 dollars
1880	254,587	8,346.2	95,713	5,221.7	158,875	3,124.4
1901	461,159	8,380.8	82,975	3,767.5	378,183	4,613.4
1908	426,311	8,022.0	113,796	3,306.0	312,515	4,716.0
1920	530,750	12,740.4	59,531	4,198.7	471,219	8,541.7
1929	274,673	11,580.6	63,388	4,294.9	211,285	7,285.7
1930	316,393	11,472.0	71,099	3,984.7	245,294	7,487.3
1931	293,271	7,428.0	66,634	2,705.8	226,637	4,722.1
1932	359,007	5,905.0	61,626	1,939.7	297,381	3,965.3
1933	272,380	5,060.8	55,362	1,733.8	217,018	3,327.0

SOUTH ATLANTIC STATES

Calendar year	Total		North Carolina		South Carolina		Georgia		Florida (east coast only)	
	1,000 pounds	1,000 dollars	1,000 pounds	1,000 dollars	1,000 pounds	1,000 dollars	1,000 pounds	1,000 dollars	1,000 pounds	1,000 dollars
1880	42,952	1,256.6	32,249	845.7	6,143	212.5	2,272	120.0	2,287	78.4
1902	106,446	2,839.6	67,585	1,739.7	8,174	263.0	11,103	359.1	19,584	477.9
1908	166,875	4,034.0	101,422	1,776.0	14,104	288.0	14,828	701.0	36,521	1,269.0
1918	332,614	5,348.6	210,502	2,978.7	3,747	207.7	37,154	416.0	81,211	1,746.2
1927	265,035	5,896.9	144,466	2,777.4	8,374	350.4	47,607	697.2	64,588	2,071.9
1928	262,118	6,196.2	141,899	2,629.2	7,432	316.8	42,069	866.3	70,718	2,383.9
1929	340,874	5,952.5	217,595	2,544.0	6,135	275.1	43,514	877.2	73,630	2,256.2
1930	275,807	4,270.0	168,938	1,836.4	5,106	252.9	34,873	536.3	66,890	1,644.4
1931	150,393	3,066.6	98,161	1,087.6	5,837	211.5	7,350	251.1	39,045	1,516.4
1932	154,304	2,383.5	86,214	826.7	4,536	123.4	16,523	185.9	47,031	1,247.5

No. 675.—Quantity and Value of the Products of the Fisheries of Specified Sections—Continued

GULF STATES

Calendar year	Total		Florida (west coast only)		Alabama	
	1,000 pounds	*1,000 dollars*	*1,000 pounds*	*1,000 dollars*	*1,000 pounds*	*1,000 dollars*
1880	23,561	1,227.5	8,376	564.8	3,542	119.3
1902	113,697	3,494.2	48,120	1,462.2	9,351	266.7
1908	118,274	4,860.0	37,566	2,120.0	10,665	387.0
1918	130,924	6,510.3	54,754	3,420.4	5,609	230.6
1927	195,705	9,965.8	73,835	4,351.4	10,076	437.2
1928	191,007	9,866.3	61,121	3,866.5	14,466	586.8
1929	194,521	8,951.2	72,323	3,863.7	9,025	410.3
1930	141,953	5,015.3	56,260	2,077.0	7,113	315.5
1931	138,917	6,794.9	45,009	3,001.4	6,168	222.8
1932	145,613	4,044.8	53,525	1,725.9	6,106	168.6

Calendar year	Mississippi		Louisiana		Texas	
	1,000 pounds	*1,000 dollars*	*1,000 pounds*	*1,000 dollars*	*1,000 pounds*	*1,000 dollars*
1880	788	22.5	6,996	392.6	3,859	128.3
1902	23,427	553.2	24,754	858.3	8,044	353.8
1908	17,302	459.0	42,302	1,448.0	10,439	446.0
1918	20,592	762.8	24,954	1,419.4	25,015	677.2
1927	34,503	1,259.4	56,208	2,863.5	21,083	1,054.3
1928	30,701	1,060.1	69,507	3,477.9	15,212	875.0
1929	34,629	1,005.3	61,920	2,764.6	16,624	907.3
1930	15,736	740.1	49,886	1,960.4	15,693	777.5
1931	22,985	595.4	45,704	1,330.3	19,051	789.8
1932	20,603	497.4	48,340	1,180.6	14,304	472.3

PACIFIC COAST STATES

Calendar year	Total		Washington		Oregon		California	
	1,000 pounds	*1,000 dollars*	*1,000 pounds*	*1,000 dollars*	*1,000 pounds*	*1,000 dollars*	*1,000 pounds*	*1,000 dollars*
1888	87,043	4,010.0	20,468	811.0	26,048	734.0	40,527	2,465.0
1899	206,911	6,278.6	119,340	2,871.4	22,752	855.7	64,819	2,551.5
1908	193,056	6,839.0	111,356	3,513.0	28,221	1,356.0	53,479	1,970.0
1915	304,796	9,300.7	170,594	5,317.1	34,693	1,495.5	99,509	2,488.1
1924	487,688	20,052.1	97,088	7,123.5	39,578	3,203.6	361,022	9,725.1
1925	627,025	24,580.5	139,457	9,476.4	40,008	3,442.4	447,560	11,661.7
1926	537,624	18,914.7	98,088	7,942.3	32,998	3,068.0	406,538	7,904.3
1927	662,513	22,306.6	131,134	9,145.4	34,195	3,102.9	497,184	10,058.3
1928	705,112	20,512.8	88,991	7,500.8	27,474	2,686.3	588,647	10,325.7
1929	1,034,434	25,038.4	152,224	9,562.8	25,284	2,605.2	856,926	12,870.4
1930	833,389	23,064.1	110,039	8,334.8	26,459	2,256.3	696,891	12,473.0
1931	597,307	13,512.2	140,491	5,121.8	25,819	1,282.2	430,997	7,108.2
1932	560,828	9,484.3	94,959	3,378.0	22,986	728.7	442,883	5,377.6
1933	860,161	13,988.0	128,729	5,683.9	24,533	1,209.8	706,899	7,094.3

GREAT LAKES

Calendar year	Total [1]		Lake Superior		Lake Michigan		Lake Huron		Lake Erie	
	1,000 pounds	*1,000 dollars*	*1,000 pounds*	*1,000 dollars*	*1,000 pounds*	*1,000 dollars*	*1,000 pounds*	*1,000 dollars*	*1,000 pounds*	*1,000 dollars*
1885	99,842	2,691.9	8,826	291.5	23,518	878.8	11,457	276.4	51,457	1,109.1
1899	113,727	2,611.4	5,430	150.9	34,500	876.7	12,418	308.1	58,394	1,150.9
1908	106,631	3,768.0	10,198	342.0	40,019	1,554.0	12,932	486.0	41,922	1,280.0
1917	104,269	6,295.0	15,447	726.7	35,461	2,270.9	13,363	857.5	38,710	2,327.3
1926 [2]	75,300	6,642.4	13,436	760.5	20,495	2,077.6	13,132	1,261.0	25,057	2,246.5
1927 [2]	81,327	6,794.9	15,302	918.1	23,681	2,354.8	15,711	1,444.4	23,796	1,831.3
1928 [2]	63,368	5,960.8	13,132	772.7	17,999	2,332.5	9,943	1,024.0	19,643	1,573.9
1929 [2]	85,389	6,787.7	17,148	835.2	35,616	3,460.9	10,477	927.5	18,648	1,268.1
1930 [2]	94,948	6,050.3	14,694	695.3	30,973	2,159.0	16,377	1,319.9	29,540	1,655.5
1931 [2]	91,727	6,029.2	11,281	627.8	25,059	1,991.5	17,727	1,510.2	34,772	1,698.9
1932 [2]	83,744	4,331.8	10,173	379.3	20,692	1,236.3	15,848	1,143.1	33,670	1,439.3

[1] Includes in addition to the lakes shown small amounts for Lake Ontario and also prior to 1926, Lake St. Clair and St. Clair and Detroit Rivers and beginning 1926, Lake-of-the-Woods, Namakan Lake, and Rainy Lake.

[2] Data collected for the most part by State fishery agencies and compiled by the Bureau of Fisheries

No. 675.—Quantity and Value of the Products of the Fisheries of Specified Sections—Continued

MISSISSIPPI RIVER AND TRIBUTARIES

	Total	
	1,000 pounds	*1,000 dollars*
1894	44,545	1,384.6
1899	96,797	1,781.0
1903	93,374	1,841.2
1908	148,284	3,125.0
1922	105,734	4,503.5
1931	82,383	2,897.4
	Mississippi River [3]	
1894	21,242	587.8
1899	68,604	823.0
1903	53,851	1,157.4
1922	33,945	1,645.3
1931	28,139	1,076.3

Tributary	1922		1931	
	1,000 pounds	*1,000 dollars*	*1,000 pounds*	*1,000 dollars*
Arkansas River [4]	2,034	136.3	777	49.9
Atchafalaya River [5]	4,579	254.7	9,231	523.1
Cumberland River	728	14.7	106	13.0
Illinois River [6]	12,661	617.3	5,985	159.7
Missouri River [6]	1,232	105.2	1,051	94.3
Ohio River [3]	7,458	379.1	1,221	96.5
Red River [6]	6,677	324.5	6,417	277.4
St. Francis River [6]	3,684	108.9	2,173	65.6
Tennessee River [6]	4,990	98.3	5,222	75.0
Wabash River [6]	12,063	357.8	8,388	152.0
White River (Missouri and Arkansas) [6]	14,662	405.9	12,363	256.7
Yazoo River [4]	1,022	55.6	1,311	57.8

[3] Including minor tributaries.
[4] Includes tributaries in 1931.
[5] Not included with Mississippi River and tributaries, 1899 to 1908.
[6] Including tributaries.

No. 676.—SUMMARY OF THE FISHERIES OF THE UNITED STATES AND ALASKA, 1933

Section	Fishermen	Fishing vessels	Fishing boats	Products	
				Quantity	Value
	Number	*Number*	*Number*	*1,000 pounds*	*1,000 dollars*
Total	117,537	3,735	67,018	2,899,048	60,218
New England States	17,073	595	8,400	499,936	13,486
Middle Atlantic States	8,574	407	3,870	169,753	4,811
Chesapeake Bay States	20,142	287	13,429	272,380	5,061
South Atlantic and Gulf States [1]	21,560	512	12,849	299,917	6,428
Pacific Coast States	18,716	929	6,547	860,161	13,988
Lake States [1]	6,932	498	3,159	83,744	4,389
Mississippi River States [2]	15,884	----------	14,546	82,383	2,897
Alaska	8,656	507	4,218	630,774	9,158

[1] Figures for South Atlantic and Gulf and Lake States are for 1932.
[2] Figures for the Mississippi River States are for 1931

No. 677.—FISHERY PRODUCTS LANDED AT SEATTLE, WASH., BY UNITED STATES VESSELS AND FISH RECEIVED BY SEATTLE WHOLESALE DEALERS

Species	Quantity in thousands of pounds				Value in dollars			
	1931	1932	1933	1934	1931	1932	1933	1934
Grand total	40,746	42,266	43,353	44,363	2,308,024	1,797,611	2,443,235	2,754,582
Landed by U. S. vessels [1]	17,208	24,142	24,085	23,944	1,172,314	1,055,607	1,491,970	1,648,127
Halibut	15,214	21,841	22,127	20,559	1,107,266	995,634	1,431,431	1,522,237
Sablefish	1,299	1,691	1,280	2,259	45,134	42,022	39,765	86,001
Lingcod	406	379	471	737	12,080	10,995	13,735	24,900
Rockfishes	289	231	207	389	7,834	6,956	7,039	14,989
Received by wholesale dealers [2]	23,538	18,124	19,268	20,419	1,135,710	742,004	951,265	1,106,455
Salmon—								
Humpback or pink	4,683	7	2,524	5	61,624	74	63,751	103
Chum or keta	3,234	3,674	3,985	3,864	53,021	45,482	111,691	94,760
King or spring	8,900	7,824	5,127	7,189	683,140	445,768	367,802	585,485
Coho or silver	4,452	4,601	4,759	6,240	220,606	165,398	272,337	302,182
Sockeye or red	46	23	391	53	4,064	1,327	30,808	4,026
Trout, steelhead	136	114	237	-------	12,751	6,403	17,828	----------
Smelt	269	191	258	440	11,741	6,630	12,032	17,048
Sole	389	336	548	954	11,681	7,895	15,350	32,265
Crabs	948	876	595	602	60,153	48,218	36,000	40,456
Miscellaneous	481	478	844	1,072	16,929	14,814	23,666	30,130

[1] Halibut fleet.
[2] Does not include fish received from Alaska or Canada.

Source of Tables 675, 676, and 677: Bureau of Fisheries, Department of Commerce.

No. 678.—FISHERIES: PRODUCTS LANDED AT BOSTON AND GLOUCESTER, MASS., AND PORTLAND, ME., BY FISHING VESSELS

Port and calendar year	Total, all species	Cod	Haddock	Hake	Pollock	Cusk	Halibut	Mackerel	Miscellaneous
	Quantity in thousands of pounds								
All three ports:									
1923	174,941	62,655	73,762	6,338	4,804	2,998	4,875	11,565	7,945
1924	182,948	61,449	79,902	7,285	5,085	3,406	4,422	9,758	11,643
1925	216,869	67,250	91,886	5,806	5,290	3,713	3,561	26,210	13,153
1926	238,426	78,219	94,061	5,505	6,740	2,728	3,431	36,233	11,511
1927	263,850	63,355	128,593	5,862	7,663	2,727	4,779	31,530	19,341
1928	277,982	59,302	155,331	8,423	8,040	2,358	3,385	24,253	16,890
1929	327,096	50,647	187,204	12,051	10,565	3,483	2,696	37,743	22,707
1930	350,801	66,616	189,371	15,618	13,980	4,433	2,581	33,513	24,689
1931	263,685	60,645	132,846	7,755	7,631	4,265	2,571	29,524	18,448
1932	252,334	59,551	120,117	7,745	7,850	3,069	2,356	38,096	13,550
1933	267,157	73,842	129,862	7,197	12,395	3,430	2,139	22,444	15,848
1934	311,278	90,619	134,674	7,178	21,312	3,932	1,888	30,547	21,128
Boston:									
1932	215,619	48,544	114,734	5,670	5,783	2,493	2,084	25,274	11,037
1933	232,583	61,250	122,886	5,221	8,262	2,498	1,756	17,358	13,352
1934	255,055	72,423	125,663	4,297	9,214	2,621	1,753	21,006	18,078
Gloucester:									
1932	25,328	7,898	2,431	1,030	1,176	241	163	11,054	1,335
1933	21,737	9,518	2,558	489	3,398	280	5	4,037	1,452
1934	40,130	13,320	4,897	563	11,142	189	5	8,295	1,719
Portland:									
1932	11,387	3,109	2,952	1,044	891	336	109	1,768	1,178
1933	12,837	3,074	4,417	1,486	735	652	379	1,050	1,044
1934	16,093	4,876	4,114	2,318	956	1,122	130	1,246	1,331
	Value in thousands and tenths of thousands of dollars								
All three ports:									
1923	7,051.2	2,184.1	2,423.2	142.4	152.2	61.7	922.7	487.0	677.3
1924	6,993.0	2,138.3	2,308.6	186.1	159.4	68.1	789.6	541.0	801.0
1925	8,115.6	2,321.2	2,747.7	173.7	147.6	84.6	655.2	1,191.0	794.4
1926	9,068.6	2,647.5	3,082.9	146.2	153.7	69.6	671.2	1,406.0	891.0
1927	9,404.5	2,146.5	3,531.7	156.5	171.8	71.4	839.9	1,295.0	1,191.0
1928	10,849.1	2,198.7	5,036.5	221.7	174.4	62.7	609.0	1,355.9	1,190.2
1929	13,051.7	1,983.5	6,845.3	405.1	243.5	102.9	484.5	1,382.4	1,604.5
1930	12,785.5	2,208.1	6,645.8	394.9	263.8	113.2	443.0	1,157.6	1,559.1
1931	9,249.3	1,758.4	4,434.4	178.0	113.7	83.2	375.9	1,225.7	1,080.0
1932	6,083.9	1,301.5	2,906.8	136.6	85.7	45.8	261.2	618.4	727.9
1933	6,850.9	1,641.7	3,374.0	144.3	158.8	49.3	226.1	498.2	758.5
1934	8,261.3	2,324.1	3,753.7	188.0	329.4	78.4	217.7	552.5	817.5
Boston:									
1932	5,366.9	1,044.6	2,767.5	111.5	70.7	38.2	239.2	460.2	635.0
1933	6,093.6	1,361.0	3,205.0	111.8	105.9	38.2	191.0	402.5	678.2
1934	7,110.3	1,875.3	3,536.6	122.5	158.8	52.7	206.1	422.6	735.7
Gloucester:									
1932	434.1	175.8	48.5	9.3	9.7	1.8	11.8	139.0	38.2
1933	441.9	209.2	52.9	9.3	47.6	1.7	.4	82.8	38.0
1934	755.7	323.4	102.2	16.8	160.7	2.4	.3	116.6	33.3
Portland:									
1932	282.8	81.1	90.8	15.7	5.4	5.8	10.2	19.1	54.7
1933	315.3	71.5	116.0	23.2	5.4	9.2	34.7	12.9	42.4
1934	395.3	125.4	114.9	48.7	9.9	23.3	11.3	13.3	48.5

No. 679.—CANNED FISHERY PRODUCTS AND BY-PRODUCTS OF THE UNITED STATES AND ALASKA: VALUE

NOTE.—Values in thousands of dollars. See also census statistics of fish canning, tables 655 and 760

Product	1927	1928	1929	1930	1931	1932	1933	1934
Total value	94,177	110,753	124,833	106,579	79,514	56,216	77,258	102,344
Salmon	45,729	54,638	56,086	42,835	38,083	26,460	36,242	45,818
California sardines	9,269	9,659	11,997	8,742	4,715	2,358	3,805	5,481
Maine and Massachusetts sardines	5,249	8,076	6,898	4,459	2,647	1,370	2,397	3,315
Tuna and tunalike fishes	8,368	8,374	9,873	13,056	7,279	6,183	6,934	10,010
Shrimps and crabs	5,348	5,226	5,559	5,017	3,995	2,676	3,623	4,595
Clams	2,745	2,624	2,548	2,666	2,257	1,797	1,766	2,713
Oysters	2,368	2,761	2,732	1,837	964	1,008	1,076	1,722
Miscellaneous canned products	2,308	4,514	5,372	4,246	3,009	1,897	3,957	6,209
Menhaden—meal, scrap, and oil	3,690	3,440	3,630	2,674	1,140	1,180	1,587	2,328
Miscellaneous byproducts	9,103	11,441	20,138	21,047	15,425	11,286	15,871	20,152

Source of tables 678 and 679: Bureau of Fisheries, Department of Commerce.

No. 680.—CANNED SALMON OUTPUT, UNITED STATES AND ALASKA

[Quantity in thousands and tenths of thousands of 48-pound cases, value in thousands and tenths of thousands of dollars]

Specie	Quantity				Value			
	Total	Washington	Oregon and California	Alaska	Total	Washington	Oregon and California	Alaska
Total, all species:								
1927	5,076.6	1,091.0	413.5	3,572.1	45,728.8	10,158.2	5,554.3	30,016.3
1928	6,926.8	497.4	345.5	6,083.9	54,638.1	5,024.0	4,230.2	45,383.9
1929	6,990.7	1,278.5	342.1	5,370.1	56,085.7	10,922.4	4,693.9	40,469.4
1930	6,086.4	708.7	345.2	5,032.5	42,835.9	8,364.4	4,775.6	29,695.9
1931	6,740.0	1,068.7	267.5	5,403.8	38,083.2	6,134.1	2,852.2	29,096.9
1932	5,909.0	412.3	242.2	5,254.5	26,460.1	2,632.2	2,112.0	21,715.9
1933	6,362.5	848.9	288.0	5,225.6	36,241.9	5,217.4	2,648.5	28,376.0
1934	8,383.0	596.1	305.1	7,481.8	45,817.9	5,293.1	2,912.8	37,612.0
Coho or silver:								
1932	253.3	66.3	38.9	148.1	1,396.7	360.8	424.7	611.2
1933	243.3	46.8	33.9	162.6	1,382.1	294.0	243.0	845.0
1934	371.7	71.9	63.7	236.1	2,303.5	509.2	560.6	1,233.7
Chum or keta:								
1932	1,007.0	168.8	17.7	820.5	2,809.1	473.2	47.4	2,288.5
1933	735.6	49.8	27.0	658.8	3,012.2	197.2	102.1	2,712.8
1934	855.3	88.2	26.4	740.7	3,149.3	347.7	99.8	2,701.8
Humpback or pink:								
1932	2,114.8	1.7	--------	2,113.1	6,643.0	6.0	--------	6,637.0
1933	2,722.7	540.2	--------	2,182.6	12,235.7	2,361.9	--------	9,873.7
1934	3,827.7	3.6	--------	3,824.1	15,685.3	19.5	--------	15,665.8
King, chinook, or spring:								
1932	320.4	78.0	172.9	69.5	2,590.4	693.4	1,517.7	379.3
1933	322.4	74.6	206.5	41.4	3,071.4	677.2	2,083.1	311.2
1934	323.9	74.1	196.9	52.9	3,166.5	766.1	2,038.4	362.0
Red or sockeye:								
1932	2,197.0	92.1	1.8	2,103.1	12,877.8	1,058.6	19.3	11,799.9
1933	2,320.9	134.1	6.5	2,180.3	16,379.4	1,658.1	88.0	14,633.3
1934	2,988.3	355.2	5.1	2,628.0	21,359.6	3,630.7	80.2	17,648.7
Steelhead:								
1932	16.4	5.5	10.9	--------	143.1	40.2	102.9	--------
1933	17.6	3.5	14.1	--------	161.2	28.9	132.3	--------
1934	16.1	3.1	13.0	--------	153.7	19.9	133.8	--------

Source: Bureau of Fisheries, Department of Commerce.

No. 681.—ALASKA FISHERY INDUSTRIES: SUMMARY OF PRODUCTS

Product	Quantity in thousands of unit specified						Value in thousands of dollars				
	Unit	1920	1925	1930	1933	1934	1920	1925	1930	1933	1934
Total	--------	--------	--------	--------	--------	--------	41,492	40,039	37,679	32,123	41,963
Salmon:											
Canned	Case	4,429	4,460	5,032	5,226	7,482	35,603	31,990	29,695	28,376	37,612
Fresh and frozen	Pound	5,165	5,193	7,909	4,860	6,829	424	395	679	252	405
Cured, all forms	do	3,067	6,895	6,979	6,358	5,360	510	1,297	1,096	752	703
By-products	do	2,071	1,738	2,703	1,181	1,268	105	60	62	20	29
Halibut, fresh and frozen.	do	15,295	10,972	31,557	14,069	13,221	1,727	884	2,991	726	805
Herring:											
Fresh and frozen	do	--------	--------	79	--------	--------	--------	--------	4	--------	--------
Cured for food	do	8,582	35,171	8,765	13,507	8,276	542	2,323	496	620	475
Bait	do	4,085	7,087	9,298	4,472	6,392	41	39	103	39	52
By-products	do	11,186	34,806	50,002	45,317	55,738	720	1,490	1,531	744	1,076
Cod	do	12,764	2,854	322	338	493	1,117	129	17	13	20
Sablefish	do	584	1,043	449	103	215	29	45	21	5	9
Other fish	do	110	142	484	119	342	14	10	26	3	9
Shrimps	do	112	520	514	319	381	49	207	211	102	120
Crabs	do	8	206	107	571	643	2	53	35	156	208
Clams	do	222	2,066	853	523	391	47	492	242	246	189
Whales:											
Oil	do	8,317	7,224	7,034	2,344	6,656	436	556	417	55	213
Fertilizer	do	3,190	2,444	2,340	1,034	2,698	120	57	51	14	38
All other	do	18	797	43	--------	--------	6	12	2	--------	--------

Source: Bureau of Fisheries, Department of Commerce.

No. 682.—CANNED SALMON: Output and Prices of Alaska Product

Yearly average or year	Total value of pack (thousands of dollars)	Output, equivalent in thousands of cases of forty-eight 1-pound cans						Average price in dollars per case of forty-eight 1-pound cans				
		Total	Coho or silver	Chum or keta	Humpback or pink	King or spring	Red or sockeye	Coho or silver	Chum or keta	Humpback or pink	King or spring	Red or sockeye
1911-1915	16,398	3,835	131	485	1,304	52	1,863	4.45	2.85	3.07	5.11	5.54
1916-1920	39,897	5,293	220	1,079	1,936	77	1,982	8.73	5.35	6.10	9.94	10.20
1920	35,603	4,429	192	1,034	1,593	110	1,501	9.13	4.19	5.47	10.97	13.05
1921	19,633	2,597	107	255	424	45	1,766	5.63	3.68	4.21	10.22	8.96
1922	29,787	4,502	176	566	1,658	31	2,071	5.47	3.98	4.34	8.08	9.24
1923	32,873	5,036	164	526	2,448	38	1,859	5.74	4.65	4.86	8.56	9.24
1924	33,007	5,295	184	1,028	2,601	34	1,448	6.83	4.68	4.93	8.89	9.53
1925	31,990	4,460	161	1,079	2,111	50	1,060	9.72	4.44	5.28	11.91	13.12
1926	46,080	6,653	203	902	3,338	52	2,157	8.40	5.01	5.39	10.37	9.89
1927	30,016	3,572	253	508	1,421	70	1,320	8.51	5.47	5.87	11.25	12.08
1928	45,384	6,084	299	996	2,787	54	1,948	7.12	6.06	6.56	11.13	9.41
1929	40,469	5,370	172	864	2,572	72	1,690	7.59	5.35	6.06	11.92	10.71
1930	29,695	5,032	332	600	3,189	60	851	8.26	3.60	4.17	13.32	12.57
1931	29,096	5,404	170	534	2,954	52	1,694	6.51	3.19	3.46	9.40	9.20
1932	21,716	5,254	148	821	2,113	70	2,103	4.12	2.79	3.14	5.46	5.61
1933	28,376	5,226	163	659	2,183	41	2,180	5.20	4.12	4.52	7.51	6.71
1934	37,612	7,482	236	741	3,824	53	2,628	5.23	3.65	4.10	6.85	6.72

No. 683.—FISH PROPAGATION: Output of Fish Eggs, Fry, and Fingerlings, by United States Bureau of Fisheries, Years Ended June 30

[All quantities expressed in thousands]

Year	Total	Eggs	Fry	Fingerlings	Cost per million[1]
1895	619,916	55,408	561,894	2,613	$292.64
1900	1,164,337	88,682	1,070,757	4,898	250.00
1915	4,288,758	536,260	3,694,282	58,216	131.55
1920	4,770,356	630,749	3,872,218	267,388	130.11
1925	5,301,862	1,050,393	4,114,514	136,954	135.61
1926	5,232,373	737,136	4,195,942	299,295	142.53
1927	6,481,073	1,523,458	4,767,113	190,502	116.30
1928	7,036,317	2,253,244	4,521,439	261,634	119.37
1929	7,060,369	2,861,236	4,062,948	136,185	125.55
1930	7,570,482	2,553,481	4,766,831	250,170	120.50
1931	7,121,805	2,327,421	4,474,344	320,040	138.41
1932	7,073,935	2,808,231	4,117,085	148,619	141.90
1933	7,202,155	2,677,817	4,342,000	182,338	117.70
1934	3,258,131	2,169,766	961,997	126,368	176.40

Species	1934			Species	1934		
	Eggs	Fry	Fingerlings		Eggs	Fry	Fingerlings
Catfish		5,000	5,149,400	Pike and pickerel			72,900
Buffalofish	7,725,000	5,000	85,000	Mackerel		2,946,000	
Carp	6,250,000	290,000	1,330,000	Crappie			9,528,300
Shad		11,574,000		Largemouth black bass		510,000	4,304,200
Whitefish	60,000	9,290,000		Smallmouth black bass		931,000	334,800
Chinook salmon	6,025,000	759,000	19,124,600	Rock bass			84,900
Chum salmon		11,621,000	236,500	Warmouth bass			14,500
Silver salmon		1,430,000	1,103,000	Sunfish			3,951,000
Sockeye salmon		5,450,000	18,144,100	Pike perch	830,025,000	6,600,000	
Humpback salmon		139,000		Yellow perch		4,000,000	2,191,800
Steelhead salmon	110,000	73,000	2,198,500	White perch		900,000	
Atlantic salmon			20,900	White bass			18,900
Landlocked salmon			474,000	Rio grande perch			8,800
Rainbow trout	6,695,000		12,538,600	Fresh-water drum			6,600
Black-spotted trout	18,165,000		16,294,700	Cod	1,037,262,000		
Lockleven trout	13,174,000	7,726,000	5,526,400	Haddock	191,754,000		
Lake trout	500,000	786,000	383,400	Winter flounder	46,077,000	888,415,000	
Brook trout	5,654,000	3,654,000	20,440,700	Miscellaneous fishes			2,801,600
Grayling	290,000	4,950,000					

[1] Includes all expenditures chargeable to fish culture and distribution and salaries of all employees in the fish-cultural field services and the administrative and clerical force in Washington, D. C.

Sources of tables 682 and 683: Bureau of Fisheries, Department of Commerce.

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 763, p. 748]

No. 684.—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	1916	3,508	1,621	1,884	3
1886–1890	541	248	292	1	1917	4,992	2,086	2,900	6
1891–1895	592	244	347	1	1918	5,541	2,153	3,381	7
1896–1900	828	366	461	1	1919	4,596	1,360	3,233	3
1901–1905	1,392	578	813	1	1920	6,981	1,762	5,214	5
1906–1910	1,887	769	1,118	(1)	1921	4,139	654	3,482	3
1911–1915	2,220	820	1,399	1	1922	4,647	987	3,656	4
1916–1920	5,124	1,796	3,322	5	1923	5,987	1,511	4,472	4
1921–1925	5,155	1,153	3,998	5	1924	5,306	1,232	4,068	6
1926–1930	5,556	1,273	4,275	9	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	1,285	4,092	9
1910	1,988	750	1,238	(1)	1929	5,888	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	2,462	284	2,172	6
1914	2,111	687	1,424	(1)	1933	2,555	411	2,133	11
1915	2,395	992	1,400	2	1934	3,350	542	2,793	15

[1] Less than $500,000.

Source: Bureau of Mines, Department of the Interior.

No. 685.—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[3] (New York)	Antimony (New York)	Quicksilver (New York)	Platinum (New York)
1896–1900	[4] 13.41	3.84	19.54	[5] 4.55	37.15	8.204	42.17	[6] 16.66
1901–1905	13.877	4.330	28.194	[7] 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
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	[8] 24.628	7.413	(9)	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	23.79	7.667	115.01	45.36
1931	8.116	4.243	24.467	3.640	23.30	6.720	87.35	35.67
1932	5.555	3.180	22.017	2.876	23.30	5.592	57.93	36.46
1933	7.025	3.869	39.110	4.029	23.30	6.528	59.23	30.99
1934	8.428	3.860	52.191	4.158	21.58	8.901	73.87	36.47

[1] Flasks of 75 pounds prior to 1928; 76 thereafter.
[2] 99 percent tin, 1896–1919; Straits tin thereafter.
[3] Prices 1896 to 1929 for pure aluminum (No. 1 virgin 98–99 percent); beginning 1930, for 99 percent + virgin ingot.
[4] Prices 1896 to 1898 are for Lake copper.
[5] Data are for New York zinc.
[6] Average for 1899 and 1900 only.
[7] Average, 1903–5; average for New York zinc, 1901–5, 5.058 cents.
[8] Average of 11 months.
[9] No average computed.

Sources: Engineering and Mining Journal; American Metal Market for aluminum, 1909–34.

No. 686.—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	Percent 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	1,091,900	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. 687.—PRODUCING MINES AND QUARRIES: PRINCIPAL STATISTICS, CONTINENTAL UNITED STATES

	1909 [1]	1919 [1]	1929		Percent 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**	**—11.6**
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**	**6,970,001**	**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 686 and 687: Bureau of the Census, Department of Commerce.

No. 688.—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	82	81	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	268,629
Kentucky	864	617	41,444	57,569	135,098	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	78,898	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. 689.—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	1,066,608	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	384,854
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	25,907	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	1,014	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. 690.—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: Percent
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. 691.—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	*78*	(x)	*98*	281	744	2,021	917
Slate	4,027	[1] 91		(x)	*926*	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

[1] Number of hours not reported.

Source of tables 690 and 691: Bureau of the Census, Department of Commerce.

No. 692.—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	1927	1928	1929	1930	1931	1932	1933
Continental United States	4, 888, 555	4, 708, 113	5, 164, 963	4, 249, 935	2, 854, 199	2, 285, 307	2, 320, 888
New England	48, 531	49, 053	49, 101	40, 619	32, 370	21, 383	16, 699
Maine	5, 476	5, 923	6, 749	6, 228	4, 889	3, 174	2, 594
New Hampshire	3, 447	3, 816	3, 726	3, 337	2, 796	1, 352	1, 457
Vermont	14, 703	14, 649	14, 603	11, 637	8, 422	6, 401	5, 793
Massachusetts	16, 295	16, 234	16, 031	12, 723	11, 170	8, 039	4, 917
Rhode Island	1, 311	831	940	1, 209	793	506	387
Connecticut	7, 299	7, 600	7, 053	5, 485	4, 300	1, 911	1, 551
Middle Atlantic	1, 122, 074	1, 060, 381	1, 074, 167	935, 351	714, 283	497, 983	487, 367
New York	112, 210	108, 026	109, 361	99, 622	78, 007	50, 176	42, 940
New Jersey	73, 091	70, 865	71, 892	57, 206	41, 633	23, 073	22, 580
Pennsylvania	936, 773	881, 490	892, 914	778, 523	594, 643	424, 734	421, 847
East North Central	660, 742	642, 488	676, 012	543, 627	364, 475	236, 421	261, 371
Ohio	226, 903	211, 041	220, 061	186, 972	130, 928	87, 997	91, 146
Indiana	107, 578	98, 584	96, 962	79, 227	50, 852	34, 603	34, 011
Illinois	180, 394	188, 099	182, 791	148, 311	108, 066	71, 693	74, 837
Michigan	124, 030	123, 826	151, 976	111, 406	62, 786	34, 714	54, 223
Wisconsin	21, 777	20, 938	24, 222	17, 711	11, 843	7, 414	7, 154
West North Central	347, 534	348, 016	392, 950	325, 710	192, 733	133, 564	165, 857
Minnesota	102, 973	108, 275	136, 350	103, 931	55, 275	12, 273	42, 472
Iowa	33, 426	35, 499	35, 955	33, 358	21, 615	18, 523	15, 155
Missouri	75, 890	74, 981	78, 948	69, 074	41, 806	29, 245	30, 588
North Dakota	2, 870	3, 083	3, 466	3, 056	2, 271	2, 386	2, 961
South Dakota	8, 464	9, 443	8, 914	11, 076	11, 339	11, 118	14, 659
Nebraska	3, 542	3, 455	4, 845	4, 962	3, 623	1, 548	2, 047
Kansas	120, 369	113, 280	124, 472	100, 253	56, 804	58, 471	57, 975
South Atlantic	481, 112	440, 831	450, 973	380, 543	289, 619	199, 741	218, 442
Delaware	493	482	467	425	395	300	135
Maryland	20, 469	18, 418	18, 470	14, 990	11, 330	7, 234	7, 015
District of Columbia	1, 375	1, 031	1, 065	1, 288	282	1, 819	423
Virginia	41, 323	38, 770	39, 753	34, 603	26, 150	16, 927	18, 846
West Virginia	366, 643	336, 637	346, 565	290, 119	221, 735	156, 643	172, 727
North Carolina	11, 704	11, 480	10, 964	7, 462	5, 554	2, 466	3, 351
South Carolina	4, 251	4, 046	3, 592	3, 341	3, 031	951	1, 014
Georgia	16, 758	14, 740	15, 294	12, 831	10, 291	6, 293	6, 087
Florida	18, 096	15, 227	14, 804	15, 484	10, 851	7, 108	8, 844
East South Central	271, 684	243, 628	241, 344	201, 427	140, 224	95, 527	108, 364
Kentucky	152, 614	131, 970	132, 650	111, 691	74, 868	59, 076	65, 536
Tennessee	37, 875	39, 217	40, 720	32, 499	24, 461	14, 562	16, 771
Alabama	78, 641	69, 807	65, 402	55, 462	38, 507	19, 170	23, 291
Mississippi	2, 554	2, 634	2, 573	1, 775	2, 388	2, 719	2, 766
West South Central	1, 009, 814	967, 071	1, 116, 555	947, 374	564, 491	651, 899	605, 831
Arkansas	59, 449	45, 010	41, 325	34, 901	18, 692	15, 540	12, 710
Louisiana	51, 267	56, 810	62, 726	71, 929	61, 693	61, 097	54, 886
Oklahoma	524, 595	486, 634	516, 685	390, 171	181, 905	185, 121	172, 561
Texas	374, 503	378, 617	495, 820	450, 373	302, 201	390, 141	365, 674
Mountain	458, 780	493, 577	579,548	369, 988	231, 619	146, 300	151, 068
Montana	68, 265	74, 752	93, 842	50, 995	32, 360	19, 023	21, 662
Idaho	29, 184	28, 589	32, 143	22, 904	13, 177	9, 478	12, 429
Wyoming	56, 167	52, 951	51, 237	46, 735	30, 893	27, 343	22, 025
Colorado	58, 855	58, 595	55, 332	46, 271	32, 970	25, 800	27, 259
New Mexico	28, 609	30, 427	37, 128	31, 850	25, 350	20, 264	23, 355
Arizona	100, 559	116, 000	157, 960	82, 934	41, 603	15, 204	12, 571
Utah	90, 388	97, 381	115, 131	64, 224	40, 302	22, 620	24, 312
Nevada	26, 753	34, 882	36, 776	24, 075	14, 964	6, 568	7, 455
Pacific	488, 284	463, 068	584, 313	505, 296	12, 371	302, 489	305, 889
Washington	21, 966	22, 120	22, 435	20, 076		12, 817	9, 388
Oregon	6, 821	6, 687	6, 877	6, 170		2, 989	3, 522
California	459, 497	434, 261	555, 001	479, 050		286, 683	292, 979
Alaska	14, 402	14, 024	15, 947	13, 707		11, 526	12, 681

Source: Bureau of Mines, Department of the Interior.

No. 693.—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 1934 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	1933	1934	1915	1920	1925	1930	1933	1934
METALLIC												
Aluminum ... 1,000 pounds		138,000	140,000	229,035	85,126	74,177	16,280	41,375	36,430	50,961	16,174	14,094
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)	(3)	[2] 2,374	[2] 473	[2] 918	[2] 258	(3)	(3)
Bauxite ... long tons	297,041	521,308	316,540	330,612	154,176	157,838	1,515	3,247	1,988	1,928	923	1,129
Cadmium ... pounds	91,415	129,283	502,824	2,777,762	2,276,933	2,777,384	108	151	277	1,778	(4)	(4)
Chromite ... long tons	3,281	2,502	108	80	843	369	37	45	2	2	12	5
Copper,[5] sales value ... 1,000 pounds	1,388,010	1,209,061	1,674,870	1,394,389	449,999	488,454	242,902	222,467	237,832	181,271	28,800	39,076
Ferro-alloys ... long tons	388,644	612,808	616,222	650,240	421,423	428,798	17,450	77,519	53,048	51,900	28,654	34,635
Gold[6] ... 1,000 troy ounces	4,888	2,476	2,412	2,286	2,556	3,075	101,036	51,187	49,860	47,248	[6] 65,338	[6] 107,632
Iron:												
Ore ... 1,000 long tons	55,493	69,281	63,925	55,201	24,624	25,793	[7] 101,289	[7] 285,006	[7] 160,797	[7] 145,619	[7] 63,776	[7] 66,484
Pig ... do	30,384	35,710	36,815	29,905	14,353	15,633	401,410	1,140,904	739,316	512,165	213,348	264,654
Lead (refined),[5] sales value ... short tons	507,026	476,849	654,921	573,740	259,616	299,841	47,660	76,296	113,956	57,374	19,212	22,188
Manganese ore (35 percent or more Mn.) ... long tons	9,613	94,420	98,324	67,035	19,146	26,514	113	2,396	1,858	1,437	466	572
Manganiferous ore (5 to 35 percent Mn.) ... long tons	195,735	767,664	1,448,054	785,390	191,631	221,822	817	2,438	3,752	2,402	529	621
Mercury, metal ... flasks (76 pounds net)	20,756	13,216	9,053	21,553	9,669	15,445	1,805	1,067	763	2,479	573	1,141
Mercury ore ... short tons	159,000	109,000	65,000	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)
Nickel ... do	822	365	272	308	123	157	538	293	170	214	63	108
Ores (crude), tailings, etc.:												
Copper ... 1,000 short tons	43,404	36,765	53,262	47,382	8,385	(8)	(8)	(8)	(8)	(8)	(8)	(8)
Copper-lead and copper-lead zinc ... do	11	27	229	246	126	(8)	(8)	(8)	(8)	(8)	(8)	(8)
Dry and siliceous (gold and silver) ... do	12,687	8,590	8,995	7,767	8,680	(8)	(8)	(8)	(8)	(8)	(8)	(8)
Lead ... do	7,497	7,200	8,560	8,080	3,213	(8)	(8)	(8)	(8)	(8)	(8)	(8)
Lead-zinc ... do	18,176	12,383	17,741	10,645	4,894	(8)	(8)	(8)	(8)	(8)	(8)	(8)
Zinc ... do		2,651	3,411	5,980	3,236	(8)	(8)	(8)	(8)	(8)	(8)	(8)
Platinum and allied metals (value at New York City) ... troy ounces	8,665	41,544	49,643	43,502	51,539	47,274	479	4,698	5,662	2,049	1,631	1,686
Silver ... 1,000 troy ounces	74,961	55,362	66,155	50,748	23,003	31,384	37,397	60,802	45,912	19,538	8,051	20,274
Tin (metallic equivalent) ... short tons	102	22	14	17	3	9	79	22	16	10	2	10
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 concentrates) ... do	2,332	216	1,190	702	895	2,049	4,100	102	756	509	514	1,791
Uranium and vanadium ores ... do		35,076	13,070	(4)	105	(4)	694	2,401	331	(4)	4	(4)
Zinc,[5] sales value ... do	453,135	450,045	555,631	489,361	306,010	355,366	113,617	72,907	84,456	46,979	25,705	30,561
Total metallic products (approximate)							991,730	1,762,850	1,380,280	982,550	411,300	542,100

For footnotes see p. 681.

No. 693.—Mineral Products of the United States: Quantities and Values—Continued

Products	Quantity						Value in thousands of dollars					
	1915	1920	1925	1930	1933	1934	1915	1920	1925	1930	1933	1934
NONMETALLIC												
Arsenious oxide ..... short tons	5,498	11,502	12,317	17,425	11,797	15,623	302	2,021	1,199	1,008	636	797
Asbestos ..... do	1,731	1,648	1,258	4,242	4,745	5,087	77	678	52	289	131	158
Asphalt:												
Native ..... do	740,254	898,993	584,850	702,777	313,135	440,852	5,242	13,199	4,148	4,463	1,705	2,366
Oil (including road oil) ..... do			1,206,700	2,273,546	2,122,458	2,484,743			[7] 15,306	[7] 21,570	[7] 15,946	[7] 23,277
Barite (crude) ..... do	108,547	228,113	228,063	234,932	167,880	209,850	381	2,142	1,703	1,538	853	1,109
Borates ..... do	67,003	120,320	113,700	177,360	188,047	242,500	1,677	2,173	3,086	5,352	3,436	4,822
Bromine ..... 1,000 pounds	856	1,161	1,566	8,463	10,148	15,344	856	745	488	2,110	2,040	3,227
Calcium-magnesium chloride ..... short tons	20,535	27,849	67,870	116,160	57,813	76,719	131	539	1,387	2,208	893	1,153
Cement ..... 1,000 bbls. (376 lbs. net)	87,685	97,079	159,047	160,846	64,715	76,367	75,155	195,590	281,076	231,249	86,172	116,446
Clay:												
Products							160,080	373,670	[9] 423,447	[9] 275,134	[9] 94,727	[9] 116,172
Raw ..... 1,000 short tons	2,363	3,116	4,030	3,963	1,840	2,187	[7] 3,972	[7] 11,614	[7] 12,737	[7] 12,521	[7] 6,841	[7] 8,197
Coal:												
Bituminous [10] ..... do	442,624	568,667	520,053	467,526	333,631	358,395	502,038	2,129,933	1,060,402	795,483	445,788	652,279
Pennsylvania anthracite ..... do	88,995	89,598	61,817	69,385	49,541	57,385	184,653	434,252	327,665	354,574	206,718	243,312
Coke ..... do	41,581	51,345	51,267	47,972	27,589	31,822	[7] 105,504	[7] 494,246	[7] 262,559	[7] 209,137	[7] 122,951	[7] 159,426
Diatomite and tripoli ..... short tons	35,304	102,155	102,418	[11] 32,439	[11] 20,878	[11] 20,529	167	1,649	1,357	[11] 508	[11] 350	[11] 329
Emery ..... do	3,063	2,327	769	555	1,056	189	31	22	6	6	12	2
Feldspar (crude) ..... long tons	93,855	135,551	185,706	171,788	150,633	154,188	489	851	1,316	1,067	779	853
Fluorspar ..... short tons	136,941	186,778	113,669	95,849	72,930	85,786	764	4,719	2,052	1,747	1,039	1,391
Fuller's earth ..... do	47,901	128,487	206,574	335,644	224,152	220,264	489	2,506	2,924	4,327	2,081	2,085
Garnet for abrasive purposes ..... do	4,301	5,476	8,429	5,003	2,794	2,591	140	434	713	314	225	215
Gems and precious stones							170	265	(12)	(12)	(12)	(12)
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)	417	576	57	(4)		(4)
Grindstones and pulpstones ..... short tons		53,484	37,340	18,700	14,176	12,630	648	1,707	1,706	771	444	463
Gypsum ..... 1,000 short tons	2,448	3,129	5,678	3,471	1,335	1,536	6,597	24,533	47,577	27,051	11,927	13,762
Lime ..... do	3,623	3,570	4,581	3,388	2,269	2,407	14,424	37,544	42,609	25,616	14,254	16,996
Magnesite (crude) ..... short tons	30,499	303,767	120,660	129,320	108,187	100,973	274	2,748	1,433	1,033	840	731
Mica:												
Scrap ..... do	3,959	5,723	9,695	6,732	8,751	7,719	51	167	174	109	98	100
Sheet ..... 1,000 pounds	554	1,683	1,794	1,465	365	584	378	547	322	177	53	90
Millstones							53	63	22	18	8	10
Mineral paints:												
Natural pigments ..... short tons	57,442	(13)	(13)	(13)	(13)	(13)	552	(13)	(13)	(13)	(13)	(13)
Zinc and lead pigments [14] ..... do	141,383	143,244	199,190	147,948	129,355	114,661	14,962	24,565	28,311	18,420	13,194	12,617
Mineral waters ..... 1,000 gallons	52,114	36,218	(12)	(12)	(12)	(12)	5,139	4,861	(12)	(12)	(12)	(12)
Natural gas ..... 1,000,000 cu. ft.	628,579	798,210	1,188,571	1,943,421	1,555,474	1,770,721	101,312	196,194	265,271	416,090	368,540	395,378
Natural gasoline ..... 1,000 gallons	65,365	384,744	1,127,470	2,210,494	1,420,000	1,535,360	5,151	71,788	120,383	128,160	54,368	60,523
Oilstones, etc ..... short tons		1,144	970	651	587	396	115	232	272	137	97	94
Peat ..... do	42,284	73,204	72,436	(12)	(12)	40,544	289	922	453	(12)	(12)	214

Petroleum ..... 1,000 barrels (42 gals.)	281, 104	442, 929	763, 743	898, 011	905, 656	908, 065	179, 463	1, 360, 745	1, 284, 960	1, 070, 200	608, 000	904, 825
Phosphate rock ..... 1,000 long tons	1, 836	4, 104	3, 482	3, 926	2, 490	2, 835	5, 413	25, 080	11, 546	13, 997	7, 872	10, 040
Potash (K_2O) ..... short tons	1, 090	41, 444	25, 802	56, 610	139, 067	114, 122	342	7, 463	1, 204	2, 986	5, 297	2, 813
Pumice ..... do	27, 708	41, 838	40, 380	56, 843	61, 220	56, 169	63	114	179	336	242	207
Pyrites ..... long tons	394, 124	310, 777	170, 081	[15] 347, 512	[15] 284, 311	[15] 432, 524	1, 675	1, 597	650	[15] 1, 029	[15] 770	[15] 1, 216
Salt ..... 1,000 short tons	5, 352	6, 840	7, 398	8, 054	7, 605	7, 612	11, 748	29, 894	26, 162	25, 009	22, 318	22, 851
Sand and gravel:												
Sand, glass ..... 1,000 short tons	1, 884	2, 166	2, 335	1, 849	1, 781	1, 920	1, 607	4, 749	3, 836	3, 211	3, 011	65, 000
Sand (molding, building, etc.) and gravel 1,000 short tons	74, 719	79, 875	169, 667	195, 203	105, 974	111, 080	21, 515	60, 913	103, 706	111, 966	50, 062	
Sand-lime brick ..... thousands	179, 643	169, 761	[9] 315, 595	[9] 191, 193	[9] 22, 904	[9] 41, 408	1, 135	2, 490	[9] 3, 781	[9] 1, 951	[9] 195	[9] 356
Silica (quartz) ..... short tons	112, 575	68, 190	25, 444	13, 156	11, 153	18, 293	274	320	205	121	71	130
Slate ..... do	----------	468, 700	724, 600	463, 610	259, 620	232, 730	4, 959	8, 726	12, 575	7, 912	2, 696	2, 708
Stone ..... 1,000 short tons	----------	78, 527	115, 851	126, 996	[16] 70, 222	[16] 86, 617	74, 595	133, 542	174, 217	178, 949	[16] 80, 946	[16] 94, 456
Sulphur ..... 1,000 long tons	294	1, 518	1, 858	1, 990	1, 637	1, 614	4, 959	30, 000	29, 000	35, 800	29, 500	28, 900
Sulphuric acid (60° Baumé) from copper and zinc smelters ..... 1,000 short tons	[17] 905	[17] 1, 230	1, 007	1, 188	656	576	7, 621	13, 617	7, 513	9, 544	4, 338	4, 227
Talc and soapstone ..... short tons	186, 891	210, 635	[18] 182, 256	[18] 179, 385	[19] 166, 023	[19] 138, 905	1, 892	3, 035	[18] 2, 012	[18] 2, 108	[19] 1, 732	[19] 1, 451
Total nonmetallic products (approximate)	----------	----------	----------	----------	----------	----------	**1, 400, 484**	**5, 214, 170**	**4, 291, 100**	**3, 773, 400**	**2, 132, 900**	**2, 793, 300**
SUMMARY OF VALUES												
Metallic products	----------	----------	----------	----------	----------	----------	991, 730	1, 762, 350	1, 380, 280	982, 550	411, 300	542, 100
Nonmetallic products (exclusive of fuels)	----------	----------	----------	----------	----------	----------	427, 867	1, 021, 260	1, 232, 420	1, 008, 900	449, 350	534, 600
Mineral fuels	----------	----------	----------	----------	----------	----------	972, 617	4, 192, 910	3, 058, 680	2, 764, 500	1, 683, 550	2, 258, 700
"Unspecified" (metallic and nonmetallic) products (partly estimated)	----------	----------	----------	----------	----------	----------	2, 430	4, 820	6, 250	8, 850	10, 900	14, 600
Grand total (approximate)	----------	----------	----------	----------	----------	----------	**2, 394, 644**	**6, 981, 340**	**5, 677, 630**	**4, 764, 800**	**2, 555, 100**	**3, 350, 000**

[1] From both domestic and foreign ores. No comparable data for 1933 and 1934; 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 in 1933 and largely in 1934. Value not included in total value. Bureau of Mines not at liberty to publish figures.
[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] Valued at $20.67+ per ounce prior to 1933. In 1933 includes $52,842,000, calculated by Bureau of the Mint at legal coinage value ($20.67+ per ounce), plus $12,495,000 premium calculated by Bureau of Mines at average weighted price ($25.56 per ounce). Valued at $35.00 per ounce in 1934.
[7] Value not included in total value, since value of product derived therefrom, or of raw material used, is accounted for under other items.
[8] Figures not available. Value of products derived therefrom, or of raw materials used, is included elsewhere.
[9] Figures obtained through cooperation with Bureau of the Census.
[10] Includes brown coal and lignite and anthracite mined elsewhere than in Pennsylvania.
[11] Tripoli only. Value of diatomite is included in total value of nonmetallic products. Bureau of Mines not at liberty to publish figures.
[12] No canvass. Estimate of value included in total value of nonmetallic products.
[13] Canvass discontinued after 1915. Value of iron ore sold for paint included under "Unspecified." [14] Sublimed blue lead, sublimed white lead, leaded zinc oxide, and zinc oxide.
[15] Figures include pyrites concentrates from Tennessee and partly desulphurized tailings from zinc operations in Wisconsin; similar output in 1915 to 1925 was not included.
[16] Includes soapstone used as dimension stone. [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 in 1925 and 1930 is included in value of nonmetallic products. Bureau of Mines not at liberty to publish figures.
[19] Talc and ground soapstone.

Source: Bureau of Mines, Department of the Interior.

No. 694.—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 percent 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
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
1933	17,553	24,624	155	861
1934	24,588	25,793	609	1,428

Production	1931	1932	1933	1934
REGION				
Lake Superior [1]	25,877	8,139	14,611	21,031
Birmingham	3,495	1,336	2,044	2,226
All other	1,760	371	898	1,331
STATE				
Alabama	3,615	1,375	2,133	2,344
Michigan	7,553	2,555	2,434	5,039
Minnesota	17,445	5,154	11,949	15,390
Missouri	112	30	(2)	4
New Jersey	294	31	73	139
New York	275	31	59	245
Pennsylvania	368	103	264	525
Utah	184	137	95	161
Wisconsin	880	430	228	602
Wyoming	181		289	117
All other	225	1	28	22
KIND				
Hematite	[3] 29,665	[3] 9,622	16,921	[3] 23,391
Brown ore	360	62	235	286
Magnetite	[3] 1,105	[3] 163	397	[3] 910
Carbonate	1	(2)	(2)	1

[1] Includes only those mines in Wisconsin which are in true Lake Superior district. [2] Less than 500 tons.
[3] Some hematite included with magnetite.

No. 695.—ANALYSIS OF PIG IRON AND FERRO-ALLOY PRODUCTION

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

	1900	1910	1915	1920	1925	1930	1931	1932	1933	1934
Total pig iron and ferro-alloys	13,789	27,304	29,916	36,926	36,701	31,752	18,426	8,781	13,346	16,139
By States:										
New England	14	17	8	10		2,211	1,275	710	765	1,194
New York, New Jersey	463	2,203	2,105	2,601	2,188					
Pennsylvania	6,366	11,272	12,791	13,983	12,523	10,305	5,233	2,188	3,893	4,409
Maryland and Virginia	781	771	503	953	830	1,088	692	380	619	
Alabama	1,184	1,939	2,049	2,393	2,836	2,395	1,671	667	906	
Ohio	2,471	5,752	6,913	8,533	8,863	6,805	4,189	2,412	3,955	
Illinois	1,363	2,676	2,447	3,281	3,604	3,345	1,965	919	1,013	
Indiana, Michigan	164	1,250	1,987	2,940	4,120	3,934	2,328	1,035	1,470	10,535
Wisconsin, Minnesota	185	307	373	711	468	805	317	164	188	
Iowa, Colorado, Utah	798	1,117	741	1,520	505					
All other					762	865	756	306	538	
By disposition:										
For sale	(1)	(1)	8,583	10,724	8,991	7,083	4,339	1,877	2,338	3,003
For maker's use	(1)	(1)	21,333	26,202	27,710	24,670	14,087	6,904	11,007	13,136
By kinds:										
Basic	1,072	9,085	13,093	16,738	19,667	18,393	10,174	5,074	7,953	10,102
Bessemer	7,979	11,246	10,523	12,062	9,419	7,315	4,636	2,220	3,474	3,431
Foundry (incl. ferrosilicon)	3,376	5,260	4,844	5,958	5,410	3,960	2,345	966	1,210	1,505
Malleable	173	843	830	1,311	1,554	1,572	946	420	495	827
Forge	793	564	316	318	241	51	36	2	5	21
Ferromanganese, spiegeleisen, and all other	395	306	310	539	409	461	289	129	209	252
By fuels:										
Coke [2]	11,728	26,258	29,535	36,300	36,504	31,656	18,380	8,766	13,313	16,113
Anthracite	1,677	649	85	303						
Charcoal	384	397	296	323	196	97	46	15	33	26
Materials used:										
Iron ore, briquettes, etc	24,131	51,739	55,137	66,450	65,450	[3] 53,662	[3] 29,668	[3] 12,788	[3] 21,572	[3] 26,042
Cinder, scale, etc	1,600	2,800	4,483	4,986	5,017	[3] 6,296	[3] 3,762	[3] 2,189	[3] 2,820	[3] 3,439
Coke (1,000 tons of 2,000 pounds) [4]	(1)	(1)	33,329	42,046	39,296	[3] 31,168	[3] 17,738	[3] 8,337	[3] 12,547	(1)
Limestone	7,422	14,528	14,790	17,825	15,154	[3] 11,099	[3] 6,209	[3] 2,951	[3] 4,566	(1)
Total number furnaces Dec. 31	406	473	445	452	395	300	288	279	275	269
Furnaces in blast Dec. 31	232	206	310	216	238	97	61	44	75	68

[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 694, Bureau of Mines, Department of the Interior; table 695, *American Iron and Steel Institute*.

No. 696.—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. Imports are imports for consumption beginning with 1933. All production figures are for calendar years. For individual years 1871 to 1908 and data for earlier years, see Statistical Abstract 1931, tables 750 and 751

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	1918	39,054,644	269,575	34,711	44,462,432
1876-1880	2,562,763	3,407	276,600	803,479	1919	31,015,364	321,261	101,665	34,671,232
1881-1885	4,301,096	5,311	325,290	1,652,268	1920	36,925,987	216,828	185,944	42,132,934
1886-1890	7,079,312	12,407	229,970	3,292,763	1921	16,688,126	28,405	44,842	19,783,797
1891-1895	8,133,014	22,983	54,778	4,675,736	1922	27,219,904	33,332	498,059	35,602,926
1896-1900	11,491,937	224,268	34,308	8,439,938	1923	40,361,146	37,559	474,723	44,943,696
1901-1905	18,239,665	45,465	314,765	15,367,931	1924	31,405,790	45,818	276,966	37,931,939
1906-1910	24,024,722	78,618	275,036	22,166,783	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	223,680	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
1916	39,434,797	607,236	135,349	42,773,680	1933	13,345,602	11,272	196,284	23,232,347
1917	38,621,216	656,220	76,786	45,060,607	1934	16,138,573	13,474	157,387	[2] 26,055,289

[1] 1875 only. [2] Includes only steel castings produced in foundries producing steel ingots.

No. 697.—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	1933	1934
Rolled products, total	16,840	21,621	24,393	32,348	33,387	29,513	17,735	18,970
Rails	3,376	3,636	2,204	2,604	2,785	1,873	416	1,010
Bessemer and electric	3,192	1,884	327	143	10	2	(1)	2
Open hearth	183	1,751	1,775	2,334	2,692	1,835	398	982
Rerolled			102	127	84	36	18	26
Sheets and plates	3,532	4,955	6,078	9,338	9,808	9,067	6,217	6,376
Universal			955	1,250	1,196	1,041	312	535
Sheared			1,923	3,505	2,557	2,622	849	903
Black sheets [2]			1,837	2,886	4,097	3,512	3,092	3,203
Black plates for tinning			1,093	1,449	1,632	1,692	1,677	1,500
Other black-plate specialties			270	247	325	201	287	236
Wire rods	1,809	2,242	3,096	3,137	2,845	2,349	2,024	1,724
Structural shapes	1,661	[3] 2,267	2,437	3,307	3,604	3,512	1,109	1,425
Merchant bars	3,594	3,786	4,131	6,130	5,659	4,132	2,285	[4] 2,802
Skelp	1,436	1,828	2,299	3,220	3,230	2,682	995	1,120
Hoops	446	262	282	333	205	80	48	49
Bands and cotton ties		425	438	389	356	46	51	28
Splice and fish-plate bars			536	576	823	606	197	348
Rolled forging blooms, billets, etc.	42	460	651	447	345	304	121	212
Bars for reenforced concrete work	946	241	353	572	820	850	370	487
Hot-rolled strips and flats for cold rolling		1,519	1,888	2,294	2,908	1,942	1,830	2,197
Blanks or pierced billets for seamless tubes						1,248	589	825
All other rolled products						814	483	366
Miscellaneous products:								
Tin plate		648	983	1,375	1,544	1,660	1,686	1,503
Terneplates		75	73	71	114	103	83	100
Galvanized sheets			706	835	1,134	1,045	703	772
Galvanized formed products			50	64	80	65	44	40
Wire nails (thousands of kegs [5])	10,855	12,705	14,583	16,450	15,454	9,561	8,927	6,197
Cut nails (thousands of kegs [5])	1,358	1,005	775	845	736	460	349	349
Wrought pipe or tubes [6]			1,920	3,003	3,031	2,247	723	862
Boiler tubes [6]			97	119	63	31	13	14
Seamless pipes or tubes			140	292	568	1,194	480	733
Cast-iron pipe and fittings			1,085	792	1,719	1,282	433	581
Forgings made by rolling mills		320	524	540	388	476	89	259

[1] Less than 500 tons. [2] Rolled on sheet or jobbing mills. [3] Small structural forms not included.
[4] Merchant bars include certain miscellaneous bars which were included in prior years in "All other rolled products." [5] Of 100 pounds. [6] Excluding electric welding.

Source of tables 696 and 697: American Iron and Steel Institute.

No. 698.—PRODUCTION, EXPORTS, AND IMPORTS OF FINISHED ROLLED IRON AND STEEL

NOTE.—In long tons (2,240 pounds). Imports are imports for consumption beginning with 1933; general imports in earlier years. Blank spaces indicate that figures are not available

Yearly average or year (calendar year)	Total production, finished rolled products	Rails			Plates and sheets			Merchant bar production [1]
		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	[2] 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
1911–1915	22,250,075	2,760,557	378,792	23,740	5,382,221	416,404	2,875	3,770,316
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	9,067,356	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	79,031	[4] 22,252	1,699,501
1933	16,735,086	416,296	41,481	6,403	6,216,650	108,841	[4] 9,503	2,655,049
1934	18,969,506	1,010,224	69,159	3,073	6,375,815	202,265	[4] 4,646	3,289,431

Yearly average or year (calendar year)	Skelp 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
1911–1915	2,242,270	2,619,287	75,225	11,784	[8] 2,446,391	265,891	6,352	3,029,034
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	38,623	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
1933	994,515	2,024,095	16,877	13,339	1,109,457	32,033	29,296	3,319,024
1934	1,120,217	1,723,765	23,732	10,657	1,425,040	53,574	25,023	4,025,014

[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 in 1911.

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

No. 699.—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	Quantity in thousands of unit specified				Value in thousands of dollars		
	Unit	1929	1931	1933	1929	1931	1933
STEEL WORKS AND ROLLING MILLS							
All products, total value					3,365,789	1,402,843	1,143,889
Unrolled steel, total	Ton [1]	56,161	25,896	23,163			
Ingots—							
For sale and interplant transfer	do	661	243	133	17,150	5,548	3,932
Produced and consumed in works	do	54,133	25,193	22,751			
Direct steel castings—							
For sale and interplant transfer [2]	do	1,212	371	222	191,398	59,557	32,296
Produced and consumed in works [2]	do	155	89	56			
Semifinished rolled products, for sale and interplant transfer, total.	do	12,779	5,633	5,470	421,328	161,673	137,957
Blooms, billets, and slabs, except for forging.	do	7,361	3,107	3,025	244,792	91,110	79,499
Rolled blooms and billets for forging	do	270	69	64	10,327	2,494	2,008
Sheet and tin-plate bars	do	5,062	2,439	2,369	162,316	67,290	56,026
Muck and scrap bar	do	87	17	12	3,893	778	423
Finished rolled products and forgings, total. [3]	do	39,883	18,396	16,161			
Produced and consumed in works	do	9,532	5,199	4,994			
For sale and interplant transfer	do	30,350	13,198	11,166	1,604,833	614,899	495,544
Rails	do	2,666	1,130	393	113,925	48,197	15,157
Rail joints, fastenings, tie plates, etc.	do	872	379	198	47,761	19,096	9,316
Structural shapes (not fabricated)	do	4,470	1,985	992	188,898	71,668	35,216
Concrete reenforcing bars	do	972	617	357	42,417	23,081	12,309
Merchant bars, mill shafting, etc.—							
Steel	do	6,228	2,231	2,275	358,601	111,637	107,840
Iron	do	187	53	45	13,284	3,696	3,348
Bolt and nut rods, spike and chain rods, etc.	do	121	20	34	5,633	843	1,361
Wire rods	do	1,155	650	736	49,042	23,420	26,179
Plates No. 12 and thicker	do	5,218	1,986	1,406	228,236	75,853	53,508
Sheets No. 13 and thinner	do	4,041	2,021	2,686	306,936	125,920	136,919
Skelp	do	1,271	619	468	50,121	21,320	15,206
Hot-rolled strips for cold rolling	do	479	402	455	21,347	18,052	18,041
Other strips and cotton ties	do	1,566	706	742	75,626	31,785	29,917
Axles	do	150	27	55	12,039	2,239	2,788
Armor plate and ordnance	do	10	17	8	3,287	6,184	2,080
Car and locomotive wheels	do	209	84	69	19,352	7,689	6,486
All other rolled and forged products [4]	do	732	270	249	68,278	24,219	19,872
Scrap iron and steel, for sale and interplant transfer.	do	2,830	1,409	1,031	42,101	16,645	10,255
Cinder and scale	do	1,194	620	709	2,731	1,308	1,269
All other (including value added to rolled products by further manufacture).	do				1,086,248	543,213	462,636
WIRE AND WIRE PRODUCTS (ALL METALS)							
All industries, total value					919,988	403,407	298,418
Iron and steel wire:							
Plain wire, total [5]	Ton [6]	3,097	1,866	1,962			
For sale and interplant transfer	do	1,204	603	667	88,456	40,492	43,586
Produced and consumed in works	do	1,891	1,262	1,295			
Galvanized wire: For sale and interplant transfer.	do	269	172	168	19,656	10,963	9,936
Other coated wire: For sale and interplant transfer.	do	52	43	34	8,143	5,164	4,184
Cold-rolled from drawn wire: For sale and interplant transfer.	do	29	14	15	4,256	2,361	2,882
Copper wire:							
For sale and interplant transfer	Lb	544,740	187,921	99,135	118,628	22,884	10,305
Produced and consumed in works	do	407,996	242,390	159,379			
Drawn on contract or custom basis from rods or bars furnished by others.	do	151,761	25,572	9,673			

For footnotes, see p. 686.

No. 699.—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		
		1929	1931	1933	1929	1931	1933
WIRE AND WIRE PRODUCTS (ALL METALS)—continued							
Brass and bronze wire:							
For sale and interplant transfer	Lb.	86,805	48,031	55,015	20,332	7,904	7,527
Produced and consumed in works	do.	5,581	5,066	4,997			
Other metal wire:							
For sale and interplant transfer	do.	48,487	26,750	15,630	23,590	10,214	6,760
Produced and consumed in works	do.	21	31	47			
Fabricated wire products for sale:							
Iron and steel—							
Nails, brads, and spikes [7]	Keg [8]	13,601	8,177	9,101	44,935	22,532	24,312
Tacks [7]	Lb.	6,540	2,620	(9)	640	218	374
Staples	do.	58,879	44,863	(9)	2,342	1,385	1,757
Barbed wire	Ton [6]	222	162	182	13,824	8,280	8,608
Rope or cable, except insulated	do.	153	57	49	46,877	18,412	13,615
Strand, galvanized	do.	49	36	20	5,618	3,284	2,098
Poultry netting	do.	47	32	29	7,536	4,165	3,725
Woven wire fence, except poultry netting.	do.	366	242	203	31,041	17,897	13,907
Fly screening	Lb.	64,728	31,719	46,856	9,942	4,623	6,264
Other wire cloth	do.		24,949	22,522	6,555	4,177	2,734
Concrete reenforcement wire	Ton [6]		140	(9)	11,786	8,177	3,665
Other woven wire	do.	139	28	28		5,522	4,837
Automobile skid chains					11,491	5,987	3,337
Bale ties	Lb.	148,474	109,349	124,090	5,088	3,593	3,680
Wire springs					47,903	26,686	24,104
Welding wire	Lb.		22,795	23,328	42,872	1,427	1,581
Other fabricated iron and steel wire products.						25,936	19,524
Nonferrous wire products—							
Fly screening—							
Copper	Lb.	4,993	2,697	9,788	1,768	780	2,388
Other metals	do.	10,211	7,132		3,336	2,381	
Fourdrinier and cylinder wire cloth.	do.	3,108	1,899	1,985	4,765	3,082	3,189
Other wire cloth—							
Copper	do.	1,168	386	(9)	588	151	1,227
Other metals	do.	1,450	1,239	(9)	683	1,084	
Copper strand, except insulated	do.	92,395	59,051	24,771	18,617	7,383	2,486
Other fabricated nonferrous wire products, except insulated wire.					6,125	5,670	2,350
Fabricated wire products not distributed above.						397	2,255
Insulated wire and cable					312,592	120,197	61,226
TIN PLATE AND TERNEPLATE							
All products, total value					213,084	142,698	151,601
Tin plate	Lb.	4,031,856	3,108,668	3,764,702	194,107	135,375	142,434
Terneplate	do.	345,592	159,357	198,254	15,568	5,609	6,336
All other products					3,409	1,713	2,830
CAST-IRON PIPE AND FITTINGS							
All industries, total value					85,890	51,111	22,633
Quantity reported	Ton [6]	1,736	1,191	520	78,296	45,238	20,065
Quantity not reported					7,594	5,873	2,569

[1] Of 2,240 pounds.
[2] In addition steel castings were produced for sale by establishments classified in other industries as follows: For 1929, 33,550 tons valued at $6,635,760; 1931, 13,916 tons valued at $2,578,080; 1933, 14,495 tons valued at $2,508,632. 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 1929, 53,980 tons; 1931, 13,210 tons; 1933, 16,271 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] Not including value of nails and tacks made from nail and tack plate.
[8] Of 100 pounds.
[9] No comparable data.

Source: Bureau of the Census, Department of Commerce.

No. 700.—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
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	
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	
1933	23,232,347	2,428,791	20,381,672	20,057,146	324,526	681	421,203	
1934 [1]	26,055,289	2,162,357	23,531,105	23,256,417	274,688	531	361,296	

[1] Figures include only that portion of steel for castings which was produced in foundries producing steel ingots.

No. 701.—BLAST FURNACES AND STEEL MILLS: CENSUS STATISTICS

NOTE.—The scope of the industry "Steel works and rolling mills" is indicated by table 699

Year	Number of establishments	Wage earners (average number)	Wages	Value of products [1]	Value added by manufacture [2]	Primary horsepower
			Thousands of dollars			
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	(3)
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	(3)
1933	466	288,945	270,367	1,357,574	481,529	(3)
Blast furnaces:						
1931 [4]	80	13,572	19,259	311,371	52,240	(3)
1933 [4]	72	12,098	11,564	213,685	29,729	(3)
Steel works and rolling mills:						
1931	446	264,634	338,386	1,402,843	570,959	(3)
1933	394	276,847	258,803	1,143,889	451,800	(3)

[1] Includes much duplication.
[2] Value of products less cost of materials.
[3] No data.
[4] Includes data for 4 establishments in 1931 and 5 in 1933 engaged in production of sintered ore and flue dust and operated independently of blast furnaces.

No. 702.—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		1911	2,188	86,599	1923	2,010	167,247
1895	89		1912	2,948	112,535	1924	1,806	150,494
1900	1,154	42,518	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	1933	1,341	45,534
1910	1,538	63,436	1922	1,995	136,334	1934	2,813	88,691

Sources: Table 700, American Iron and Steel Institute; table 701, Bureau of the Census, Department of Commerce; table 702, Bureau of Foreign and Domestic Commerce, Department of Commerce.

No. 703.—EXPORTS OF HEAVY IRON AND STEEL PRODUCTS

NOTE.—This and tables 702 and 704 exclude the highly elaborated manufactures of iron and steel

Articles	Quantity in long tons (2,240 pounds)				Value in thousands of dollars			
	1931	1932	1933	1934	1931	1932	1933	1934
Total	968,645	594,581	1,341,183	2,812,847	63,226	28,857	45,534	88,691
Pig iron, not including ferro-alloys	6,719	2,324	2,750	4,096	151	54	64	97
Ferromanganese and spiegeleisen	1,306	33	44	222	39	2	3	13
Scrap	136,125	227,522	773,406	1,835,170	1,957	1,859	6,874	19,188
Ingots, blooms, billets, sheet bars, and skelp	64,461	27,114	26,419	76,953	2,701	974	936	2,676
Iron and steel bars	43,528	15,987	22,926	43,966	2,425	870	1,187	2,210
Alloy steel bars	2,968	1,621	1,797	2,911	499	251	267	525
Wire rods	32,125	14,813	16,877	23,734	1,297	583	608	815
Galvanized sheets	51,523	26,923	53,856	68,538	4,294	1,982	3,682	4,630
Plates, iron and steel	42,472	10,293	13,754	35,792	1,911	524	632	1,612
Black steel sheets	91,788	38,277	37,078	90,999	6,918	2,844	2,465	6,025
Black iron sheets	5,526	2,462	2,751	4,325	447	176	196	317
Hoop, band, and strip steel	28,229	17,778	20,252	29,307	1,834	1,127	1,228	1,933
Tin plate, terneplate, etc	84,433	39,603	95,238	184,651	7,841	3,273	7,650	16,873
Structural shapes, plain material	88,710	14,885	14,089	31,392	3,437	590	535	1,322
Structural materials, fabricated	32,135	17,277	18,335	23,673	2,769	1,029	1,206	1,704
Tanks, complete and knocked down	12,432	3,053	3,078	7,852	1,132	267	305	596
Metal lath	2,410	1,471	1,007	1,110	350	183	135	159
Steel rails	33,108	11,320	41,481	69,159	1,289	428	1,227	2,121
Rail fastenings, switches, frogs, etc	8,093	3,742	13,536	16,929	877	299	939	1,246
Boiler tubes	7,071	3,681	3,916	8,245	886	567	483	1,085
Casing and oil-line pipe	21,975	17,275	39,208	57,112	2,469	1,792	3,431	5,666
Seamless black pipe, except casing and oil line		597	1,407	2,670		95	195	323
Black and galvanized welded pipe	60,437	30,888	35,733	46,159	5,178	2,463	2,495	3,652
Riveted pipe and fittings		161	142	501		33	24	84
Cast-iron pipe and fittings	21,184	8,410	11,614	17,703	1,661	591	802	1,436
Malleable-iron screwed pipe fittings	4,509	1,677	2,500	2,980	1,401	485	666	955
Barbed-wire and woven-wire fencing	24,105	17,742	29,948	37,449	1,331	896	1,598	2,192
Plain and galvanized wire	14,163	8,391	21,919	36,520	1,044	597	1,208	2,214
Woven-wire screen cloth	866	635	722	965	298	199	215	286
Wire rope	2,499	1,575	2,212	2,682	666	410	508	716
Insulated wire and cable	298	84	25	71	108	28	7	24
Wire, other, and manufactures thereof	4,640	2,080	2,848	4,700	997	527	651	996
Wire nails	8,838	7,552	10,251	13,201	485	370	509	748
Nails other than wire, including tacks	3,816	3,378	3,964	4,937	608	456	476	617
Horseshoes	152	100	144	174	21	14	23	20
Bolts, nuts, rivets, and washers [1]	4,861	2,714	3,681	5,147	1,049	625	809	1,340
Car wheels and axles	6,317	2,884	3,966	7,208	430	210	239	449
Iron castings	4,326	3,397	4,205	6,974	689	374	422	667
Steel castings	3,104	1,173	956	2,449	743	290	209	575
Forgings	7,393	3,689	3,148	4,221	997	521	424	584

[1] Except track.

No. 704.—IRON AND STEEL: EXPORTS BY DESTINATIONS

NOTE.—All figures in long tons (2,240 pounds). Products covered are those listed in table 703

Country	1932	1933	1934	Country	1932	1933	1934
Belgium	1,872	3,528	24,939	Argentina	17,892	45,512	42,081
France	3,703	6,424	2,744	Brazil	10,090	53,588	85,102
Germany	703	15,469	11,964	Chile	1,655	10,384	24,880
Italy	8,093	118,731	231,059	Colombia	10,863	24,420	36,766
Netherlands	1,188	10,544	14,200	Peru	3,284	3,941	15,132
Norway	2,964	4,194	6,577	Uruguay	2,164	4,949	9,371
Poland and Danzig	4,426	30,022	123,800	Venezuela	8,505	18,636	41,575
Rumania	797	1,297	14,798	India and Ceylon	3,254	5,822	10,060
U. S. S. R. (Russia) in Europe	275	2,408	14,961	British Malaya	390	2,377	4,710
United Kingdom	4,700	9,148	141,877	China	20,885	36,885	82,401
Canada	163,900	139,507	254,565	Netherland India	4,291	9,968	12,375
Central America	20,641	24,625	34,811	Hong Kong	5,647	7,991	9,872
Mexico	18,237	31,498	101,689	Japan	191,193	593,207	1,249,248
British West Indies and Bermudas	1,127	2,039	5,091	Kwantung	1,203	4,461	9,845
Cuba	10,531	15,621	31,597	Palestine and Syria	3,566	3,535	4,361
Dominican Republic	1,497	4,198	5,011	Philippine Islands	46,768	58,353	60,029
Netherland West Indies	3,102	5,188	8,403	Australia	1,300	1,431	6,738
				British South Africa	2,349	10,232	15,833
				All other	11,526	21,050	64,382

Source of tables 703 and 704: Bureau of Foreign and Domestic Commerce, Department of Commerce.

No. 705.—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, The Valleys	Basic, The Valleys	Southern, No. 2, Cincinnati	Local, No. 2, Chicago [1]							
1891–1895	--------	--------	11.74	12.80	27.27	20.89	--------	1.46	--------	--------	--------
1896–1900	--------	--------	12.56	14.30	24.96	21.08	[5] 1.46	1.50	1.61	[5] 1.63	--------
1901–1905	--------	--------	15.80	17.50	27.87	25.76	1.47	1.77	1.60	1.63	--------
1905	--------	15.25	15.57	17.65	28.00	24.03	1.48	1.87	1.58	1.62	1.76
1906	--------	18.10	18.37	20.43	28.00	27.45	1.51	1.93	1.61	1.70	1.77
1907	--------	20.87	23.10	24.50	28.00	29.25	1.60	1.94	1.70	1.70	1.92
1908	--------	15.16	15.54	17.57	28.00	26.31	1.49	1.60	1.64	1.64	1.86
1909	--------	15.48	16.12	17.49	28.00	24.62	1.33	1.62	1.42	1.42	1.63
1910	--------	14.76	15.16	17.09	28.00	25.38	1.44	1.65	1.47	1.45	1.66
1911	--------	13.07	13.67	14.83	28.00	21.46	1.26	1.41	1.31	1.32	1.54
1912	--------	13.92	14.93	15.32	28.00	22.38	1.29	1.44	1.33	1.32	1.53
1913	--------	14.71	14.90	15.85	28.00	25.79	1.55	1.69	1.50	1.50	1.66
1914	--------	12.87	13.41	13.60	28.00	20.09	1.15	1.32	1.14	1.15	1.43
1915	--------	13.74	13.57	14.01	28.00	22.44	1.31	1.48	1.31	1.30	1.53
1916	--------	19.76	18.67	20.26	32.00	43.95	2.67	2.13	3.53	2.55	2.67
1917	--------	38.90	38.95	41.31	38.00	70.96	3.64	3.83	5.88	3.67	4.19
1918	--------	32.50	36.56	33.25	55.00	47.33	2.89	4.31	3.24	2.99	3.54
1919	--------	27.67	32.17	29.11	47.29	40.54	2.49	4.10	2.72	2.53	3.12
1920	42.82	42.25	44.52	42.52	52.42	56.14	3.22	4.75	3.28	2.95	3.84
1921	23.34	21.73	26.68	22.93	44.06	34.46	1.87	4.47	1.93	1.93	2.54
1922	25.63	24.20	23.95	24.85	40.75	33.95	1.72	3.35	1.72	1.71	2.24
1923	27.20	25.80	27.85	28.16	43.00	41.70	2.36	3.50	2.43	2.43	2.78
1924	21.53	20.24	23.92	22.11	43.00	37.99	2.20	4.00	2.12	2.19	2.60
1925	20.57	19.58	23.85	22.09	43.00	35.45	2.02	4.52	1.92	1.99	2.44
1926	19.57	18.55	24.71	21.64	43.00	35.00	2.00	4.62	1.88	1.95	2.41
1927	18.66	17.69	21.16	19.68	43.00	33.27	1.83	4.68	1.82	1.83	2.29
1928	17.46	16.67	19.70	18.54	43.00	32.67	1.87	4.64	1.87	1.87	2.25
1929	18.78	18.19	18.49	20.00	43.00	34.66	1.92	4.13	1.93	[6] 1.92	2.30
1930	18.51	17.97	16.19	18.47	43.00	31.84	1.71	4.11	1.69	[6] 1.69	2.11
1931	16.94	15.85	14.52	17.35	43.00	29.36	1.62	3.69	1.62	[6] 1.62	2.02
1932	15.23	13.99	13.84	15.87	42.44	26.52	1.58	3.35	1.58	[6] 1.58	1.96
1933	16.41	15.24	16.31	16.47	39.36	26.00	1.64	3.35	1.61	[6] 1.63	1.94
1934	18.69	17.85	19.90	18.19	36.38	27.10	1.81	3.50	1.78	[6] 1.78	2.10

[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 Mar. 19, 1929.

No. 706.—ALUMINUM AND BAUXITE: Production, Exports, and Imports

	1913	1920	1925	1930	1932	1933	1934
BAUXITE							
Quantities, long tons (2,240 pounds):							
Production	210,241	521,308	316,540	330,612	96,349	154,176	157,838
Georgia, Alabama, and Tennessee	40,370	40,029	20,220	15,339	6,570	11,997	12,074
Arkansas	169,871	481,279	296,320	315,273	89,779	142,179	145,764
Imports for consumption	21,456	42,895	353,696	409,678	205,620	149,548	166,653
Exports	(1)	22,257	78,633	104,504	28,474	21,760	51,415
Value of production [2] (1,000 dollars)	998	3,247	1,988	1,928	548	923	1,129
ALUMINUM							
Value, 1,000 dollars:							
Production—							
Primary metal	9,450	41,375	36,430	50,961	20,453	16,174	14,094
Secondary metal	2,199	9,489	24,816	17,177	10,992	15,343	17,632
Imports for consumption, total	4,784	13,077	10,107	5,286	1,822	3,212	4,038
Crude and semicrude	4,388	12,184	9,806	4,690	1,339	2,746	3,625
Manufactures	396	893	301	596	483	466	413
Exports, total	966	5,631	6,057	7,122	1,452	1,329	2,381
Crude and semicrude	--------	3,068	3,366	3,916	469	600	1,251
Manufactures	--------	2,563	2,691	3,206	984	729	1,130
Quantities, 1,000 pounds:							
Imports (crude and semicrude)	25,095	39,299	41,997	25,461	8,185	15,247	18,592
Exports (crude and semicrude)	(1)	9,408	12,642	17,330	4,437	5,708	8,366

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

Sources: Table 705, Iron Age and American Iron and Steel Institute; table 706, Bureau of Mines, Department of the Interior.

No. 707.—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	1920	1925	1930	1931	1932	1933	1934
UNREFINED COPPER								
Ore produced (million short tons) [1]	28.5	36.8	53.1	47.4	34.1	12.3	8.4	(2)
Average copper yield, percent	1.88	1.63	1.54	1.43	1.50	1.83	2.11	(2)
Smelter output from domestic ore	1,080.2	1,209.1	1,674.9	1,394.4	1,042.7	544.0	450.0	488.5
Mine production	1,088.2	1,224.6	1,678.1	1,410.1	1,057.7	476.2	381.3	478.6
Imports, unrefined:								
Ore (copper content)	64.2	52.0	107.6	101.3	23.6	14.0	12.5	12.6
Concentrates (copper content)	21.0	46.8	54.0	56.9	99.4	44.2	37.8	46.5
Matte and regulus (copper content)		17.6	1.7	4.7	1.5	1.7	2.4	3.7
Black, in bars, pigs, etc	[3] 259.2	244.7	379.3	560.5	281.9	161.7	223.6	308.5
REFINED COPPER PRODUCTION								
Total new and old copper	1,611.0	2,151.0	3,045.0	3,091.0	2,195.0	1,177.0	1,418.0	1,646.0
New copper (primary)	1,422.0	1,526.2	2,204.6	2,157.1	1,501.4	680.9	741.6	890.7
Domestic	1,071.9	1,182.4	1,682.9	1,391.2	1,074.6	445.1	481.3	466.1
Foreign	350.1	343.7	521.7	765.8	426.8	235.8	260.2	424.7
Electrolytic	1,128.3	1,351.7	2,050.6	1,993.6	1,373.4	[4] 608.7	[4] 681.4	838.5
Lake	221.5	153.5	138.0	143.0	105.2	[4] 53.8	[4] 59.5	51.7
Casting and best select [5]	72.3	21.0	15.9	20.5	22.8	18.3	.7	.5
Old copper rerefined (secondary)	189.0	624.9	840.4	934.4	694.0	496.4	676.2	754.8
REFINED COPPER CONSUMPTION								
New copper produced (refinery)	1,422.0	1,526.2	2,204.6	2,157.1	1,501.4	680.9	741.6	890.7
Refined copper imported	(3)	108.7	99.8	86.2	174.4	167.8	10.9	54.8
Refined copper exported [6]	708.3	553.1	1,022.3	669.3	464.2	250.1	264.7	544.3
Stocks, Dec. 31 (refined)	122.8	659.0	124.0	615.0	924.6	1,004.0	813.0	569.0
Withdrawn on domestic account:								
New refined copper	732.4	1,053.8	1,401.0	1,265.0	902.1	519.2	678.7	608.9
New and old copper	921.0	1,679.0	2,241.0	2,199.0	1,596.0	1,016.0	1,355.0	1,364.0

[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.

No. 708.—COPPER: Smelter Production by State of Origin of Ore Smelted

[Quantities in thousands of pounds]

State of origin	1910	1920	1925	1930	1931	1932	1933	1934
Total	1,080,160	1,209,061	1,674,870	1,394,389	1,042,711	544,010	449,999	488,454
Alaska	4,311	66,094	72,204	36,380	23,233	13,297	1,756	130
Arizona	297,251	552,989	722,653	570,897	400,311	201,136	122,697	168,408
California	45,760	11,822	46,944	26,262	8,345	5,514	632	233
Colorado	9,307	4,283	3,163	12,944	9,029	8,976	8,882	13,047
Idaho	6,878	1,922	3,144	2,714	1,627	663	2,183	1,718
Michigan	221,463	153,484	138,030	142,986	105,222	63,899	72,341	51,682
Missouri		533	12	2			182	46
Montana	283,079	177,744	270,605	198,796	173,910	97,918	94,263	67,005
Nevada	64,495	55,580	77,138	87,475	71,233	32,616	42,507	41,923
New Mexico	3,785	52,160	76,467	74,188	66,776	32,915	24,948	26,994
Oregon	22	2,529	126	230	9	37	9	41
Pennsylvania	741	618	562	3,061	844	(1)	(1)	(1)
Tennessee	16,692	16,728	19,789	(1)	(1)	(1)	(1)	(1)
Utah	125,185	110,358	242,731	205,770	161,023	76,403	65,656	96,223
Washington	65	2,126	1,185	1,405	71	3	87	33
Undistributed	1,127	92	117	31,280	21,078	10,633	14,035	20,969

[1] Included under "Undistributed."

Source of tables 707 and 708: Bureau of Mines, Department of the Interior.

No. 709.—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 707

[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	1912	1,243	205,139	1,568	1,243	325	273
1860	16	3,709	1913	1,224	189,795	1,615	1,237	378	276
1870	28	5,997	1914	1,150	152,968	1,534	1,150	384	252
1871–1875	34	8,895	1915	1,388	242,902	1,634	1,388	247	395
1876–1880	50	9,679	1916	1,928	474,288	2,259	1,928	331	700
1881–1885	118	17,236	1917	1,886	514,911	2,428	1,886	542	767
1886–1890	226	30,345	1918	1,909	471,408	2,432	1,883	549	705
1891–1895	339	37,266	1919	1,286	239,274	1,805	1,433	372	574
1896–1900	531	74,424	1920	1,209	222,467	1,526	1,182	344	625
1901–1905	732	103,859	1921	506	65,221	951	609	341	435
1906–1910	980	150,924	1922	950	128,289	1,256	905	351	672
1911–1915	1,221	185,592	1923	1,435	210,945	1,980	1,464	516	822
1916–1920	1,644	395,270	1924	1,634	214,087	2,260	1,674	586	777
1921–1925	1,240	171,275	1925	1,675	237,832	2,205	1,683	522	840
1926–1930	1,729	252,172	1926	1,740	243,547	2,322	1,731	591	960
1905	889	138,650	1927	1,684	220,609	2,326	1,719	607	980
1906	918	177,136	1928	1,826	262,930	2,488	1,792	696	1,073
1907	869	173,799	1929	2,003	352,504	2,740	1,983	757	1,253
1908	943	124,419	1930	1,394	181,271	2,157	1,391	766	934
1909	1,093	142,084	1931	1,043	94,887	1,501	1,075	427	694
1910	1,080	137,180	1932	544	34,273	681	445	236	496
1911	1,097	137,154	1933	450	28,800	742	481	260	676
			1934	488	39,076	891	466	425	755

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

Source: Bureau of Mines, Department of the Interior.

No. 710.—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	1925	540,376	161,166	326,486	84,270
1896–1900 [1]	137,084	36,745	24,634	5,866	1926	482,843	141,204	389,721	99,742
1901–1905 [1]	190,451	54,942	83,237	22,611	1927	538,365	150,214	359,161	84,963
1906–1910 [1]	289,445	92,334	130,111	38,026	1928	562,510	169,831	393,537	98,187
1911–1915 [1]	416,840	123,655	176,635	46,129	1929	499,237	183,405	487,156	153,710
1916–1920 [2]	376,877	208,909	244,948	103,805	1930	376,647	105,342	408,577	104,616
1921–1925	438,337	129,761	298,975	77,811	1931	278,987	54,748	292,946	48,745
1926–1930	491,290	149,999	407,630	108,244	1932	164,111	21,236	195,996	23,735
1923	412,375	129,220	338,236	95,988	1933	174,627	24,917	[3] 126,639	[3] 14,834
1924	556,106	156,646	384,408	96,184	1934	312,743	49,765	[3] 199,538	[3] 27,786

[1] Fiscal years ended June 30.
[2] Average for period July 1, 1915, to Dec. 31, 1920.
[3] Imports for consumption; general imports prior to 1933.

Source: Bureau of Foreign and Domestic Commerce.

No. 711.—REFINED PRIMARY LEAD AND SECONDARY LEAD

NOTE.—Production in short tons (2,000 pounds); values, except price per pound, in thousands of dollars. Figures, except those for antimonial and secondary lead, relate to new (primary) lead only; totals include lead derived from both domestic (including Alaska) and foreign ore. General production figures and production of desilverized lead exclude antimonial lead, shown in next to the last column. This table represents exclusively refined lead, while in table 712 part of the lead from domestic ore is unrefined

Year	Production	Value	Year	Production	Value	Year	Production	Value
1830	8,000	608	1901	371,032	30,909	1918	640,195	90,908
1840	17,000	1,666	1902	367,892	30,167	1919	482,220	51,115
1850	22,000	2,112	1903	368,939	30,991	1920	529,657	84,745
1860	15,600	1,778	1904	393,452	33,837	1921	448,589	40,373
1870	17,830	2,247	1905	388,307	36,501	1922	532,662	58,593
1880	95,725	9,573	1906	404,746	46,141	1923	618,322	86,565
1885	126,192	10,095	1907	413,389	43,819	1924	690,493	110,479
1890	157,844	14,206	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
1899	298,047	26,824	1916	571,134	78,817	1933	273,579	20,245
1900	367,773	32,364	1917	610,769	105,052	1934	311,236	23,031

Year	Class		Source			Average value per pound	Antimonial lead, at primary refineries	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	(3)	--------
1890	126,493	31,351	139,720	18,124		.045	(3)	--------
1895	195,932	39,890	159,649	76,173		.032	(3)	--------
1900	319,752	48,021	260,918	106,855		.044	(3)	--------
1905	302,852	85,455	307,514	80,793		.047	(3)	--------
1910	328,954	141,318	375,402	18,065	76,805	.044	(3)	55,422
1915	388,594	161,461	507,026	9,581	33,448	.047	(3)	78,900
1920	339,803	189,854	476,849	8,414	44,394	.080	(3)	124,650
1925	506,409	260,560	654,921	47,024	65,024	.087	(3)	226,880
1930	441,672	201,361	573,740	34,348	34,945	.050	24,797	255,800
1931	304,375	138,389	390,260	22,254	30,250	.037	21,842	234,700
1932	225,231	63,130	255,337	21,747	11,277	.030	21,024	198,300
1933	188,001	85,578	259,616	7,677	6,286	.037	17,805	224,500
1934	209,212	102,024	299,841	10,241	1,154	.037	16,607	208,400

[1] Desilverized soft lead is included. [2] Excludes antimonial lead. [3] Not available.

No. 712.—SOURCES OF PRIMARY LEAD SMELTED OR REFINED IN THE UNITED STATES

[Production in short tons (2,000 pounds). See headnote to table 711]

Source of ore	1910	1920	1925	1930	1931	1932	1933	1934
Total	494,081	547,155	798,499	649,306	446,108	290,065	281,804	320,722
From domestic ore	389,211	494,347	686,451	580,013	393,599	257,041	267,841	309,327
Arizona	948	5,987	10,281	4,223	2,085	1,134	1,718	3,507
Colorado	38,542	17,752	31,855	25,091	6,311	2,288	2,169	3,568
Idaho	109,951	117,191	123,363	135,411	100,970	68,606	74,210	73,798
Kansas	1,308	8,421	15,001	[1] 13,103	[1] 6,601	[1] 5,667	[1] 5,089	[1] 8,140
Missouri	161,659	171,999	208,547	201,056	151,359	79,483	85,564	105,570
Montana	1,943	13,231	22,008	15,412	4,766	1,572	5,944	7,263
Nevada	2,246	8,650	10,978	14,091	8,348	390	2,318	11,393
New Mexico	1,890	1,123	3,782	11,250	11,045	10,606	10,727	10,375
Oklahoma	1,805	68,494	78,487	[1] 23,398	[1] 12,312	[1] 9,285	[1] 15,076	[1] 20,031
Utah	60,605	64,006	166,844	122,311	75,207	70,111	60,049	60,223
Undistributed	6,077	13,127	13,764	13,672	13,878	7,507	3,944	4,473
Zinc residues	2,237	4,366	1,541	995	717	392	1,033	986
From foreign ore [2]	18,065	8,414	47,024	34,348	22,254	21,747	7,677	10,241
Canada	25	1,186	10,676	14,369	3,816	3,797	3,472	2,514
Europe	--------	19	470	41	43	4,491	2,600	45
Mexico	11,704	2,729	31,107	14,949	6,420	334	257	1,011
South America	2,996	2,747	4,496	3,476	2,299	2,631	1,348	4,028
From foreign base bullion [2]	76,805	44,394	65,024	34,945	30,250	11,277	6,286	1,154
Mexico	76,805	42,421	65,024	18,592	30,072	11,164	6,021	703
Peru	--------	--------	--------	16,353	178	113	265	451

[1] Separation as between Kansas and Oklahoma is made on the basis of mine figures.
[2] Totals include small unspecified items.

Source of tables 711 and 712: Bureau of Mines, Department of the Interior.

No. 713.—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 1932) is taken of changes in stocks

	1910	1920	1925	1929	1930	1932	1933	1934
Supply, total	473,836	565,610	779,035	780,430	644,570	288,406	273,642	311,519
Stock in bonded warehouses Jan. 1	79	234	5,045	4,139	1,328	(1)	(1)	(1)
Imports of pigs, bars, and old	3,485	35,719	7,021	1,658	209	44	63	283
Production from domestic and foreign ore	470,272	529,657	766,969	774,633	643,033	288,361	273,579	311,236
Deductions, total	78,661	27,590	123,380	87,665	61,796	30,736	29,343	13,378
Exports—								
Pig lead	69,786	20,093	103,519	73,251	48,307	23,516	22,835	5,906
In manufactures with benefit of drawback	8,800	6,175	11,699	13,086	12,161	7,220	6,508	7,472
Stock in bonded warehouses Dec. 31	75	1,322	8,162	1,328	(1)	(1)	(1)	(1)
Apparent deliveries to domestic consumers	395,175	538,020	655,655	692,765	582,774	257,669	244,299	298,141

[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 the Interior.

No. 714.—MANUFACTURES OF NONFERROUS METALS AND ALLOYS,[1] 1933

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, and platinum, not from the ore"

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

Kind	1933	
	Quantity	Value
Ingots and pigs:		
Copper (secondary)	58,554	4,180
Lead (secondary)	238,190	9,913
Zinc (secondary)	46,674	2,037
Brass and bronze	117,282	8,018
Antifriction bearing metal	25,628	4,324
Solders, of all kinds	53,480	11,241
Type metal	44,856	2,762
Plates and sheets:		
Brass and bronze	235,118	28,754
Copper	138,574	17,237
Lead	24,568	1,537
Nickel alloys	21,282	5,710
Rods and bars:		
Brass and bronze	137,642	14,279
Copper	160,940	12,588
Nickel alloys	5,120	2,228
Tubing (seamless) and pipe:		
Brass and bronze	77,460	10,760
Copper	59,150	9,055
Lead	26,970	1,953
Nickel alloys	1,584	600
Other tubing, including brazed	2,052	520
Castings, rough:		
Brass and bronze:		
Quantity reported	73,087	11,917
Quantity not reported		4,658
Copper	2,734	664
Nickel-alloy [2]	6,627	2,838
Finished products:		
Castings, finished		3,530
Bearings and bushings (including antifriction linings)		9,533
Die castings		7,962
Extruded shapes		1,438
Forgings and hot-pressed parts		1,781
Bells		161

[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-corrosion-resistant alloy castings.

Source: Bureau of the Census, Department of Commerce.

No. 715.—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	1920	1925	1930	1931	1932	1933	1934 [1]
Mine production (recoverable zinc content of ore)	327,618	587,524	710,847	595,425	410,318	285,231	384,280	438,501
Colorado	38,545	24,395	30,811	36,259	16,187	109	1,285	772
Idaho	2,802	13,966	15,619	37,649	19,569	10,252	20,968	25,000
Kansas	13,229	61,073	118,778	74,304	39,051	26,277	40,947	38,261
Missouri	128,589	24,509	14,794	10,811	3,205	986	5,042	7,059
Montana	15,819	92,169	57,658	26,421	6,747	2,197	20,724	30,500
Nevada	1,354	5,349	7,411	14,584	10,431	127	6,387	13,750
New Jersey	68,584	78,511	89,261	97,626	94,285	81,460	75,125	76,553
New Mexico	9,044	5,007	9,246	32,765	27,866	25,593	30,924	26,522
New York	----------	5,654	5,158	22,471	24,100	16,794	17,733	23,188
Oklahoma	6,394	219,727	283,371	136,153	78,132	63,437	91,065	107,772
Tennessee	966	19,217	16,256	[2] 48,147	[2] 38,312	[2] 18,514	[2] 32,770	[2] 47,712
Utah	8,184	4,079	26,306	44,495	37,291	29,666	29,745	28,198
Wisconsin	25,927	27,285	20,230	12,558	10,088	7,522	7,800	9,807
Other States	8,181	6,583	15,948	1,182	5,054	2,297	3,765	3,407
Smelter production	310,407	506,227	634,376	547,345	326,796	227,148	355,282	392,890
Primary zinc	269,184	463,377	572,946	498,045	291,996	207,148	307,182	363,590
From domestic ore	252,479	450,045	555,631	489,361	291,996	207,148	306,010	355,366
From foreign ore	16,705	13,332	17,315	8,684	----------	----------	1,172	8,224
Secondary zinc	41,223	42,850	61,430	49,300	34,800	20,000	48,100	29,300
Redistilled	12,784	21,371	39,181	[3] 34,849	[3] 21,625	14,718	30,087	19,601
Remelted	28,439	21,479	22,249	14,451	13,175	5,282	18,013	9,699
Value of primary product from domestic ore ($1,000)	27,268	72,907	84,456	46,979	22,192	12,429	25,705	30,561
Primary zinc consumed:								
Supply, total	282,350	508,347	593,724	584,295	459,586	351,089	437,310	475,857
Stock at smelters, Jan. 1	11,206	36,793	20,754	85,904	167,293	143,592	128,192	110,487
Produced	269,184	463,377	572,946	498,045	291,996	207,148	307,182	363,590
Imported	1,960	8,177	24	346	297	349	1,936	1,780
Deductions:								
Exports, total	13,234	114,267	80,547	8,533	3,402	9,617	5,034	8,567
Stock, Dec. 31	23,232	71,037	13,080	167,293	143,592	128,192	110,487	124,783
Apparent deliveries to domestic consumers	245,884	323,043	500,097	408,469	312,592	213,280	321,789	340,529

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

Source: Bureau of Mines, Department of the Interior.

No. 716.—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	1925	555,631	84,456
1880 [3]	23,239	2,277	1926–1930	576,395	73,119	1926	611,991	91,799
1885	40,688	3,540	1917	584,597	119,258	1927	576,960	73,851
1886–1890	54,285	5,219	1918	492,405	89,618	1928	591,525	72,166
1891–1895	82,396	6,787	1919	452,272	66,032	1929	612,136	80,802
1896–1900	109,963	10,180	1920	450,045	72,907	1930	489,361	46,979
1901–1905	169,504	17,067	1921	198,232	19,823	1931	291,996	22,192
1906–1910	219,378	24,165	1922	353,274	40,273	1932	207,148	12,429
1911–1915	346,867	52,416	1923	508,335	69,134	1933	306,010	25,705
1916–1920	508,731	99,812	1924	515,831	67,058	1934	355,366	30,561

[1] Values at New York prices, up to and including 1907; at St. Louis prices, 1908 to 1914; at average price allgrades, 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 the Interior.

No. 717.—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 at a fixed rate, is not shown in the table. Gold is valued at $20.67+ per fine troy ounce from 1837 through 1933. In 1933, however, varying higher prices prevailed subsequent to the Executive order of Aug. 29 (for 1933 data regarding value of gold production, see note 6, table 693). On Jan. 31, 1934, the legal value of gold was fixed at $35 per fine ounce. 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	1903	3,560	54,300	29,322
1848-1850	4,838	116	152	1904	3,892	57,683	33,456
1851-1855	14,271	194	259	1905	4,266	56,102	34,222
1856-1860	12,384	309	418	1906	4,565	56,518	38,256
1861-1865	10,716	28,811	38,674	1907	4,375	56,515	37,300
1866-1870	12,226	49,113	65,261	1908	4,574	52,441	28,051
1871-1875	8,826	121,083	156,270	1909	4,822	54,722	28,455
1876-1880	10,301	157,681	182,506	1910	4,657	57,138	30,855
1881-1885	7,730	182,841	202,807	1911	4,687	60,399	32,616
1886-1890	8,078	231,819	227,495	1912	4,521	63,767	39,198
1891-1895	9,107	287,057	227,960	1913	4,300	66,802	40,348
1896-1900	15,729	279,544	172,689	1914	4,573	72,455	40,068
1901-1905	19,394	278,798	159,543	1915	4,888	74,961	37,397
1906-1910	22,993	277,333	162,916	1916	4,479	74,415	48,953
1911-1915	22,968	338,384	189,626	1917	4,051	71,740	59,078
1916-1920	17,246	326,009	298,852				
1921-1925	12,229	314,190	259,162	1918	3,321	67,810	66,485
1926-1930	11,259	293,692	159,829	1919	2,919	56,682	63,534
				1920	2,476	55,362	60,802
1888	1,604	45,793	43,045	1921	2,422	53,052	[1] 53,052
1889	1,595	50,095	46,838	1922	2,363	56,240	[1] 56,240
1890	1,589	54,516	57,242				
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
				1925	2,412	66,155	45,912
1893	1,739	60,000	46,800	1926	2,335	62,719	39,136
1894	1,911	49,500	31,422	1927	2,197	60,434	34,266
1895	2,255	55,727	36,446				
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
				1930	2,286	50,748	19,538
1898	3,118	54,438	32,118	1931	2,396	30,932	8,970
1899	3,437	54,765	32,859	1932	2,449	23,981	6,763
1900	3,830	57,647	35,741				
1901	3,806	55,214	33,128	1933	2,556	23,003	8,051
1902	3,870	55,500	29,415	1934 (preliminary)	3,075	31,384	20,274

State or Territory	Gold, 1,000 fine ounces					Silver, 1,000 fine ounces					Silver, value, 1934, 1,000 dollars
	1910	1920	1930	1933	1934	1910	1920	1930	1933	1934	
Total	4,657	2,476	2,286	2,556	3,075	57,138	55,362	50,748	23,003	31,384	20,274
Alaska	787	413	407	457	541	154	822	392	155	160	103
Arizona	165	240	149	72	145	2,656	5,432	4,910	2,145	4,067	2,627
California	989	716	450	595	710	1,792	1,655	1,434	354	800	517
Colorado	993	363	218	265	322	8,523	5,167	4,852	2,163	3,309	2,138
Idaho	50	23	21	56	89	7,027	7,365	9,710	6,627	7,537	4,869
Michigan	------	------	------	(2)	(2)	262	512	11	126	1	(2)
Montana	180	92	47	61	96	12,283	13,263	8,597	3,564	3,354	2,167
Nevada	913	175	140	101	142	12,366	7,482	4,179	1,031	2,699	1,744
New Mexico	23	22	32	27	27	779	700	1,160	1,163	1,121	724
Oregon	33	50	14	20	33	44	102	10	18	58	37
South Dakota	260	210	406	520	482	121	88	105	130	106	68
Texas	(2)	(2)	(2)	(2)	(2)	364	523	469	(2)	738	477
Utah	209	103	209	93	138	10,446	11,755	14,451	5,298	7,091	4,581
Washington	39	7	4	5	7	205	178	30	16	35	23
Philippine Islands	7	62	185	280	333	2	22	121	181	227	146
Other	8	(2)	3	4	11	115	296	317	31	82	53

[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. 718.—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	9,399	12,899	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
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
1932	1,000	[2] *7,490*	[2] *6,490*	26,595	20,105	77	14,384	14,461	9,797	24,258
1933	100	[2] *5,893*	[2] *5,793*	22,806	17,013	77	10,733	10,811	18,533	29,343

[1] Estimated. [2] Excess of return from industry over amount used by industry.

No. 719.—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 at par of exchange through 1933; thereafter, at the current rate of exchange. London quotations are in depreciated currency after Sept. 21, 1931, also in some prior year periods, including 1918 to 1924. New York quotations are in depreciated currency after early March 1933. The commercial ratio is computed on the basis of London quotations through 1914; thereafter, on the basis of the New York average price. In 1934 the monetary value of gold was $35.00 per fine ounce as compared with $20.67 in previous years. The value of fine silver (371¼ grains) in the dollar is computed on the basis of London quotations through 1917; thereafter, on the basis of the New York average price

[All figures, except "Commercial ratio to gold," expressed in dollars]

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	------	1907	0.662	0.660	0.710	0.528	31.24	0.512
1840	1.323	------	------	------	15.62	1.023	1908	.535	.535	.589	.483	38.64	.414
1845	1.298	------	------	------	15.92	1.004	1909	.520	.522	.545	.508	39.74	.402
1850	1.316	------	------	------	15.70	1.018	1910	.541	.542	.576	.508	38.22	.418
1855	1.344	------	------	------	15.38	1.039	1911	.539	.540	.575	.521	38.33	.417
1860	1.352	------	------	------	15.29	1.045	1912	.615	.620	.656	.553	33.62	.475
1865	1.338	------	------	------	15.44	1.035	1913	.605	.612	.651	.580	34.19	.468
1870	1.328	------	------	------	15.57	1.027	1914	.553	.563	.609	.490	37.37	.428
1875	1.242	1.239	1.261	1.210	16.64	.961	1915	.519	.511	.580	.478	40.48	.401
1880	1.145	1.139	1.150	1.113	18.05	.886	1916	.686	.672	.791	.573	30.78	.531
1885	1.065	1.064	1.095	1.028	19.41	.824	1917	.895	.840	1.165	.731	24.61	.692
1890	1.046	1.053	1.205	.958	19.75	.809	1918	1.042	.984	1.019	.889	21.00	.761
1891	.988	.990	1.075	.948	20.92	.764	1919	1.250	1.121	1.383	1.014	18.44	.867
1892	.871	.876	.953	.830	23.72	.674	1920	1.346	1.019	1.379	.604	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	34.20	.467	1925	.703	.694	.732	.668	29.78	.537
1898	.590	.591	.623	.551	35.03	.456	1926	.629	.624	.689	.518	33.11	.483
1899	.602	.605	.648	.586	34.36	.465	1927	.571	.567	.603	.542	36.47	.438
1900	.620	.621	.658	.598	33.33	.480	1928	.586	.585	.639	.568	35.34	.452
1901	.596	.597	.645	.548	34.68	.461	1929	.536	.533	.578	.468	38.78	.412
1902	.528	.528	.569	.474	39.15	.408	1930	.387	.385	.472	.311	53.74	.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	1933	.398	.350	.453	.248	59.06	.271
1906	.677	.674	.724	.631	30.54	.524	1934	.481	.483	.561	.421	72.49	.373

Source of tables 718 and 719: Annual Reports of the Director of the Mint, Treasury Department.

No. 720.—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
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	100
1932	21,789	652	21,137	97.0	104,337	630	117
1933	27,589	911	26,678	96.7	122,951	638	161
1934	31,822	1,029	30,793	96.8	159,426	943	161

[1] Imports entered for consumption.

No. 721.—COKE: By-Product and Beehive Production, by States

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

	1915	1920	1925	1929	1930	1931	1932	1933	1934
BY-PRODUCT									
Total	14,073	30,834	39,912	53,412	45,196	32,356	21,137	26,678	30,793
Alabama	2,070	3,124	4,582	4,754	3,987	2,943	1,401	1,669	2,109
Colorado	--------	517	490	565	379	226	92	140	171
Illinois	1,687	2,137	3,012	4,204	3,576	2,479	1,428	1,501	1,650
Indiana	2,768	4,554	5,142	6,455	4,984	2,757	1,435	2,089	2,613
Maryland	313	682	1,019	1,393	1,169	818	500	702	785
Massachusetts	504	488	535	777	863	1,150	987	1,020	1,128
Michigan	(1)	1,393	1,751	2,680	2,604	2,437	2,165	2,341	2,548
Minnesota	128	675	518	746	641	440	386	412	417
New Jersey	269	726	904	898	919	931	806	835	910
New York	684	1,040	2,220	4,299	3,850	3,578	3,130	3,427	4,090
Ohio	666	5,615	7,105	8,521	6,163	3,933	2,347	3,677	4,296
Pennsylvania	3,092	7,730	9,853	14,489	12,529	7,525	4,038	6,170	6,834
West Virginia	141	447	1,056	1,431	1,479	1,265	903	1,074	1,344
All other States	1,749	1,706	1,725	2,199	2,051	1,873	1,520	1,621	1,897
BEEHIVE									
Total	27,508	20,511	11,355	6,472	2,776	1,128	652	911	1,029
Pennsylvania	22,531	15,908	9,574	5,368	2,011	856	506	670	721
Ohio	19	87	156		--------	--------	--------	--------	--------
West Virginia	1,250	1,381	490	497	422	114	49	113	172
Alabama	1,001	890	88	--------	--------	--------	--------	--------	--------
Kentucky	285	273	(1)	--------	--------	--------	--------	--------	--------
Tennessee	234	163	128	96	25	17	11	12	6
Virginia	630	1,028	422	315	220	99	56	70	78
Colorado	671	273	155	156	79	(1)	24	35	38
Utah	(1)	(1)	146	14	7	(1)	6	10	13
All other States	887	509	196	26	12	43	1	(2)	2

[1] Included under "all other States." [2] Less than 500 tons.

Source of tables 720 and 721: Bureau of Mines, Department of the Interior.

No. 722.—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	1912	534,467	84,362	450,105	177,623	517,983
1831–1840	1,032	722	310	1913	569,960	91,525	478,435	195,181	565,235
1841–1850	4,535	2,697	1,837	1914	513,525	90,822	422,704	188,181	493,309
1851–1860	12,513	7,645	4,868	1915	531,619	88,995	442,624	184,653	502,038
1861–1865	20,538	11,142	9,396	1916	590,098	87,578	502,520	202,010	665,116
1866–1870	31,706	16,281	15,425	1917	651,402	99,612	551,791	283,651	1,249,273
1871–1875	52,179	23,407	28,773	1918	678,212	98,826	579,386	336,480	1,491,810
1876–1880	62,261	25,800	36,461	1919 [1]	553,952	88,092	465,860	364,927	1,160,616
1881–1885	107,291	36,198	71,093	1920	658,265	89,598	568,667	434,252	2,129,933
1886–1890	138,398	43,952	94,446	1921 [1]	506,395	90,473	415,922	452,305	1,199,984
1891–1895	178,822	53,405	125,416	1922	476,951	54,683	422,268	273,700	1,274,820
1896–1900	227,123	55,625	171,498	1923	657,904	93,339	564,565	506,787	1,514,621
1901–1905	339,357	66,854	272,503	1924 [1]	571,613	87,927	483,687	477,231	1,062,626
1906–1910	454,555	81,142	373,413	1925 [1]	581,870	61,817	520,053	327,665	1,060,402
1911–1915	529,189	89,233	439,955	1926 [1]	657,804	84,437	573,367	474,164	1,183,417
1916–1920	626,386	92,741	533,645	1927 [1]	597,859	80,096	517,763	420,942	1,029,652
1921–1925	558,947	77,648	481,299	1928 [1]	576,093	75,348	500,745	393,638	933,774
1926–1930 [1]	595,497	76,619	518,878	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	1931 [1]	441,735	59,646	382,089	296,355	588,895
1909	460,815	81,070	379,744	1932 [1]	359,565	49,855	309,710	222,375	406,677
1910	501,596	84,485	417,111	1933 [1]	383,172	49,541	333,631	206,718	445,788
1911	496,371	90,464	405,907	1934 [1 2]	415,780	57,385	358,395	243,312	652,279

State	1911–1915	1916–1920	1921–1925	1926–1930 [1]	1930 [1]	1931 [1]	1932 [1]	1933 [1]	1934 [1 2]
Total quantity	529,189	626,386	558,947	595,497	536,911	441,735	359,565	383,172	415,780
Anthracite (Pa.)	89,233	92,741	77,648	76,619	69,385	59,646	49,855	49,541	57,385
Bituminous	439,956	533,645	481,299	518,878	467,526	382,089	309,710	333,631	358,395
Alabama	15,864	17,834	18,097	18,380	15,570	11,999	7,856	8,760	9,596
Arkansas	1,986	1,980	1,261	1,579	1,533	1,154	1,033	883	(3)
Colorado	9,433	11,595	10,049	9,665	8,197	6,604	5,599	5,230	5,168
Illinois	58,320	78,255	68,523	57,310	53,731	44,303	33,475	37,413	40,905
Indiana	16,060	25,515	21,677	18,467	16,490	14,295	13,324	13,761	14,820
Iowa	7,442	7,571	4,952	3,879	3,893	3,388	3,862	3,195	3,345
Kansas	6,811	6,556	3,827	3,215	2,430	1,987	1,953	2,218	(4)
Kentucky	18,380	30,108	43,743	61,116	51,209	39,964	35,300	36,100	38,068
Maryland	4,549	4,158	2,033	2,700	2,271	2,006	1,429	1,531	1,660
Michigan	1,271	1,301	976	705	661	359	446	407	631
Missouri	4,048	5,086	3,011	3,538	3,853	3,621	4,070	3,432	[4] 5,800
Montana	2,972	4,008	2,881	3,139	3,022	2,378	2,125	2,152	2,600
New Mexico	3,618	3,728	2,772	2,612	1,969	1,553	1,263	1,226	1,250
North Dakota	506	787	1,221	1,622	1,700	1,519	1,740	1,782	1,770
Ohio	28,553	40,609	31,590	21,111	22,552	20,411	13,909	19,589	20,842
Oklahoma	3,720	4,292	2,741	3,346	2,794	1,908	1,255	1,238	[3] 2,264
Pennsylvania	157,229	168,532	133,721	137,038	124,463	97,659	74,776	79,296	89,223
Tennessee	6,288	6,208	5,078	5,544	5,130	4,721	3,538	3,775	4,056
Texas	2,201	1,980	1,084	1,107	834	716	637	822	716
Utah	2,999	4,693	4,593	4,683	4,258	3,350	2,852	2,675	2,418
Virginia	7,924	10,158	10,648	12,521	10,907	9,699	7,692	8,179	9,100
Washington	3,261	3,576	2,626	2,513	2,302	1,846	1,591	1,394	1,387
West Virginia	69,353	86,369	97,044	136,315	121,473	101,473	85,609	94,344	98,190
Wyoming	6,907	8,555	6,812	6,526	6,088	4,994	4,171	4,013	4,349
Miscellaneous	259	190	239	246	196	182	204	217	237

[1] Exclusive of product of wagon mines.
[2] Preliminary.
[3] Arkansas included with Oklahoma.
[4] Kansas included with Missouri.

Source: Bureau of Mines, Department of the Interior.

No. 723.—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
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
1933	8,992	37,611	924	9,040	8,069	28,572	[5] 584	[5] 3,432	1,175	5,241
1934	10,863	51,464	1,159	11,082	9,704	40,382	[5] 587	[5] 4,190	1,179	5,798

[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.
[5] Imports for consumption; general imports prior to 1933.

No. 724.—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	Capacity of mines [1] (million tons [2])
	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	(3)	71
1895	52,093	1,315	4,591	--------	1.41	142,917	196	2.07	406	(3)	90
1900	50,710	1,208	5,550	--------	1.49	144,206	166	2.40	398	(3)	105
1905	69,053	1,571	7,036	--------	1.83	165,406	215	2.18	470	(3)	110
1910	73,623	2,021	8,841	--------	1.90	169,497	229	2.17	498	(3)	112
1915	76,906	2,092	9,997	--------	2.07	176,552	230	2.19	504	1.5	118
1920	76,844	2,897	9,858	--------	4.85	145,074	271	2.28	618	1.1	101
1925	53,768	2,885	5,164	--------	5.30	160,312	182	2.12	386	1.6	103
1930	61,202	3,144	5,038	--------	5.11	150,804	208	2.21	460	2.0	90
1931	52,636	2,901	3,986	--------	4.97	139,431	181	2.37	428	2.8	100
1932	43,862	2,810	3,150	--------	4.46	121,243	162	2.54	411	3.4	94
1933	43,335	3,250	2,956	--------	4.17	104,633	182	2.60	473	3.3	83
BITUMINOUS											
1890	87,373	7,008	1,607	15,332	.99	192,204	226	2.56	579	[4] 5.3	151
1895	106,287	8,340	2,086	18,404	.86	239,962	194	2.90	563	[5] 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	342,909	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
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
1932	285,508	20,393	2,781	1,028	1.31	406,380	146	5.22	762	78.8	653
1933	306,280	23,052	2,858	1,441	1.34	418,703	167	4.78	797	80.0	615

[1] Calculated at 303.5 working-days in the anthracite field and 308 working-days in the bituminous field.
[2] Of 2,000 pounds. [3] Not available. [4] 1891. [5] 1896.

Sources: Table 723, Bureau of Foreign and Domestic Commerce; table 724, Bureau of Mines, Department of the Interior.

No. 725.—CONSUMPTION OF BITUMINOUS COAL: By Consuming Classes

	1889	1899	1909	1919	1929	1931	1932	1933	1934 [1]
Consumption (million net tons of 2,000 lbs.), total	95.8	190.3	370.3	481.7	519.6	371.9	306.9	321.7	346.1
Colliery fuel	1.4	3.1	9.5	11.1	4.7	3.2	2.8	2.9	3.1
Locomotive fuel, all steam roads	26.5	53.4	106.0	124.7	118.6	[2] 81.7	[2] 66.5	[2] 66.2	[2] 70.5
Bunkers, vessels in foreign trade	1.9	3.8	6.8	8.2	4.3	2.2	1.4	1.3	1.3
Coke ovens, beehive and by-product	16.0	30.2	59.4	65.6	86.8	48.6	31.9	40.1	46.5
Electric public utilities [3]	------	7.6	18.7	35.1	44.9	38.7	30.3	30.6	33.6
All other uses [4]	50.0	92.2	169.9	237.0	260.3	197.4	174.1	180.7	191.1
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	.9	.8	.9	.9	.9
Locomotive fuel, all steam roads	27.7	28.1	28.6	25.9	22.8	[2] 22.0	[2] 21.7	[2] 20.6	[2] 20.4
Bunkers, vessels in foreign trade	2.0	2.0	1.9	1.7	.8	.6	.4	.4	.4
Coke ovens, beehive and by-product	16.7	15.9	16.0	13.6	16.7	13.1	10.4	12.4	13.4
Electric public utilities	------	4.0	5.0	7.3	8.6	10.4	9.9	9.5	9.7
All other uses	52.1	48.4	45.9	49.2	50.2	53.1	56.7	56.2	55.2

[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 the Interior (data were assembled from various original sources).

No. 726.—LABOR STRIKES IN COAL MINES

Year	Men on strike	Man-days lost	Average days lost per man	Year	Men on strike	Man-days lost	Average days lost per man
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 [1]	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
1920	282,419	5,914,473	21	1932	97,126	7,841,991	81
1921	151,263	3,106,103	21	1933	176,451	4,413,304	25

State	1930		1931		1932		1933	
	Men on strike	Man-days lost	Men on strike	Man-days lost	Men on strike	Man-days lost	Men on strike	Man-days lost
Grand total	41,000	1,102,758	110,565	2,127,984	97,126	7,841,991	176,451	4,413,304
Anthracite (Pa.)	18,202	112,398	65,907	570,664	34,259	289,523	50,948	686,692
Total bituminous	22,798	990,360	44,658	1,557,320	62,867	7,552,468	125,503	3,726,612
Arkansas	------	------	860	21,153	1,964	103,522	1,225	8,241
Illinois	9,483	348,779	9,400	397,263	32,961	4,397,006	[2] 3,187	130,197
Indiana	2,008	32,003	883	14,181	3,820	507,051	3,151	48,210
Iowa	591	3,754	824	24,500	389	7,503	4,462	186,763
Kentucky	6,436	562,067	2,920	59,240	721	30,725	5,302	69,037
Michigan	630	2,560	597	26,185	------	------	562	62,990
Missouri	50	700	679	34,671	301	48,590	463	8,040
Montana	------	------	------	------	748	28,100	------	------
Ohio	1,143	12,583	5,591	138,155	15,290	2,130,292	3,647	45,942
Oklahoma	------	------	501	19,812	970	46,903	219	1,296
Pennsylvania	924	14,689	12,783	398,932	2,021	113,696	86,832	2,896,545
Tennessee	------	------	1,133	28,767	550	35,967	375	10,125
Virginia	------	------	------	------	140	140	3,226	56,442
Washington	------	------	------	------	958	42,266	894	87,270
West Virginia	1,523	13,215	8,441	393,883	1,510	44,307	8,723	50,929
Other States	10	10	46	578	524	16,400	3,235	64,585

[1] Owing to unusual conditions, figures tend to understate extent of the strike and number of idle miners.
[2] Not including men idle through labor factional trouble due to jurisdictional claims of a rival union.

Source: Bureau of Mines, Department of the Interior.

No. 727.—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	1933	1934	1935	1925	1930	1932	1933	1934	1935
Atlanta, Ga						7.32	7.80	6.46	6.12	7.02	7.02
Baltimore, Md	[2] 15.75	13.75	12.75	13.00	11.54	7.38	[3] 7.89	[3] 7.36	[3] 6.86	[3] 7.64	[3] 7.17
Birmingham, Ala						7.79	7.65	6.31	5.07	6.07	6.29
Boston, Mass	16.00	15.50	13.50	13.50	13.50						
Bridgeport, Conn	15.38	15.50	12.75	13.75	13.17						
Buffalo, N. Y	13.56	13.32	12.21	12.64	12.65						
Butte, Mont						11.05	11.15	9.98	9.72	9.75	9.76
Charleston, S. C	[2] 17.10					11.00	9.67	9.50	8.67	9.92	10.00
Chicago, Ill	16.70	16.40	15.50	13.79	13.81	8.51	[4] 8.53	[4] 7.92	[4] 7.25	[4] 8.21	[4] 8.32
Cincinnati, Ohio						7.21	[4] 6.30	[4] 5.75	[4] 5.25	[4] 6.10	[4] 6.06
Cleveland, Ohio	14.88	14.75	13.44	12.13	12.29	8.37	[4] 7.10	[4] 6.61	[4] 5.52	[4] 6.20	[4] 6.77
Columbus, Ohio						6.68	[4] 6.07	[4] 5.35	[4] 4.92	[4] 6.11	[4] 6.41
Dallas, Tex	[5] 17.75	[5] 15.50	[5] 14.00	[5] 14.00	[5] 13.50	14.22	12.92	10.50	10.75	10.50	10.25
Denver, Colo	[6] 16.33	[6] 14.75	[6] 14.50	[6] 15.58	[6] 15.50	9.47	10.45	8.21	7.02	8.03	7.75
Detroit, Mich	15.38	15.50	13.17	12.45	12.19	8.93	[4] 8.39	[4] 6.38	[4] 5.80	[4] 6.86	[4] 7.17
Fall River, Mass	15.83	16.25	14.25	14.25	14.25						
Houston, Tex				[5] 14.50	[5] 14.50	12.38	13.60	10.80	10.50	11.60	11.75
Indianapolis, Ind	16.50					7.15	[4] 6.01	[4] 5.71	[4] 5.05	[4] 5.99	[4] 6.17
Jacksonville, Fla						12.00	14.00	10.00	9.00	11.13	11.13
Kansas City, Mo	[5] 15.17	[5] 12.55	[5] 10.50	[5] 10.50	[5] 10.50	8.13	7.18	6.04	5.61	5.85	6.03
Little Rock, Ark	[5] 15.00	[5] 13.50	[5] 10.75	[5] 10.50	[5] 10.50	11.00	9.95	9.22	8.22	8.33	8.17
Los Angeles, Calif						16.31	16.50	16.25	16.25	17.04	16.78
Louisville, Ky						7.37	[4] 7.01	[4] 5.23	[4] 4.64	[4] 5.46	[4] 6.15
Manchester, N. H	17.00	17.00	14.83	15.00	15.50						
Memphis, Tenn						8.11	7.85	6.78	5.68	7.18	7.19
Milwaukee, Wis	16.65	15.85	14.80	13.00	13.30	9.69	[4] 7.68	[4] 7.45	[4] 6.94	[4] 7.51	[4] 7.98
Minneapolis, Minn	17.95	17.85	17.10	15.25	15.55	10.92	[4] 10.56	[4] 9.78	[4] 9.56	[4] 9.93	[4] 10.30
Mobile, Ala						10.02	9.63	8.88	7.32	8.44	9.01
Newark, N. J	13.43	13.46	11.88	12.50	11.40						
New Haven, Conn	15.20	15.17	13.90	13.90	13.65						
New Orleans, La						11.19	10.96	9.93	8.57	10.10	10.60
New York, N. Y	14.33	14.13	11.64	12.35	12.14						
Norfolk, Va	15.50	14.00	13.00	14.00	13.50	9.27	[4] 7.25	[4] 7.00	[4] 6.50	[4] 8.00	[4] 8.00
Omaha, Nebr						10.04	9.69	8.77	8.35	8.59	8.55
Peoria, Ill						6.79	6.75	6.25	6.09	6.55	7.00
Philadelphia, Pa	[2] 15.32	[2] 14.50	11.50	12.00	10.96						
Pittsburgh, Pa	16.50	15.00	12.75	12.75	12.75	6.83	5.29	4.47	3.26	4.72	4.20
Portland, Me	16.56	16.80	15.60	14.25	14.25						
Portland, Oreg						13.64	13.46	12.07	11.52	12.71	11.55
Providence, R. I	[7] 16.00	[7] 16.00	[7] 14.50	[7] 14.50	[7] 14.50						
Richmond, Va	15.50	15.00	13.50	14.00	13.00	8.83	[4] 8.38	[4] 8.00	[4] 6.83	[4] 7.83	[4] 7.67
Rochester, N. Y	14.15	14.25	13.00	12.85	12.73						
St. Louis, Mo	16.88	16.45	15.22	13.72	13.86	6.69	6.75	5.57	5.44	5.54	5.99
St. Paul, Minn	17.95	17.85	17.10	15.25	15.55	11.57	[4] 10.27	[4] 9.60	[4] 9.40	[4] 9.78	[4] 10.16
Salt Lake City, Utah	[6] 18.50	[6] 18.00				8.40	8.37	7.58	7.01	7.80	7.17
San Francisco, Calif	[8] 26.50	[8] 26.00	[8] 25.00	[8] 25.63	[8] 25.63	17.28	16.98	17.00	15.00	16.06	15.21
Savannah, Ga	[9] 17.00					[9] 11.50	[9] 10.24	[9] 8.53	[9] 8.28	[9] 10.04	[9] 10.03
Scranton, Pa	10.62	9.92	8.68	8.60	8.44						
Seattle, Wash						10.21	10.68	10.54	9.79	9.92	9.66
Springfield, Ill						4.25	4.34	4.34	3.68	4.06	4.54
Washington, D. C	[2] 15.67	[2] 15.23	[2] 14.15	[2] 14.15	[2] 14.00	[2,4] 8.88	[2,4] 8.63	[2,4] 8.46	[2,4] 8.18	[2,4] 8.64	[2,4] 9.00

[1] The term "anthracite" signifies Pennsylvania anthracite, except as indicated by notes.
[2] Per ton of 2,240 pounds.
[3] Run of mine, high volatile.
[4] Prepared sizes, high volatile.
[5] Arkansas anthracite, egg or furnace.
[6] Colorado anthracite, furnace, 1 and 2 mixed.
[7] 50 cents per ton additional is charged for binning.
[8] New Mexico anthracite, Cerillos egg.
[9] 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. 728.—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
1920	12.77	14.33	161	181	12.59	14.28	163	185	8.81	10.55	162	194
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	12.26	172	155	13.82	12.47	179	161	7.46	7.64	137	141
1934	13.25	12.60	167	159	13.44	12.79	174	166	8.24	8.23	152	152
1935	13.01	-------	164	------	13.21	-------	171	------	8.37	-------	154	------

[1] Prices represent combined averages for cities shown in table 727.
[2] Average of prices for January and July; this is the base for relative prices. [3] Insufficient data.

No. 729.—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	-------	-------	-------	1926	1,313,019	300,168	1,206,300	1,363,090	136,412
1911-1915	575,708	88,492	11,602	30,317	2,481	1927	1,445.428	317,930	1,341,248	1,641,144	118,688
1916-1920	762,681	154,590	412,787	268,038	48,174	1928	1,568,139	363,726	1,473,434	1,814,034	138,944
1921-1925	947,419	229,002	820,445	762,151	82,205	1929	1,917,693	413,276	1,959,294	2,233,688	158,410
1926-1930	1,637,540	362,238	1,613,811	1,852,490	136,123	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	392,816	1,790,119	1,831,918	63,732
1923	1,006,976	240,001	875,711	816,226	77,268	1932	1,555,990	384,632	1,499,756	1,523,800	49,244
1924	1,141,521	253,856	1,016,276	933,861	82,233	1933	1,555,474	368,540	1,551,464	1,420,000	54,368
1925	1,188,571	265,271	1,040,390	1,127,470	120,383	1934[1]	1,770,721	395,378	1,776,172	1,535,360	60,523

State	Natural gas produced and marketed					Natural gas consumed	Natural gasoline produced		
	1920	1925	1930	1932	1933	1933	1932	1933	1934[1]
Total[2]	798,210	1,188,571	1,943,421	1,555,990	1,555,474	1,553,399	1,523,800	1,420,000	1,535,360
Arkansas	19,050	41,878	18,585	10,235	8,288	22,775	18,653	15,215	13,033
California	66,041	187,789	334,789	263,484	259,799	259,799	551,897	496,293	506,272
Illinois	3,013	4,165	2,890	1,769	1,631	33,341	4,558	3,673	3,810
Kansas	33,140	26,917	37,630	40,690	41,596	57,032	24,792	24,869	27,891
Kentucky	15,297	10,770	28,023	29,005	31,380	13,222	4,877	4,514	4,171
Louisiana	46,219	152,620	278,341	201,561	197,826	115,800	46,199	36,973	40,558
Mississippi	-------	-------	179	8,648	8,679	5,818	-------	-------	-------
Montana	818	1,496	10,060	13,295	14,391	[3] 12,222	-------	1,295	1,237
New Mexico	-------	(4)	9,497	17,604	19,148	13,400	17,507	19,149	21,748
New York	19,127	[5] 6,210	[5] 9,624	[5] 8,813	[5] 6,865	19,912	117	96	85
Ohio	136,872	43,235	63,394	51,466	47,929	92,762	5,163	4,662	5,881
Oklahoma	126,689	249,285	348,116	255,487	245,759	242,494	378,584	360,488	355,438
Penn	161,397	101,632	88,706	[6] 61,611	[6] 63,579	73,627	11,685	11,686	10,781
Texas	49,467	[7] 134,872	[7] 517,880	[7] 456,832	[7] 475,691	412,428	371,106	366,515	466,570
W. Virginia	100,289	180,345	144,180	100,540	100,653	46,933	43,773	39,848	41,854
Wyoming	10,312	45,539	43,219	28,938	25,830	20,087	44,391	34,103	34,799

[1] Preliminary. [2] Includes other States not shown separately.
[3] Includes 83,000,000 cubic feet piped from Canada. [4] Separate data not available.
[5] Includes 68,000,000 cubic feet piped to Canada in 1925, 107,000,000 in 1930, 46,000,000 in 1932, and 29,000,000 in 1933.
[6] Includes 37,000,000 cubic feet piped to Canada in 1932, and 40,000,000 in 1933.
[7] Includes 64,000,000 cubic feet piped to Mexico in 1925, 1,691,000,000 in 1930, 1,610,000,000 in 1932, and 2,089,000,000 in 1933.

Sources: Table 728, Bureau of Labor Statistics, Department of Labor; table 729, Bureau of Mines, Department of the Interior.

No. 730.—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, byproduct coke-oven gas are not included

Material or product	Unit	Quantity (thousands of unit specified)				Value (thousands of dollars)	
		1929	1931 As published; comparable with 1929	1931 Comparable with 1933 [1]	1933 Reported on standard schedule [1]	1931 Comparable with 1933 [1]	1933 Reported on standard schedule [1]
Materials used:							
Coal for gas making:							
Anthracite	Long ton [2]	68	42	39	40		
Bituminous	Short ton [3]	8,918	9,055	9,009	7,473		
Oil for gas making	Barrel [4]	4,683	1,607	1,242	935		
Oil for carbureting	do	16,024	13,893	8,887	11,178		
Gas purchased	M cu. ft.	[5] 103,209	[5] 96,226	[5] 96,226	93,854		
Products, total value						379,351	295,480
Gas sold (from production in industry).	M cu. ft.	([6])	283,382	281,453	226,000	311,548	248,669
Coke for sale	Short ton [3]	3,444	3,599	3,583	3,182	26,573	20,671
Tar for sale	Gallon	163,695	149,891	149,195	113,581	6,597	4,521
All other products and receipts.						34,633	21,619

[1] For reason of adjustment, see last paragraph of general note, p. 715. [2] 2,240 pounds.
[3] 2,000 pounds. [4] 42 gallons.
[5] Includes 5,281,902 M cu. ft. in 1929 and 6,184,801 M cu. ft. in 1931 purchased from establishments in the gas industry. No similar duplication is included in the corresponding figure for 1933.
[6] Not available.

No. 731.—MANUFACTURED-GAS INDUSTRY: SUMMARY OF STATISTICS

NOTE.—Companies formerly distributing manufactured gas but which were distributing natural gas at the beginning of 1934 have been excluded for all years shown in this table.

	1929	1930	1931	1932	1933	1934
Population served, Dec. 31 (thousands)	47,538	48,672	49,366	49,131	49,519	49,771
Miles of main, Dec. 31	84,600	88,000	92,500	92,600	93,900	94,100
Employees, Dec. 31	74,700	74,300	72,100	66,100	69,700	71,900
Total gas produced and purchased (million cubic feet)	427,681	426,239	411,579	382,416	367,154	386,706
Gas produced	308,983	303,798	294,223	261,091	243,677	250,909
Gas purchased	118,698	122,441	117,356	121,325	123,477	135,797
Total number of customers, Dec. 31 (thousands)	10,267	10,285	10,207	9,729	9,680	9,874
Domestic	9,770	9,770	9,666	9,231	9,161	9,311
House heating	43	53	58	60	80	117
Industrial and commercial	447	455	476	429	430	437
Miscellaneous	7	7	7	9	9	9
Total gas sales to consumers (million cubic feet)	394,539	396,111	384,262	352,175	334,168	347,453
Domestic	276,453	277,713	271,981	258,074	239,298	232,829
House heating	14,124	18,181	19,674	19,440	20,384	28,551
Industrial and commercial	101,792	97,919	90,571	72,407	72,481	84,005
Miscellaneous	2,170	2,298	2,036	2,254	2,005	2,068
Total revenue from consumers (thousand dollars)	435,879	438,045	426,766	403,343	372,351	374,845
Domestic	334,058	335,017	328,738	319,085	293,524	288,420
House heating	11,943	15,025	15,833	14,964	14,336	19,074
Industrial and commercial	88,004	86,120	80,616	67,681	62,965	65,871
Miscellaneous	1,874	1,883	1,579	1,613	1,526	1,480

No. 732.—AVERAGE NET PRICE OF MANUFACTURED GAS

NOTE.—Average net prices per 1,000 cubic feet for household use in cities specified in the first section of table 733

Date	Actual	Relative	Date	Actual	Relative	Date	Actual	Relative
Apr. 15, 1913	$0.95	100	Mar. 15, 1922	$1.29	136	Dec. 15, 1928	$1.22	128
Apr. 15, 1915	.93	98	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
Apr. 15, 1920	1.09	115	Dec. 15, 1926	1.22	128	Dec. 15, 1933	1.14	120
May 15, 1921	1.32	139	Dec. 15, 1927	1.22	128	Nov. 15, 1934	1.14	120

Sources: table 730, Bureau of the Census, Department of Commerce; table 731, American Gas Association; table 732, Bureau of Labor Statistics, Department of Labor.

No. 733.—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	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	June 15, 1933	June 15, 1934	Nov. 15, 1934
	MANUFACTURED GAS															
Atlanta	$1.00	$1.00	$1.15	$1.65	$1.55	$1.55	$1.55	$1.55	$1.55	$1.43	-----	-----	-----	-----	-----	-----
Baltimore	.90	.80	.75	.92	.85	.85	.85	.85	.85	.85	$0.85	$0.85	$0.85	$0.85	$0.85	$0.85
Birmingham	1.00	.95	.95	.80	.80	.80	.80	.80	.80	.80	.80	.80	.80	.80	.80	.80
Boston	.81	.80	1.08	1.25	1.20	1.18	1.18	1.18	1.18	1.18	1.16	1.16	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	-----	-----	-----	-----
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	1.45	1.45	1.45	1.40	1.40
Chicago	.80	.80	.87	1.07	1.02	1.02	1.02	1.02	.98	.98	.98	[1] .98	-----	-----	-----	-----
Cleveland	.80	.80	.80	.80	1.25	1.25	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	.90	.90	-----	-----	-----	-----	-----	-----	-----
Detroit	.75	.75	.79	.79	.82	.82	.79	.79	.79	.79	.79	.79	.77	.77	.79	.79
Fall River	.80	.80	1.05	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.14	1.14	1.14	1.14	1.14	1.14
Houston	1.00	1.00	1.09	1.09	1.09	1.05	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Indianapolis	.60	.55	.60	1.15	1.15	1.10	1.05	1.05	.95	.95	.95	.95	.95	.95	.95	.95
Jacksonville	1.20	1.15	1.50	1.65	1.97	1.97	1.97	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92
Manchester	1.10	1.00	1.18	1.48	1.38	1.38	1.38	1.38	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34
Memphis	1.00	1.00	1.27	1.20	1.20	1.20	1.20	1.20	1.20	-----	-----	-----	-----	-----	-----	-----
Milwaukee	.75	.75	.75	.86	.82	.82	.82	.82	.82	.82	.82	.82	.82	.82	.82	.82
Minneapolis	.85	.80	.95	1.05	1.01	.95	.97	.96	.94	.89	1.05	.96	.96	.96	.96	.96
Mobile	1.10	1.10	1.35	1.80	1.80	1.80	1.80	1.76	1.76	1.76	1.76	-----	-----	-----	-----	-----
Newark	1.00	.90	1.15	1.25	1.20	1.20	1.20	1.20	1.20	1.20	1.21	1.21	1.21	1.21	1.21	1.21
New Haven	.90	.90	1.10	1.18	1.18	1.13	1.13	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	1.30	1.30	1.30	1.30	1.30	-----	-----	-----	-----	-----	-----	-----
New York	.84	.83	.87	1.23	1.23	1.23	1.23	1.24	1.25	1.25	1.24	1.24	1.23	1.21	1.21	1.21
Norfolk	1.00	1.00	1.60	1.40	1.40	1.40	1.33	1.33	1.33	1.33	1.32	1.32	1.32	1.18	1.18	1.18
Omaha	1.15	1.15	1.15	1.18	1.18	1.08	1.08	1.08	1.00	.95	.95	.88	.79	.79	.76	.73
Peoria	.90	.90	.85	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	.95	.95	.88	.88	.88
Portland, Me.	1.10	1.00	1.40	1.55	1.55	1.55	1.50	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42
Portland, Oreg.	.95	.95	.95	1.16	1.16	1.16	1.19	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17
Providence	.85	.85	1.30	1.22	1.22	1.17	1.17	1.13	1.13	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	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Rochester	.95	.95	.95	1.05	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00	1.11	1.11	1.11	[2] 1.10	[3] 1.30	[3] 1.30	[3] 1.30
St. Paul	.95	.90	.85	.85	.85	.85	.90	.90	.90	.90	.90	.90	.90	.90	.90	.90
Salt Lake City	.87	.87	1.35	1.57	1.57	1.54	1.53	1.52	1.51	1.51	-----	-----	-----	-----	-----	-----
San Francisco	.75	.85	.95	.92	1.00	1.05	.95	.95	.94	.90	-----	-----	-----	-----	-----	-----
Savannah	-----	-----	1.25	1.45	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	1.60	1.50	1.50	1.50	1.40	1.40	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	1.43	1.43	1.43	1.48	1.48	1.48
Springfield, Ill.	1.00	1.00	1.10	1.35	1.35	1.35	1.25	1.25	1.25	1.25	1.25	[4] 1.25	-----	-----	-----	-----
Washington	.93	.93	.95	1.05	1.00	1.00	1.00	1.00	1.00	1.00	1.00	.95	.93	.84	.85	.85
	NATURAL GAS AND MIXED MANUFACTURED AND NATURAL GAS															
Atlanta	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	$1.17	$1.09	$1.09	$1.09	$1.09	$1.09
Buffalo	-----	-----	-----	-----	$0.60	$0.60	$0.65	$0.65	$0.65	$0.65	.65	.65	.65	.65	.65	.65
Butte	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.70	.70	.70	.70
Chicago	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	[5] 1.32	[5] 1.32	[5] 1.30	[5] 1.30
Cincinnati	$0.30	$0.30	$0.35	$0.50	.50	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75
Cleveland	.30	.30	.35	.55	.55	.55	.60	.60	.60	.60	.60	.60	.60	.60	.60	.53
Columbus	.30	.30	.30	.45	.45	.55	.55	.48	.48	.48	.48	.48	.48	.55	.55	.55
Dallas	.45	.45	.45	.68	.68	.74	.74	.79	.79	.79	.79	.79	.79	.79	.79	.79
Denver	-----	-----	-----	-----	-----	-----	-----	-----	-----	.99	.99	.99	.99	.99	.99	.96
Houston	-----	-----	-----	-----	-----	-----	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75
Kansas City	.27	.27	.80	.95	.95	.95	.95	.95	.95	.95	.95	.95	.95	.95	.95	.95
Little Rock	.40	.40	.45	.45	.65	.65	.65	.65	.65	.65	.65	.65	.65	.65	.65	.65
Los Angeles	-----	-----	-----	-----	-----	-----	-----	.91	.91	.84	.84	.84	.84	.82	.79	.79
Louisville	-----	.45	.45	.45	.45	45	.45	.45	.45	.45	.45	.45	.45	.45	.56	.58
Memphis	-----	-----	-----	-----	-----	-----	-----	-----	-----	.97	.95	.95	.95	.95	.95	.95
Mobile	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1.24	1.24	1.24	1.24	1.24
New Orleans	-----	-----	-----	-----	-----	-----	-----	-----	-----	.95	.95	.95	.95	.95	.95	.95
Peoria	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	[6] 1.95	[6] 1.95	[6] 1.95	[6] 1.95
Pittsburgh	.28	.28	.35	.50	.53	.60	.60	.60	.60	.60	.60	.60	.60	.60	.60	.60
Salt Lake City	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.99	.99	.99	.99	1.01	1.01
San Francisco	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.97	.97	.97	.97	.97	.97
Springfield	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	[6] 2.00	[6] 2.00	[6] 1.28	[6] 1.28

[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. 734.—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	1907	166,095	120,107	1921	472,183	814,745
1866-1870	4,013	15,795	1908	178,527	129,079	1922	557,531	895,111
1871-1875	8,221	16,430	1909	183,171	128,329	1923	732,407	978,430
1876-1880	16,816	22,926	1910	209,557	127,900	1924	713,940	1,022,683
						1925	763,743	1,284,960
1881-1885	25,508	22,933	1911	220,449	134,045			
1886-1890	32,990	23,830	1912	222,935	164,213	1926	770,874	1,447,760
1891-1895	51,095	35,708	1913	248,446	237,121	1927	901,129	1,172,830
1896-1900	59,498	56,836	1914	265,763	214,125	1928	901,474	1,054,880
1901-1905	102,083	83,524	1915	281,104	179,463	1929	1,007,323	1,280,417
						1930	898,011	1,070,200
1906-1910	172,769	119,572	1916	300,767	330,900			
1911-1915	247,739	185,793	1917	335,316	522,635	1931	851,081	550,630
1916-1920	362,661	735,698	1918	355,928	703,944	1932	785,159	680,460
1921-1925	647,961	999,186	1919	378,367	760,266	1933	905,656	608,000
1926-1930	895,762	1,205,217	1920	442,929	1,360,745	1934	908,065	904,825

Source: Bureau of Mines, Department of the Interior.

No. 735.—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. Imports are imports for consumption beginning with 1933; general imports in earlier years

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 oils	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
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	785,159	44,700	30,228	27,391	[3] 69,348	38,152	30.4	29.2	27.1	[3] 168.1	29.4
1933	905,656	31,908	13,257	36,584	[3] 61,419	32,272	17.7	7.1	32.0	[3] 151.3	27.1
1934	908,065	35,772	14,952	41,127	[3] 64,750	29,899	25.9	9.6	49.8	[3] 159.5	31.3

[1] Data are not available.
[2] Average for years 1908-1910 for total mineral oils.
[3] Not including natural gasoline (308,000 barrels valued at $533,000 in 1932, 1,657,000 barrels at $3,395,000 in 1933, and 1,495,000 barrels at $2,729,000 in 1934), included with refined oils prior to 1932.

Sources: Bureau of Mines, Department of the Interior, and Bureau of Foreign and Domestic Commerce, Department of Commerce.

No. 736.—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)	1931	1932	1933	1934
World total [1]	236,615	384,345	541,733	944,777	1,316,390	1,373,656	1,309,677	1,443,382	1,500,824
United States [2]	137,426	247,739	362,661	647,961	895,762	851,081	785,159	905,656	908,085
Percent of total	*58.1*	*64.5*	*66.9*	*68.6*	*68.0*	*62.0*	*59.9*	*62.7*	*60.5*
Regions:									
Appalachian	28,943	24,594	27,161	28,504	31,603	30,401	29,667	27,436	30,505
Lima—N. E. Ind.[3]—Mich	17,253	5,052	3,468	2,298	3,603	4,941	8,004	8,988	11,603
Illinois—S. W. Indiana [3]	12,659	24,955	13,918	9,585	7,495	5,842	5,450	4,967	5,293
Mid-continent	25,088	87,656	184,616	343,545	527,944	543,736	493,034	601,147	584,732
Gulf	17,436	12,357	24,273	33,688	54,140	57,592	53,466	76,308	83,949
Rocky Mountain	402	2,605	11,830	35,258	29,468	19,739	17,410	14,800	17,678
California	35,641	90,512	97,384	195,074	241,509	188,830	178,128	172,010	174,305
States:									
Arkansas				36,644	35,010	14,791	12,051	11,686	11,182
California	35,641	90,512	97,384	195,074	241,509	188,830	178,128	172,010	174,305
Colorado	381	211	139	392	2,477	1,545	1,136	919	1,139
Illinois	12,659	24,955	13,918	8,815	6,654	5,039	4,673	4,244	4,479
Indiana	6,527	1,167	865	1,011	937	840	806	737	838
Kansas [4]	4,603	2,235	32,556	32,733	41,123	37,018	34,848	41,976	46,482
Kentucky [5]	696	484	5,335	8,044	7,103	6,456	6,287	4,608	4,860
Louisiana	4,310	12,997	19,117	25,759	22,338	21,804	21,807	25,168	32,869
Michigan				1	1,913	3,789	6,010	7,942	10,603
Montana			129	2,729	4,826	2,830	2,457	2,273	3,603
New Mexico [6]				[7] 554	3,171	15,227	12,455	14,116	16,864
New York	1,153	920	864	1,274	2,765	3,363	3,508	3,181	3,804
Ohio	15,677	8,586	7,583	7,045	7,022	5,327	4,644	4,235	4,234
Oklahoma [4]	19,076	68,624	102,209	155,088	235,663	180,574	153,244	182,251	180,107
Pennsylvania	10,538	8,002	7,662	7,607	10,613	11,892	12,412	12,624	14,478
Texas	14,534	16,256	55,008	127,009	245,792	332,437	312,478	402,609	381,516
West Virginia	11,605	10,487	8,311	6,575	5,655	4,472	3,876	3,815	4,095
Wyoming	21	2,394	11,562	31,901	21,145	14,834	13,418	11,227	12,556

[1] Estimated; 1934 figure from "World Petroleum."
[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 Oklahoma, 1905 and 1906. [5] Kentucky includes Tennessee, 1891 to 1907.
[6] Not shown separately prior to 1924. [7] Average for years 1924 and 1925.

No. 737.—STOCKS OF CRUDE AND REFINED MINERAL OILS ON DECEMBER 31

[In thousands of barrels of 42 gallons]

	1920	1925	1930	1931	1932	1933	1934
Crude petroleum, total [1]	149,448	345,863	408,809 [2] 411,882	370,919 [2] 370,194	339,715 [2] 339,875	355,312 [2] 354,223	337,254
At refineries [3]	28,703	[4] 29,607	[4] 41,136	[4] 36,546 [2][4] 35,821	55,513 [2] 61,769	66,049	64,099
Pipe line and tank farm [5]	117,159	[4] 308,696	[4] 361,065 [2][4] 364,138	[4] 328,171	276,189 [2] 270,093	281,132 [2] 280,043	264,625
Producers' [5]	3,586	7,560	6,608	6,202	8,013	8,131	8,530
Natural gasoline	(6)	[7] 326	2,377 [2] 3,100	2,818 [2] 2,825	3,203	3,317 [2] 3,680	3,740
Refined products, total [1] [8]	60,397	206,275	254,311 [2] 251,680	247,936 [2] 258,879	247,188 [2] 249,116	244,578 [2] 244,295	228,356
Gasoline	11,009	38,918	40,541 [2] 40,098	42,320 [2] 52,401	50,602 [2] 51,107	52,616 [2] 56,255	48,205
Kerosene	9,359	7,121	6,883	5,332	4,974 [2] 5,033	6,558	6,398
Gas oil and fuel oil [1]	19,938	110,464	140,428 [2] 137,790	135,856	129,881 [2] 130,753	123,500 [2] 123,004	110,397
Lubricants	3,822	7,253	10,971	9,511 [2] 9,485	8,465 [2] 8,694	7,100	7,331
Grand total stocks all oils	209,845	552,464	665,497 [2] 666,662	621,673 [2] 631,898	590,106 [2] 592,194	603,207 [2] 602,198	564,350

[1] California heavy crude and fuel oil included in refined products as residual fuel oil beginning 1925.
[2] For comparison with succeeding year. [3] Includes foreign crude held by importers.
[4] Refinery stocks in California included in pipe-line and tank-farm stocks.
[5] Producers' stocks in California included in pipe-line and tank-farm stocks prior to 1932.
[6] Not available. [7] At plants only. [8] Includes wax, coke, and asphalt.

Source of tables 736 and 737: Bureau of Mines, Department of the Interior.

No. 738.—SUPPLY AND DEMAND OF CRUDE AND REFINED OILS

[In thousands of barrels of 42 gallons]

	1928	1929	1930	1931	1932	1933	1934
Total new supply of all oils	1,038,166	1,171,359	1,058,949	982,611	896,965	986,228	996,823
Domestic production, total	946,609	1,062,649	953,331	896,524	822,471	940,834	946,329
Crude petroleum	901,474	1,007,323	898,011	851,081	785,159	905,656	908,065
Natural gasoline	42,326	52,271	52,631	43,617	36,281	33,810	36,556
Benzol	2,809	3,055	2,689	1,826	1,031	1,368	1,708
Imports—							
Crude	79,767	78,933	62,129	47,250	44,682	31,893	35,558
Refined [1]	11,790	29,777	43,489	38,837	29,812	13,501	14,936
Change in stocks [2]	+22,775	+68,156	−24,000	−44,989	−41,792	+11,013	−37,848
Total demand	1,015,391	1,103,203	1,082,949	1,027,600	938,757	975,215	1,034,671
Exports [3]—							
Crude	18,966	26,401	23,705	25,535	27,393	36,584	41,127
Refined [1]	135,991	136,719	132,794	98,859	75,882	70,143	73,380
Domestic [4]	860,434	940,083	926,450	903,206	835,482	868,488	920,164
Bunker oil	51,226	52,278	50,773	43,714	38,152	32,272	29,899

[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 the Interior.

No. 739.—PETROLEUM REFINING: Refinery Products

Product	Quantity (thousands of gallons unless otherwise specified)				Value (thousands of dollars)	
	1929	1931 As published; comparable with 1929	1931 Comparable with 1933 [1]	1933 Reported on standard schedule [1]	1931 Comparable with 1933 [1]	1933 Reported on standard schedule [1]
Refinery products, total value					1,502,259	1,357,997
Light products of distillation (except tops)	18,251,372	17,595,043	17,432,723	16,354,818	846,254	773,182
Gasoline	17,538,789	17,100,621	16,949,078	16,094,531	824,300	759,183
Naphtha	662,642	461,174	450,397	228,516	20,146	12,251
Benzine	49,941	33,247	33,247	31,771	1,808	1,747
Illuminating oils	2,338,929	1,745,447	1,732,908	1,949,863	72,285	78,128
Fuel oils	16,390,954	14,209,692	13,999,089	13,295,107	267,881	253,237
Distillates	1,024,364	1,055,597	1,013,171	1,598,816	27,116	49,648
Gas oils	2,882,959	2,562,148	2,525,230	1,977,443	67,837	53,931
Residual fuel oils	12,483,631	10,591,948	10,460,689	9,718,848	172,928	149,658
Partially refined oils sold for rerunning	1,466,861	1,313,270	1,311,126	1,130,068	28,418	23,734
Above fuel oil	869,056	891,280	890,944	760,697		
Fuel oil	567,533	383,803	382,937	345,215		
Below fuel oil	30,273	38,187	37,245	24,156		
Lubricating oils	1,553,711	1,147,767	1,145,431	1,047,212	197,093	142,444
Black, cylinder, red, neutral, pale, and paraffin	(2)	(2)	(2)	650,475	(2)	74,178
All other lubricating oils, including compounded (except cylinder) oils	(2)	(2)	(2)	396,736	(2)	68,266
Liquid asphaltic road oils	323,002	377,748	375,116	300,243	10,352	8,343
Greases	52,017	45,816	45,211	41,923	12,225	9,251
Petroleum, mineral jelly, etc.	13,664	16,959	16,353	14,711	2,071	1,855
Lubricating greases, including axle grease	38,354	28,858	28,858	27,212	10,153	7,396
Paraffin wax	84,639	79,483	79,377	72,852	13,340	12,211
Acid oil	34,767	84,560	84,560	85,627	1,119	1,015
Asphalt other than liquid asphalt [3]	3,115	2,462	2,462	1,790	21,751	17,932
Petroleum coke [3]	1,265	2,029	2,025	1,751	7,173	5,582
Other refinery products, value					24,368	32,940

[1] For reason of adjustment, see last paragraph of general note, p. 715.
[2] No comparable data.
[3] Thousands of tons of 2,000 pounds.

Source: Bureau of the Census, Department of Commerce.

No. 740.—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	1930	1931	1932	1933	1934
Crude oil run to stills	326,025	433,915	739,920	927,447	894,608	819,997	861,254	895,636
Domestic	324,618	372,779	698,582	866,615	847,671	777,696	825,786	860,776
Foreign	1,407	61,136	41,338	60,832	46,937	42,301	35,468	34,860
Natural gasoline run to stills or blended at refineries	2,451	3,153	[1] 19,636	[1] 43,170	[1] 35,116	[1] 26,332	[1] 25,346	[1] 28,162
Stocks of crude oil, end of year	15,750	21,261	[2] 29,200	[2] 41,136	[2] 36,546	[2] 47,816	66,049	64,099
Motor fuel:								
Production	86,280	118,022	262,252	440,728	437,453	399,712	407,932	423,801
Exports (gasoline and benzol)	13,650	15,678	31,684	65,575	45,716	35,438	29,321	24,686
Imports (gasoline)	307	964	3,813	16,927	13,621	8,205	15	1
Stocks, end of year	7,080	11,009	38,918	40,098	[3] 55,226	[3] 54,310	[3] 59,935	[3] 51,945
Apparent consumption	75,672	102,937	226,329	394,800	403,418	373,900	377,003	407,106
Kerosene:								
Production	43,461	55,240	59,689	49,208	42,446	43,836	48,977	53,855
Exports	11,820	20,878	21,212	16,884	12,712	11,044	8,959	9,781
Stocks, end of year	9,050	9,359	7,121	6,883	5,332	5,033	6,558	6,398
Apparent consumption	34,442	33,082	39,969	34,736	31,296	33,221	38,493	44,234
Gas oil and fuel oil:								
Production	174,319	210,987	364,991	372,498	336,967	[4] 301,353	[4] 316,439	[4] 335,353
Exports	29,637	22,080	36,088	36,450	29,231	19,994	20,563	28,605
Stocks, end of year	15,691	19,938	[2] 24,681	[5] 137,790	[5] 135,856	[5] 129,881	[5] 123,004	[5] 110,397
Lubricants:								
Production	20,035	24,938	31,055	34,201	26,704	22,433	23,775	26,373
Exports	6,165	9,643	9,678	9,935	8,128	6,851	8,218	7,660
Stocks, end of year	3,306	3,822	7,253	10,971	9,485	8,694	7,100	7,331
Apparent consumption	13,823	14,742	20,581	21,589	20,068	16,614	17,152	18,482
Wax—production...1,000 lbs	505,144	541,204	590,577	547,680	477,400	458,920	469,560	468,720
Stocks, end of year...do	199,658	195,368	116,391	232,592	171,220	163,935	69,117	136,136
Coke—production...1,000 tons [6]	560	577	991	1,940	2,032	1,789	1,580	1,300
Stocks, end of year...do	23	32	238	1,069	1,512	1,330	727	405
Asphalt—production 1,000 tons [6]	608	1,291	2,677	3,308	2,976	2,475	2,320	2,841
Stocks, end of year...do	77	81	159	308	302	276	255	339
Other finished products	--------	--------	8,044	13,179	[7] 47,957	[7] 49,522	[7] 52,181	[7] 52,473
Losses	14,557	18,743	22,914	37,003	[7] 19,070	[7] 20,652	[7] 16,756	[7] 16,073

[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] Includes net transfers 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. 741.—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, 1934				
	1933	1934	1933	1934	Gasoline	Kerosene	Gas oil and fuel oil	Lubricants	Wax
Total	**861,254**	**895,636**	**25,346**	**28,162**	**416,932**	**53,855**	**335,353**	**26,373**	**468,720**
East coast	166,932	171,733	1,109	1,307	69,630	10,535	65,621	7,405	225,120
Appalachian	33,567	35,809	237	284	17,980	2,982	7,345	5,231	81,480
Indiana, Illinois, Kentucky, etc	117,073	119,166	1,785	2,348	67,247	4,224	28,976	2,373	37,800
Oklahoma, Kansas, and Missouri	96,541	95,006	4,968	5,874	55,624	6,307	25,721	2,969	34,720
Texas	218,145	241,359	5,916	6,349	111,679	18,159	91,190	5,901	48,160
Louisiana and Arkansas	57,519	60,191	691	769	24,265	5,571	24,249	558	25,760
Rocky Mountain	14,209	16,037	819	803	8,908	516	4,420	231	15,680
California	157,268	156,335	9,821	10,428	61,599	5,561	87,831	1,705	--------

Source of tables 740 and 741: Bureau of Mines, Department of the Interior.

No. 742.—PETROLEUM PIPE LINES: Summary for All Reporting Companies

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

Year	Miles of line operated	Investment in pipe lines	Other investments	Pipe-line operating revenues	Pipe-line operating expenses	Pipe-line operating income	Net income
1921	55,260	365,024	287,114	115,950	62,370	25,530	34,400
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
1942	92,783	763,942	41,754	211,789	86,003	110,019	112,362
1933	93,724	766,251	47,947	217,192	85,374	107,811	105,943

Source: Interstate Commerce Commission.

No. 743.—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 for kerosene, gasoline at service stations in 50 cities (exclusive of all taxes), five refining locations for fuel oil, and lubricating oil at refineries.

Year	Crude	Gasoline	Kerosene	Fuel oil	Lubricating oil	Month, 1934	Crude	Gasoline	Kerosene	Fuel oil	Lubricating oil
	Dolls.	*Cents*	*Cents*	*Dolls.*	*Cents*		*Dolls.*	*Cents*	*Cents*	*Dolls.*	*Cents*
1921	1.86	-------	12.9	1.30	--------	January	1.21	14.1	9.6	.79	20.0
1924	1.84	19.2	12.7	1.35	--------	February	1.21	14.0	9.5	.78	20.7
1925	1.96	19.9	12.3	1.46	24.3	March	1.21	14.0	9.9	.82	20.8
1926	2.03	20.8	14.7	1.47	23.3	April	1.21	13.3	9.8	.83	20.8
1927	1.55	18.0	12.9	1.14	21.2	May	1.23	13.7	9.9	.86	21.4
1928	1.54	17.7	12.9	.91	20.7	June	1.23	14.0	9.5	.88	20.8
1929	1.67	17.7	13.4	.89	26.3	July	1.23	13.9	9.5	.88	19.5
1930	1.39	16.4	12.1	.78	19.8	August	1.23	13.6	9.3	.86	16.5
1931	.91	12.9	10.3	.57	14.7	September	1.23	13.4	9.2	.85	16.7
1932	1.02	13.2	9.4	.62	14.5	October	1.23	12.7	9.2	.83	16.0
1933	.87	12.8	9.2	.67	14.7	November	1.19	12.3	9.1	.85	14.7
1934	1.21	13.5	9.5	.84	18.5	December	1.15	12.7	9.0	.86	14.5

No. 744.—ASPHALT: Supply, Distribution, and Sales

	1929	1930	1931	1932	1933	1934
Total supply (1,000 tons of 2,000 pounds)	5,011	4,260	3,841	3,140	3,090	3,573
Native asphalt and related bitumens:						
Produced	804	703	503	340	313	441
Imported (chiefly lake asphalt)	121	53	74	20	22	16
Petroleum asphalt (excluding road oil):						
Produced at refineries from—						
Domestic petroleum	1,583	1,404	1,275	1,116	1,237	1,445
Foreign petroleum	2,247	1,824	1,701	1,359	1,219	1,395
Stocks, Jan. 1	255	277	288	305	299	276
Total distribution (1,000 tons of 2,000 pounds)	5,011	4,260	3,841	3,140	3,090	3,573
Native asphalt and related bitumens:						
Indicated domestic demand	757	680	484	328	299	426
Exports (unmanufactured)	47	23	19	12	14	15
Petroleum asphalt (excluding road oil):						
Indicated domestic demand (incl. lake asphalt)	3,451	2,859	2,745	2,295	2,296	2,569
Exports	479	410	288	206	204	224
Stocks, Dec. 31	277	288	305	299	276	339
VALUE (1,000 DOLLARS)						
Native asphalt and related bitumens:						
Sales	5,470	4,463	2,930	1,943	1,705	2,366
Imports (chiefly lake asphalt)	956	457	726	251	278	222
Exports (unmanufactured)	1,133	629	531	449	554	581
Petroleum asphalt (excluding road oil):						
Sales	43,557	34,622	24,861	18,605	23,543	29,895
Exports	8,543	7,277	4,941	3,168	2,861	3,383

Source: Bureau of Mines, Department of the Interior.

No. 745.—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 746). Data for 1934 are preliminary; leaders indicate separate data not yet available

State	1910	1920	1925	1929	1930	1932	1933	1934
	Thousands of barrels of 376 pounds							
Production, total	76,550	100,023	161,659	170,646	161,197	76,741	63,473	77,682
Alabama	[1] 1,481	1,132	6,288	5,006	4,821	1,453	1,969	----------
California	[2] 6,386	7,098	13,098	13,092	10,124	5,482	7,165	8,691
Illinois	4,459	5,539	7,101	8,243	7,935	5,481	3,974	----------
Iowa	[3] 2,010	4,849	4,648	6,373	7,088	4,271	3,044	----------
Kansas	5,656	4,341	6,511	6,740	6,012	2,296	2,201	----------
Michigan	3,688	4,891	10,936	13,749	11,511	4,296	3,633	4,110
Missouri	4,456	6,018	8,332	8,113	7,809	4,238	3,799	----------
New York	3,296	5,885	8,770	10,761	10,373	6,014	4,205	----------
Ohio	1,528	1,780	5,715	9,427	8,632	4,002	2,781	----------
Pennsylvania	26,676	28,269	42,347	39,355	37,844	15,799	12,294	----------
Tennessee	(4)	(4)	(4)	4,442	3,875	1,547	1,348	----------
Texas	[5] 2,287	2,562	4,858	7,374	6,782	3,748	2,970	3,537
Other States	14,627	27,659	43,055	37,971	38,393	18,115	14,091	----------
Shipments	(6)	96,312	157,295	169,868	159,059	80,843	64,283	75,917
Imports	307	525	3,667	1,745	985	468	477	266
Stocks at mills (Dec. 31)	(6)	8,833	18,336	23,701	25,899	20,351	19,541	21,460

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

No. 746.—PORTLAND CEMENT: Shipments by Destinations

[In thousands of barrels of 376 pounds]

State	1931	1932	1933	1934 [1]
Shipped from cement plants	127,151	80,843	64,283	75,917
Shipments to States	126,405	80,184	63,305	74,890
New England	6,367	4,176	3,207	3,983
Maine	527	410	312	261
New Hampshire	437	267	262	346
Vermont	312	260	140	241
Massachusetts	3,044	2,126	1,474	1,958
Rhode Island	570	305	282	325
Connecticut	1,477	808	737	852
Middle Atlantic	32,745	18,624	13,333	15,248
New York	19,756	11,057	7,178	8,043
New Jersey	5,066	2,855	2,027	2,338
Pennsylvania	7,923	4,712	4,128	4,865
East North Central	28,010	20,081	14,321	16,174
Ohio	6,645	4,813	2,738	3,578
Indiana	3,880	3,015	1,987	2,243
Illinois	7,925	5,826	5,295	5,008
Michigan	5,582	3,476	2,465	3,018
Wisconsin	3,978	2,951	1,836	2,327
West North Central	16,705	11,521	7,867	9,279
Minnesota	3,716	3,148	1,469	1,636
Iowa	3,800	2,592	1,503	2,219
Missouri	4,259	3,456	2,549	2,223
North Dakota	258	176	133	239
South Dakota	637	334	241	399
Nebraska	1,903	771	1,026	1,157
Kansas	2,132	1,045	946	1,406
South Atlantic	12,373	7,051	5,622	7,720
Delaware	347	298	252	303
Maryland	2,014	1,557	835	1,285
District of Columbia	1,250	1,070	943	827
Virginia	1,596	906	921	1,258
Shipments to States—Con. South Atlantic—Continued.				
West Virginia	1,421	861	643	1,108
North Carolina	1,015	434	484	768
South Carolina	2,251	368	217	327
Georgia	1,714	1,129	729	938
Florida	765	428	598	906
East South Central	4,300	3,341	3,815	4,392
Kentucky	1,628	1,306	1,245	1,240
Tennessee	1,396	1,176	957	1,534
Alabama	1,251	392	926	942
Mississippi	525	467	687	676
West South Central	13,028	6,758	6,056	6,237
Arkansas	1,223	270	673	699
Louisiana	3,906	1,288	756	991
Oklahoma	2,214	1,238	1,416	1,278
Texas	5,685	3,962	3,211	3,269
Mountain	2,511	1,974	2,791	5,071
Montana	263	150	162	326
Idaho	189	103	119	217
Wyoming	136	82	82	161
Colorado	776	492	430	546
New Mexico	265	174	194	307
Arizona	438	161	126	267
Utah	311	164	243	275
Nevada	133	648	1,435	2,972
Pacific	9,630	6,496	5,984	6,720
Washington	2,087	1,289	687	1,115
Oregon	927	523	330	559
California	6,616	4,684	4,967	5,046
Unspecified	235	159	309	70
Exports direct by manufacturers [2]	746	660	977	1,027

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

Source of tables 745 and 746: Bureau of Mines, Department of the Interior.

No. 747.—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	1920	100,791	100,023	767	203,198
1895	8,731	990	7,741	5,482	1921	99,381	98,842	539	187,708
1900	17,231	8,482	8,749	13,284	1922	115,679	114,790	889	203,324
1905	40,102	35,247	4,855	35,932	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	77,198	76,741	457	[1] 82,718
1918	71,515	71,082	433	114,132	1933	63,940	63,473	467	[1] 86,172
1919	81,307	80,778	529	138,714	1934 [2]	78,354	77,682	672	[1] 116,732

[1] Value of shipments. [2] Preliminary.

Source: Bureau of Mines, Department of the Interior.

No. 748.—STONE: PRODUCTION (SALES), BY VARIETIES AND USES

Variety and use	Quantity sold, thousands of short tons (2,000 pounds)[1]							Value, 1,000 dollars	
	1927	1928	1929	1930	1931	1932	1933	1932	1933
Total	**136,345**	**133,870**	**141,110**	**126,996**	**97,933**	**70,644**	**70,222**	**89,064**	**80,946**
Granite	10,707	9,556	10,827	10,047	8,068	5,119	4,422	15,978	11,327
Basalt and related rocks	13,211	15,328	14,872	14,532	12,553	9,329	7,394	8,880	6,596
Sandstone	5,051	4,717	5,790	4,594	4,582	2,973	2,799	4,082	4,145
Marble	600	579	554	477	350	343	225	7,532	6,399
Limestone	99,662	96,865	100,687	88,741	66,751	46,914	45,922	48,016	44,499
All other	7,115	6,825	8,380	8,604	5,629	5,968	9,459	4,576	7,978
Building stone	2,485	2,453	2,647	2,322	1,669	1,296	870	20,185	15,338
Monumental	358	348	366	291	237	168	166	6,245	5,321
Paving blocks	367	349	300	295	197	72	60	620	586
Curbing	378	383	336	262	171	80	56	926	619
Flagging	55	75	88	82	50	26	14	207	134
Rubble	809	908	908	1,067	432	179	142	196	187
Riprap	4,618	3,993	4,213	4,292	4,223	3,462	3,255	2,874	3,486
Crushed stone	94,949	91,265	92,721	87,111	72,624	51,995	45,491	46,892	39,019
Furnace flux (limestone and marble)	21,666	23,124	24,394	17,091	9,727	3,991	7,985	2,929	5,513
Refractory stone	1,363	1,348	1,558	1,198	611	197	501	229	711
Manufacturing industries (limestone and marble)	5,352	5,640	7,431	6,021	4,501	4,369	5,638	3,927	4,533
Agricultural limestone and other	3,944	3,983	6,147	6,967	3,490	4,808	6,045	3,835	5,500

[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 1933: Building stone, 11,512,000 cubic feet; monumental stone, 2,007,000 cubic feet; paving blocks, 5,922,000; curbing, 689,000 cubic feet; and flagging, 181,000 cubic feet.

Source: Bureau of Mines, Department of the Interior.

No. 749.—CLAY PRODUCTS: PRODUCTION

Industry and product	Unit	Quantity (thousands of unit specified)			Value (thousands of dollars)		
		1929	1931	1933	1929	1931	1933
CLAY PRODUCTS (EXCEPT POTTERY) AND NONCLAY REFRACTORIES							
Total value					294,488	127,468	64,841
Brick:							
Common	Number	5,505,359	2,314,664	1,019,810	58,733	21,652	8,816
Vitrified	do	367,650	207,386	63,111	7,504	4,266	1,224
Face	do	2,189,408	903,226	270,323	36,120	13,271	3,807
Enameled	do	17,137	8,605	4,292	1,259	484	172
Drain tile	Ton[1]	859	253	168	6,516	1,667	1,127
Sewer pipe	do	1,675	823	451	21,330	9,448	4,911
Architectural terra cotta	do	134	55	26	13,921	5,492	1,831
Hollow building tile or block	do	4,164	1,928	608	30,142	11,172	2,836
Tile (not drain):							
Roofing	Squares	371	285	103	3,944	3,125	911
Floor (including plain, vitreous, encaustic, quarry, etc.).	Sq. ft	15,887	12,181	5,793	3,773	2,052	887
Ceramic mosaic (vitreous and semivitreous).	do	18,052	8,744	4,229	3,738	1,781	699
Faience (including art, enameled, and hand-decorated).	do	19,357	21,431	8,401	10,136	7,749	2,386
Wall (thin, white glazed, etc.)	do	30,443	17,716	9,930	11,254	4,993	1,552
Stove lining	Ton[1]	17	9	6	468	317	224
Fire-clay products (shaped):							
Brick, block, etc.[2]	Number	962,129	423,061	382,076	38,284	16,419	13,834
Special shapes	Ton[1]	182	127	107	4,092	3,068	2,293
All other clay products					14,068	6,344	5,260
Silica brick	Number	294,402	103,557	110,889	15,165	5,132	4,655
Other nonclay refractories					14,041	9,036	7,415
POTTERY							
Total value					112,019	66,583	44,024
Red earthenware (flower pots, etc.).					2,798	2,034	1,207
Stoneware (except chemical) and yellow and Rockingham ware.					4,144	3,300	2,222
White ware, cream color, white granite, semiporcelain, and semivitreous porcelain.					32,067	20,108	15,005
Hotel china					10,476	6,595	5,008
Vitreous china plumbing fixtures.					24,992	12,894	7,709
Porcelain electrical supplies					22,136	13,154	7,056
Saggers					1,308	645	326
All other products					14,098	7,853	5,491

[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.

No. 750.—GLASS AND GLASSWARE: PRODUCTION

Product	Quantity (thousands of square feet)				Value (thousands of dollars)	
	1929	1931 As published; comparable with 1929	1931 Comparable with 1933[1]	1933 Reported on standard schedule[1]	1931 Comparable with 1933[1]	1933 Reported on standard schedule[1]
Total value					208,604	184,509
Window glass	402,559	266,772	258,217	249,442	9,998	10,457
Obscured glass, including cathedral and skylight glass and opalescent sheet glass.	34,294	17,796	15,659	19,858	2,137	2,591
Wire glass, rough and polished	42,817	15,664	14,802		1,713	
Pressed and blown glass (except containers)					54,319	45,398
Containers					105,118	99,362
Plate glass, polished					25,765	26,702
Other glass products					9,555	

[1] For reason of adjustment, see last paragraph of general note, p. 715.

Source of tables 749 and 750: Bureau of the Census, Department of Commerce.

No. 751.—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
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
1932	1,013	133	384	8,705	2,642	5,273	2,317	4,269	8,108	3,745	9,924
1933	1,020	63	270	8,816	1,224	3,807	1,831	2,836	6,435	4,911	16,127
1934 [2]	1,078	113	302	11,202	2,412	3,647	1,111	3,845	6,393	7,438	18,893

[1] Vitrified brick or block. [2] Preliminary.

Sources: Bureau of the Census and Bureau of Mines, Departments of Commerce and the Interior.

No. 752.—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	1924	6,803,115	144,945	88,938
1885	985,411	2,108	440,290	1925	7,397,500	155,079	85,788
1890	1,242,779	2,464	257,323	1926	7,371,600	158,908	55,964
1895	1,913,751	3,602	279,576	1927	7,568,690	153,832	44,968
1900	2,921,708	7,511	199,909	1928	8,074,700	145,396	42,856
1905	3,635,257	34,238	161,159	1929	8,543,560	109,222	36,450
1910	4,242,792	49,013	137,103	1930	8,054,440	70,478	54,021
1915	5,352,409	80,474	122,326	1931	7,358,070	98,710	33,216
1920	6,840,029	139,272	137,654	1932	6,407,973	63,581	28,018
1922	6,792,849	134,989	113,922	1933	7,604,972	105,178	30,132
1923	7,130,713	125,529	88,750	1934	7,612,074	105,365	53,124

State or kind	1910	1915	1920	1925	1930	1933	1934
Production, total	4,242,792	5,352,409	6,840,029	7,397,500	8,054,440	7,604,972	7,612,074
By States:							
Michigan	1,323,283	1,762,430	2,262,915	2,172,600	2,558,290	2,090,254	2,012,370
New York	[1] 1,629,953	1,570,446	1,903,101	2,053,970	2,009,280	1,847,696	1,866,280
Ohio	514,339	823,234	1,057,802	1,173,590	1,311,440	1,382,294	1,432,292
Kansas	393,603	527,123	783,655	812,540	759,800	732,947	768,133
Louisiana	(1)	(2)	265,085	500,350	535,250	532,569	527,289
California	131,252	146,784	212,008	292,480	350,370	331,009	341,893
Texas	53,503	62,297	91,103	(2)	(2)	165,603	208,979
Utah	34,979	55,279	75,259	88,150	85,240	56,305	(2)
West Virginia	21,788	32,513	29,802	25,870	28,670	63,818	66,766
Undistributed	140,093	372,303	159,299	277,950	416,100	402,477	348,072
By kinds:							
Manufactured (evaporated)	1,953,069	2,335,823	2,409,924	2,235,170	2,358,610	2,358,954	2,281,453
In brine	1,314,492	1,851,199	2,819,916	2,819,690	3,718,460	3,461,026	3,417,439
Rock salt	975,231	1,165,387	1,610,189	2,342,640	1,977,370	1,784,992	1,913,182
Total value (dollars)	7,900,344	11,747,686	29,894,075	26,162,361	25,009,480	22,318,086	22,850,797

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

Source: Bureau of Mines, Department of the Interior.

No. 753.—ACCIDENT RATES IN ALL BRANCHES OF THE MINERAL INDUSTRY, 1921 TO 1933

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
1932	165	671,343	368,852	110,655,616	1,368	68,717	3.7	186.3
1933	181	677,722	409,292	122,787,658	1,242	72,342	3.0	176.7

[1] Excluding coal mines prior to 1930. Data excluding coal mines are: Number injured, 1930, 26,759; 1931, 16,063; 1932, 9,745; 1933, 11 029; number injured per thousand 300-day workers, 1930, 117.0; 1931, 99.7; 1932, 91.6; 1933, 98.6.

Source: Bureau of Mines, Department of the Interior.

No. 754.—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
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
1932	53,288	36,984	107	4,837	177
1933	57,016	38,807	95	5,793	132
Quarries:					
1915	100,740	82,447	148	9,148	523
1920	86,488	77,089	178	10,880	337
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	69,200	51,755	61	5,222	205
1932	56,866	37,047	32	3,464	110
1933	61,927	37,874	59	3,526	111
Metallurgical plants:					
1916	80,201	88,596	83	14,863	217
1920	59,232	65,587	61	8,714	149
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
1928	45,695	52,668	44	4,473	181
Metallurgical plants—Con.					
1929	47,399	53,587	43	4,368	206
1930	40,787	44,403	25	2,570	156
1931	28,938	28,806	16	1,304	89
1932	21,564	18,474	8	778	59
1933	21,999	19,583	13	1,018	61
Coke ovens:					
1916	31,603	34,119	45	5,154	83
1920	28,139	29,921	49	3,336	79
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
1932	12,002	13,862	14	298	22
1933	13,598	15,609	11	366	22
Coal mines:					
1911	728,348	534,122	2,656	(1)	(1)
1915	734,008	511,598	2,269	(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	527,623	262,484	1,207	57,445	1,527
1933	523,182	297,419	1,064	59,972	1,341
1934	(1)	(1)	1,185	(1)	(1)

[1] Not available.

Source: Bureau of Mines, Department of the Interior.