25. Forests and Forest Products

The Bureau of the Census, Department of Commerce, and the Forest Service, Department of Agriculture, are the principal Government agencies engaged in the collection and publication of statistics of forest land, forest industries, and forest products. The Forest Service, through its forest survey activities, is making an inventory of the forest resource and is measuring rates of forest growth and drain. A number of reports for surveyed areas have been published. A series of reports based on a reappraisal of the Nation's forest situation made during 1945 and 1946 have been published. Statistics from the preliminary report of this series are shown in table 808–811. There are several reports from this series on the various aspects of the forest situation. Other publications of the Forest Service include data on stumpage and log prices, lumber consumption and distribution, lumber used in manufacture, and fire statistics. The Statistical Supplement to the Annual Report of the Chief of the Forest Service carries statistics of the administration of the national forests.

The Bureau of the Census, Department of Commerce, publishes information on forest industries and products in reports of the Census of Manufactures, in addition to annual reports of the Census of Forest Products. The Bureau of the Census also publishes statistics of foreign trade in forest products. Information on the domestic movement of forest products is reported by the Interstate Commerce Commission and the Association of American Railways.

The Bureau of Agricultural and Industrial Chemistry of the Department of Agriculture publishes annual reports of the production of naval stores.

The Bureau of Labor Statistics of the Department of Labor publishes statistics of wholesale lumber prices monthly and annually.

The Timber Products and Pulp and Paper series of the Industry Reports, published by the Bureau of Foreign and Domestic Commerce in cooperation with other government agencies, carry forest products statistics which have been developed to meet current needs for information.

A number of forest products trade associations and trade journals collect and publish statistics of forest products, production, markets, shipments, inventories, etc.

The completeness and reliability of published statistics of forests and forest products vary considerably. The data for forest land area and stand are, of course, much more reliable for areas which have been surveyed than for those areas which have not been covered. Forest fire statistics for federal lands are considered much better than for private lands, though too much reliance should not be placed in any estimates of fire damage or causes of fires.

In the field of forest products, data for lumber production and other manufactured products such as veneer and plywood, pulp and paper, cooperage, naval stores, etc., are much more complete than for the primary forest products such as poles and piling, fuelwood, and fence posts. As explained in the headnotes to the following tables, however, the data for lumber production are subject to certain limitations because of incomplete coverage. Information for pulp and paper, and plywood, on the other hand, are believed to be practically complete. Statistics relating to average value of lumber sawed may be subject to some special limitations due to under representation of small mills.

Historical statistics.—In this section, tabular headnotes (as "See also *Historical Statistics*, series F 145–150") provide cross-references, where applicable, to Historical Statistics of the United States, 1789–1945. In that historical supplement to the Statistical Abstract, statistics are carried back year by year as far as possible. See also the historical appendix of the present issue of the Abstract for specific titles of series and the earliest year shown in the supplement.

No. 808.—Forest Land Area and Ownership of Commercial Forest Land, by States

[In thousands of acres. Status beginning of 1945]

Region and state	Total forest land	Commercial forest land [1]							
		All ownerships	Federally owned or managed			State, county, and municipal	Private		
			Total	National	Other		Total	Farm	Industrial and other
Total	623,828	461,044	88,957	73,512	15,445	27,114	344,973	139,058	205,915
North	211,753	170,321	11,311	9,523	1,788	19,414	139,596	61,010	78,586
New England	31,092	30,851	891	822	69	666	29,294	6,477	22,817
Connecticut	1,907	1,900	--------	--------	--------	155	1,745	711	1,034
Maine	16,788	16,665	74	47	27	50	16,541	2,173	14,368
Massachusetts	3,310	3,297	24	1	23	271	3,002	906	2,096
New Hampshire	4,800	4,722	621	613	8	79	4,022	1,086	2,936
Rhode Island	452	447	--------	--------	--------	27	420	107	313
Vermont	3,835	3,820	172	161	11	84	3,564	1,494	2,070
Middle Atlantic	44,214	41,586	1,476	1,265	211	3,613	36,497	11,854	24,643
Delaware	442	442	2	--------	2	7	433	228	205
Maryland	2,742	2,722	44	3	41	149	2,529	1,198	1,331
New Jersey	2,348	2,329	53	--------	53	96	2,180	424	1,756
New York	13,500	11,114	75	--------	75	732	10,307	3,651	6,656
Pennsylvania	15,228	15,127	470	442	28	2,514	12,143	3,369	8,774
West Virginia	9,954	9,852	832	820	12	115	8,905	2,984	5,921
Lake	55,700	50,345	6,495	5,455	1,040	14,805	29,045	13,930	15,115
Michigan	19,000	17,380	2,155	2,035	120	4,115	11,110	3,260	7,850
Minnesota	19,700	16,700	2,670	2,170	500	7,100	6,930	4,330	2,600
Wisconsin	17,000	16,265	1,670	1,250	420	3,590	11,005	6,340	4,665
Central	44,919	44,213	2,117	1,951	166	326	41,770	25,789	15,981
Illinois	3,396	3,319	192	175	17	10	3,117	3,092	25
Indiana	3,445	3,358	104	79	25	76	3,178	3,139	39
Iowa	2,248	2,226	16	5	11	19	2,191	2,186	5
Kentucky	11,857	11,694	534	427	107	35	11,125	5,421	5,704
Missouri	19,142	18,837	1,199	1,193	6	78	17,560	8,839	8,721
Ohio	4,831	4,779	72	72	--------	108	4,599	3,112	1,487
Plains	35,828	3,326	332	30	302	4	2,990	2,960	30
Kansas	1,121	1,011	--------	--------	--------	--------	1,011	1,011	--------
Nebraska	1,112	987	39	15	24	--------	948	948	--------
North Dakota	621	470	55	--------	55	1	414	414	--------
Oklahoma (West) [2]	6,326	--------	--------	--------	--------	--------	--------	--------	--------
South Dakota (East) [3]	662	618	215	15	200	3	400	400	--------
Texas (West) [2]	25,986	240	23	--------	23	--------	217	187	30
South	186,804	183,266	14,078	10,138	3,940	2,160	167,028	69,060	97,968
South Atlantic	43,843	42,923	3,485	2,775	710	536	38,902	23,377	15,525
North Carolina	18,400	17,997	1,312	960	352	242	16,443	10,072	6,371
South Carolina	10,611	10,549	720	549	171	187	9,642	5,684	3,958
Virginia	14,832	14,377	1,453	1,266	187	107	12,817	7,621	5,196
Southeast	91,842	89,390	5,909	3,802	2,107	1,216	82,265	33,134	49,131
Alabama	18,878	18,800	886	613	273	121	17,793	7,259	10,534
Florida	23,478	21,765	1,713	1,009	704	326	19,726	3,996	15,730
Georgia	21,432	21,107	1,202	646	556	72	19,833	10,362	9,471
Mississippi	15,889	15,868	1,307	979	328	410	14,151	6,323	7,828
Tennessee	12,165	11,850	801	555	246	287	10,762	5,194	5,568
West Gulf	51,119	50,953	4,684	3,561	1,123	408	45,861	12,549	33,312
Arkansas	20,036	19,928	2,645	2,214	431	104	17,179	6,142	11,037
Louisiana	16,196	16,169	747	536	211	265	15,157	2,969	12,188
Oklahoma (East) [2]	4,320	4,308	619	163	456	23	3,666	812	2,854
Texas (East) [2]	10,567	10,548	673	648	25	16	9,859	2,626	7,233
West	225,271	107,457	63,568	53,851	9,717	5,540	38,349	8,988	29,361
Pacific Northwest	53,855	46,204	23,012	17,341	5,671	3,435	19,757	3,334	16,423
Oregon	29,755	26,330	15,251	11,530	3,721	1,101	9,978	1,537	8,441
Washington	24,100	19,874	7,761	5,811	1,950	2,334	9,779	1,797	7,982
California	45,515	16,405	8,099	7,684	415	23	8,283	1,309	6,974
North Rocky Mountain	53,246	29,066	20,012	18,061	1,951	1,702	7,352	2,847	4,505
Idaho	18,813	10,149	6,436	5,838	598	925	2,788	841	1,947
Montana	24,238	14,758	10,122	9,118	1,004	699	3,937	1,614	2,323
South Dakota (West) [3]	1,317	1,147	920	918	2	4	223	144	79
Wyoming	8,878	3,012	2,534	2,187	347	74	404	248	156
South Rocky Mountain	72,655	15,782	12,445	10,765	1,680	380	2,957	1,498	1,459
Arizona	19,538	2,815	2,744	2,058	686	30	41	36	5
Colorado	19,902	7,874	5,923	5,387	536	152	1,799	650	1,149
Nevada	4,720	98	24	24	--------	--------	74	13	61
New Mexico	20,001	3,465	2,405	2,020	385	149	911	693	218
Utah	8,494	1,530	1,349	1,276	73	49	132	106	26

[1] Includes land capable of producing timber of commercial quantity and quality, and available now or prospectively, for commercial use.

[2] Western and central portions of Oklahoma and Texas included in the Plains region; eastern portions included in the West Gulf region.

[3] Eastern and central portions of South Dakota included in the Plains; southwestern portion (Black Hills) included in the North Rocky Mountain region.

Source: Department of Agriculture, Forest Service; A Reappraisal of the Forest Situation.

No. 809.—Saw Timber and Growth on Commercial Forest Land, by States

[In millions of board feet. Status beginning of 1945. Includes volume on land capable of producing timber of commercial quantity and quality and available now or prospectively for commercial use. Includes trees large enough for sawlogs regardless of actual use, in accordance with practice of region. Volumes on lumber-tally basis]

Region and state	Volume of saw timber						Saw-timber growth		
	Total	Softwood	Hardwood	On saw-timber areas: On virgin areas	On saw-timber areas: On second-growth areas	On other than saw-timber areas	Total	Softwood	Hardwood
Total	1,600,972	1,296,377	304,595	840,340	660,719	99,913	35,301	21,848	13,453
North	220,429	65,836	154,593	21,642	159,386	39,401	8,355	2,000	6,355
New England	58,197	33,263	24,934	726	48,605	8,866	1,799	910	889
Connecticut	1,642	258	1,384	-------	1,111	531	107	14	93
Maine	36,787	24,279	12,508	525	31,912	4,350	760	491	269
Massachusetts	4,670	1,946	2,724	15	3,867	788	242	96	146
New Hampshire	7,610	3,424	4,186	88	5,739	1,783	389	174	215
Rhode Island	153	22	131	-------	69	84	9	1	8
Vermont	7,335	3,334	4,001	98	5,907	1,330	292	134	158
Middle Atlantic	62,045	14,017	48,028	1,197	47,459	13,389	2,712	597	2,115
Delaware	1,183	519	664	25	1,029	129	62	27	35
Maryland	4,030	1,779	2,251	37	3,053	940	202	105	97
New Jersey	2,188	783	1,405	25	1,362	801	103	37	66
New York	25,279	6,926	18,353	329	21,088	3,862	785	191	594
Pennsylvania	20,582	3,087	17,495	162	13,406	7,014	1,111	193	918
West Virginia	8,783	923	7,860	619	7,521	643	449	44	405
Lake	50,710	15,670	35,040	17,390	23,280	10,040	1,403	346	1,057
Michigan	24,140	7,400	16,740	13,550	7,500	3,090	519	96	423
Minnesota	11,590	4,940	6,650	2,020	5,560	4,010	420	176	244
Wisconsin	14,980	3,330	11,650	1,820	10,220	2,940	464	74	390
Central	43,747	2,418	41,329	1,249	36,616	5,882	2,248	128	2,120
Illinois	3,717	22	3,695	71	3,092	554	208	1	207
Indiana	6,175	6	6,169	-------	5,773	402	298	2	296
Iowa	5,344	43	5,301	-------	4,842	502	295	2	293
Kentucky	12,392	1,611	10,781	797	10,356	1,239	638	83	555
Missouri	6,984	663	6,321	381	3,849	2,754	388	37	351
Ohio	9,135	73	9,062	-------	8,704	431	421	3	418
Plains	5,730	468	5,262	1,080	3,426	1,224	193	19	174
Kansas	2,880	-------	2,880	600	1,800	480	82	-------	82
Nebraska	1,500	300	1,200	360	660	480	58	10	48
North Dakota	434	20	414	-------	344	90	16	1	15
Oklahoma (West)[1]	-------	-------	-------	-------	-------	-------	-------	-------	-------
South Dakota (East)[2]	720	96	624	120	480	120	26	4	22
Texas (West)[1]	196	52	144	-------	142	54	11	4	7
South	337,987	193,790	144,197	11,617	305,833	20,537	19,938	12,919	7,019
South Atlantic	97,141	59,326	37,815	-------	90,205	6,936	6,106	4,016	2,090
North Carolina	42,241	27,962	14,279	-------	40,109	2,132	2,589	1,835	754
South Carolina	29,580	19,362	10,218	-------	28,452	1,128	1,733	1,234	499
Virginia	25,320	12,002	13,318	-------	21,644	3,676	1,784	947	837
Southeast	135,887	76,992	58,895	4,674	121,473	9,740	8,224	5,284	2,940
Alabama	33,361	20,681	12,680	694	30,482	2,185	2,021	1,392	629
Florida	17,308	12,862	4,446	844	14,410	2,054	989	767	222
Georgia	40,543	28,941	11,602	2,005	36,121	2,417	2,501	1,995	506
Mississippi	30,453	11,592	18,861	1,131	27,206	2,116	1,866	904	962
Tennessee	14,222	2,916	11,306	-------	13,254	968	847	226	621
West Gulf	104,959	57,472	47,487	6,943	94,155	3,861	5,608	3,619	1,989
Arkansas	37,528	22,315	15,213	2,080	33,940	1,508	1,929	1,186	743
Louisiana	36,895	13,930	22,965	2,492	33,184	1,219	1,893	970	923
Oklahoma (East)[1]	3,048	2,044	1,004	234	2,497	317	137	95	42
Texas (East)[1]	27,488	19,183	8,305	2,137	24,534	817	1,649	1,368	281
West	1,042,556	1,036,751	5,805	807,081	195,500	39,975	7,008	6,929	79
Pacific Northwest	630,894	626,941	3,953	513,149	111,706	6,039	4,224	4,152	72
Oregon	381,389	378,577	2,812	307,288	71,913	2,188	2,483	2,432	51
Washington	249,505	248,364	1,141	205,861	39,793	3,851	1,741	1,720	21
California	227,565	227,565	-------	180,082	32,624	14,859	1,160	1,160	-------
North Rocky Mountain	127,229	126,293	936	69,810	43,212	14,207	1,306	1,302	4
Idaho	60,796	60,764	32	27,078	28,076	5,642	826	826	(3)
Montana	52,515	52,112	403	32,020	12,531	7,964	418	414	4
South Dakota (West)[2]	2,866	2,866	-------	1,249	1,333	284	22	22	(3)
Wyoming	11,052	10,551	501	9,463	1,272	317	40	40	(3)
South Rocky Mountain	56,868	55,952	916	44,040	7,958	4,870	318	315	3
Arizona	16,270	16,270	-------	14,265	1,787	218	94	94	-------
Colorado	27,658	26,742	916	18,727	4,860	4,071	145	142	3
Nevada	367	367	-------	287	35	45	1	1	-------
New Mexico	8,471	8,471	-------	7,134	871	466	58	58	-------
Utah	4,102	4,102	-------	3,627	405	70	20	20	-------

[1] Volume in western and central portions of Oklahoma and Texas included in the Plains region; that in eastern portions included in the West Gulf region.

[2] Volume in eastern and central portions of South Dakota included in the Plains; that in southwestern portion (Black Hills) included in North Rocky Mountain region.

[3] Less than 500,000 board feet.

Source: Department of Agriculture, Forest Service; A Reappraisal of the Forest Situation.

No. 810.—Saw Timber—Volume, by Species and Region

[**In millions of board feet.** Status beginning of 1945. For States represented in regions shown, see table 809]

KIND OF WOOD	Total North and South	New England	Middle Atlantic	Lake	Central	Plains	South Atlantic	Southeast	West Gulf
Eastern softwoods, total	259,626	33,263	14,017	15,670	2,418	468	59,326	76,992	57,472
Southern yellow pine	188,327	142	4,035	--------	1,727	51	54,954	70,927	56,491
Spruce and fir [1]	27,007	20,649	2,718	3,600	--------	--------	40	--------	--------
White and Norway pine	15,383	7,330	3,050	3,690	161	--------	817	335	--------
Hemlock	14,921	3,764	3,996	5,950	343	--------	726	142	--------
Cypress	6,236	--------	--------	--------	126	1	2,277	3,284	548
Other	7,752	1,378	218	2,430	61	[2] 416	512	2,304	433
Eastern hardwoods, total	[3] 298,790	24,934	[3] 48,028	35,040	[3] 41,329	5,262	[3] 37,815	[3] 58,895	47,487
Oak	101,381	2,265	19,012	5,090	20,370	702	12,815	21,017	20,110
Beech, birch, and maple	67,887	20,740	19,310	17,090	7,207	--------	2,330	1,210	--------
Sweet gum	26,476	--------	--------	--------	616	36	6,667	10,516	8,641
Tupelo and black gum	18,957	--------	--------	--------	348	3	6,250	7,309	5,047
Cottonwood and aspen	15,662	1,385	1,154	6,380	2,472	2,414	116	907	834
Yellow poplar	12,347	56	1,710	--------	2,169	--------	4,512	3,900	--------
Other	56,080	488	6,842	6,480	8,147	2,107	5,125	14,036	12,855

KIND OF WOOD	Total West	Pacific Northwest			California	North Rocky Mountain	South Rocky Mountain
		Total	Douglas-fir subregion	Pine subregion			
Western species, total	1,042,556	630,894	504,931	125,963	227,565	127,229	56,868
Douglas fir	430,028	331,227	310,523	20,704	[4] 68,613	26,718	3,470
Ponderosa pine	[5] 185,025	80,198	4,850	75,348	[6] 51,191	26,771	26,865
True firs	113,541	57,854	46,464	11,390	[7] 43,012	9,360	3,315
Western hemlock	97,207	95,855	94,469	1,386	--------	1,352	--------
Sugar pine and western white pine	40,224	8,089	6,171	1,918	19,505	12,630	--------
Redwood	38,114	--------	--------	--------	[8] 38,114	--------	--------
Spruce	35,880	8,020	8,020	--------	--------	12,499	15,361
Larch	26,606	8,727	145	8,582	--------	17,879	--------
Lodgepole pine	22,060	1,171	37	1,134	--------	14,406	6,483
Other softwoods	48,066	35,800	30,386	5,414	7,130	4,678	458
Hardwoods	5,805	3,953	3,866	87	--------	936	916

[1] Balsam fir.
[2] Ponderosa pine.
[3] Excludes dead chestnut of sawlog size still standing and usable.
[4] May include some white fir, Sitka spruce, western hemlock, Port Oxford cedar and western red cedar commonly lumped with Douglas-fir in redwood cruising.
[5] Excludes 416 million board feet in Plains region.
[6] Includes Jeffery pine.
[7] Includes western white pine, mountain hemlock, and lodgepole pine recorded in cruises of fir areas.
[8] Redwood exclusive of volume of 1,000 bigtree on cruises in west-side Sierra subregion.

Source: Department of Agriculture, Forest Service; A Reappraisal of the Forest Situation.

No. 811.—Annual Drain From Commercial Forest Lands by Cutting for Commodities and by Destructive Agencies

[Includes drain in volume from land capable of producing timber of commercial quantity and quality and available now or prospectively for commercial use]

ITEM	All timber drain (millions of cu. ft.)			Saw-timber drain (millions of bd. ft.)		
	Total	Softwoods	Hardwoods	Total	Softwoods	Hardwoods
Aggregate	13,661	8,151	5,510	53,893	38,530	15,363
Timber cut for commodities (1944)	12,182	7,348	4,834	49,658	35,591	14,067
Lumber	6,711	4,778	1,933	34,391	26,130	8,261
Fuelwood	2,203	719	1,484	3,863	1,957	1,906
Pulpwood	1,306	1,163	143	4,757	4,500	257
Hewed ties	363	153	210	1,643	777	866
Fence posts	220	59	161	226	82	144
Veneer logs	392	165	227	1,971	942	1,029
Mine timbers	225	40	185	320	70	250
Cooperage	174	40	134	744	195	549
Shingles	72	72	--------	334	334	--------
Other	516	159	357	1,409	604	805
Timber removed by destructive agencies (average 1934–45)	1,479	803	676	4,235	2,939	1,296
Fire	460	247	213	859	547	312
Insects, disease, wind, etc	1,019	556	463	3,376	2,392	984

Source: Department of Agriculture, Forest Service; A Reappraisal of the Forest Situation.

No. 812.—Forest Fires—Number, and Area Burned Over on Federal, State, and Private Forest Lands: 1930 to 1947

[**Area in thousands of acres.** See also *Historical Statistics*, series F 145–150]

Calendar year	Federal lands, protected area [1]			State and private forests [2]					
				On protected area			On unprotected area		
	Forest area [3]	Number of fires	Area burned over	Forest area [3]	Number of fires	Area burned over	Forest area [3]	Number of fires	Area burned over
1930	(4)	(4)	(4)	399,142	70,832	5,809	208,779	120,148	46,457
1931	134,610	5,715	551	266,173	56,459	5,856	216,541	125,040	45,200
1932	138,525	4,933	419	266,723	55,567	3,234	220,617	105,899	38,410
1933	176,696	4,517	380	266,259	48,770	3,343	218,664	87,435	40,167
1934	182,167	8,064	658	282,979	61,254	3,515	209,558	93,345	37,648
1935	180,443	7,962	228	288,751	54,592	2,311	204,379	77,743	27,796
1936	187,122	11,144	425	298,365	73,709	3,792	195,650	141,432	38,990
1937	182,872	9,468	90	301,911	54,292	1,254	182,763	121,449	20,637
1938	191,860	9,873	316	308,458	76,326	2,623	158,884	146,030	30,876
1939	157,691	12,356	522	278,919	85,677	3,266	148,812	114,638	26,660
1940	153,723	14,076	482	281,706	73,527	2,934	146,749	107,824	22,432
1941	153,559	10,002	437	282,074	80,994	3,138	143,743	108,706	22,830
1942	153,561	9,941	576	290,928	75,849	3,863	136,687	122,428	27,415
1943	183,052	9,892	702	299,331	78,815	3,860	131,275	121,619	27,772
1944	212,344	8,985	375	301,228	56,148	2,301	129,919	66,096	13,873
1945	213,210	8,539	445	302,942	48,176	2,456	126,959	68,013	14,780
1946	213,597	9,670	321	318,505	66,103	2,253	120,489	96,505	18,117
1947	215,361	8,928	318	327,968	71,442	2,814	111,026	120,429	20,093

[1] In continental U. S.; includes National Forests, Interior, Soil Conservation Service, TVA, Public Domain, etc.
[2] In continental U. S. and Hawaii. Data reported to Forest Service by its field offices, cooperating agencies, other Government bureaus, and similar sources. Statistics on unprotected areas based on State estimates only.
[3] Prior to 1939 forest area included total area needing protection. Beginning with 1939, this area included only forest area needing protection, which accounts for reduction in areas between 1938 and 1939.
[4] Included in State and private forests, protected area.

Source: Department of Agriculture, Forest Service; annual report, Forest Fire Statistics, and records.

No. 813.—Forest Fire Control—Prevention and Suppression Expenditures on State and Private Forest Lands, by States and for Hawaii: Fiscal Year 1948

[**In thousands of dollars.** See also *Historical Statistics*, series F 151–154, for annual totals]

State or other area	Total expenditures	Federal	State and county	Private agencies	State or other area	Total expenditures	Federal	State and county	Private agencies
Total	**23,500**	**8,604**	**12,831**	**2,065**	Nevada	30	11	16	3
					New Hampshire	431	58	254	119
Alabama	903	276	579	48	New Jersey	369	127	242	-------
Arkansas	753	155	495	103	New Mexico	25	10	9	6
California	3,743	1,494	2,249	-------	New York	764	174	590	-------
Colorado	69	22	13	34	North Carolina	649	233	398	18
Connecticut	143	48	95	-------	Ohio	173	73	100	-------
Delaware	16	8	8	-------	Oklahoma	114	53	48	13
Florida	940	428	226	286	Oregon	2,024	864	538	622
Georgia	480	227	101	152	Pennsylvania	665	233	432	-------
Idaho	385	163	72	150	Rhode Island	76	28	48	-------
Illinois	45	19	26	-------	South Carolina	864	335	529	-------
Indiana	163	66	97	-------	South Dakota	31	7	24	-------
Iowa	24	8	16	-------	Tennessee	258	104	149	5
Kentucky	256	72	184	-------	Texas	378	141	155	82
Louisiana	514	188	260	66	Utah	53	21	32	-------
Maine	734	146	588	-------	Vermont	96	22	70	4
Maryland	297	110	187	-------	Virginia	463	214	248	1
Massachusetts	269	95	174	-------	Washington	1,676	773	643	260
Michigan	1,402	428	974	-------	West Virginia	395	193	202	-------
Minnesota	738	300	438	-------	Wisconsin	858	271	587	-------
Mississippi	590	194	396	-------					
Missouri	419	110	309	-------	Hawaii	10	5	5	-------
Montana	215	97	25	93					

Source: Department of Agriculture, Forest Service; records.

No. 814.—National Forest and Other Areas, by States and for Alaska and Puerto Rico: June 30, 1948

[**Areas in acres;** comprises national forests, purchase units, experimental areas, land utilization and other areas placed under Administration of Forest Service, but not given a national-forest status. See also *Historical Statistics*, series F 69–70, for gross area and area under Forest Service]

STATE OR OTHER AREA	Gross area	Not under Forest Service Administration	Under Forest Service Administration	STATE OR OTHER AREA	Gross area	Not under Forest Service Administration	Under Forest Service Administration
Total	228,936,105	48,408,043	180,528,062	Nebraska	207,209	1,181	206,028
				Nevada	5,307,853	254,891	5,052,962
Alabama	2,435,748	1,815,268	620,480	New Hampshire	806,324	136,525	669,799
Arizona	12,159,020	671,663	11,487,357	New Mexico	10,255,600	1,316,353	8,939,247
Arkansas	3,589,549	1,249,733	2,339,816	North Carolina	3,593,436	2,496,925	1,096,511
California	24,847,104	5,082,207	19,764,897	North Dakota	764,425	763,905	520
Colorado	15,228,282	1,525,575	13,702,707	Ohio	1,466,109	1,372,977	93,132
Florida	1,241,956	173,421	1,068,535	Oklahoma	344,269	165,289	178,980
Georgia	1,732,322	1,074,075	658,247	Oregon	17,353,295	2,602,027	14,751,268
Idaho	21,570,893	1,292,036	20,278,857	Pennsylvania	746,706	275,026	471,680
Illinois	812,654	595,766	216,888	South Carolina	1,422,604	837,509	585,095
Indiana	784,647	683,530	101,117	South Dakota	1,403,157	287,960	1,115,197
Iowa	218,671	213,922	4,749	Tennessee	1,531,797	958,940	572,857
Kentucky	1,393,534	958,330	435,204	Texas	1,714,374	1,056,198	658,176
Louisiana	1,274,977	715,059	559,918	Utah	8,986,154	1,123,595	7,862,559
Maine	878,032	828,787	49,245	Vermont	580,520	372,463	208,057
Maryland	4,318	3,208	1,110	Virginia	4,123,669	2,682,482	1,441,187
Massachusetts	1,651	----------	1,651	Washington	10,743,237	1,084,068	9,659,169
Michigan	5,188,799	2,797,592	2,391,207	West Virginia	1,836,144	932,814	903,330
Minnesota	5,041,773	2,416,750	2,625,023	Wisconsin	2,019,018	579,270	1,439,748
Mississippi	2,777,325	1,731,348	1,045,977	Wyoming	9,013,328	447,809	8,565,519
Missouri	3,459,999	2,117,861	1,342,138	Alaska	20,882,752	35,097	20,847,655
Montana	19,006,716	2,524,956	16,481,760	Puerto Rico	186,155	153,652	32,503

Source: Department of Agriculture, Forest Service; annual report, National Forest Areas.

No. 815.—National Forest Land Purchases, by States and for Puerto Rico, to June 30, 1948

[Under Act of Mar. 1, 1911, as amended by Act of June 7, 1924, and other related acts]

STATE OR OTHER AREA	Gross area (acres)	TOTAL NET AREA APPROVED FOR PURCHASE			NET AREA PURCHASED			Remaining acquirable area (acres)
		Acres	Average price per acre	Total price (1,000)	Acres	Average price per acre	Total price (1,000)	
Total	**63,145,250**	**18,686,557**	**$3.82**	**$71,470**	**18,355,729**	**$3.79**	**$69,517**	**24,168,614**
Alabama	2,435,087	504,435	3.67	1,854	503,041	3.66	1,841	1,460,795
Arkansas	3,587,851	1,182,171	2.88	3,400	1,148,722	2.79	3,203	845,044
California	3,600,872	144,112	8.41	1,211	138,800	8.24	1,144	908,181
Florida	1,241,956	782,182	3.14	2,452	773,475	3.08	2,385	156,333
Georgia	1,727,585	598,514	4.92	2,948	593,501	4.90	2,909	853,887
Idaho	726,970	34,502	3.38	117	27,906	3.40	95	212,998
Illinois	801,944	193,840	6.34	1,229	186,565	6.11	1,141	406,229
Indiana	781,467	99,191	7.03	697	87,330	6.85	599	403,541
Iowa	218,671	4,748	9.11	43	4,748	9.11	43	184,562
Kentucky	1,393,521	434,873	3.80	1,653	432,982	3.80	1,645	676,802
Louisiana	1,274,977	550,750	2.98	1,644	538,296	2.87	1,543	634,859
Maine	878,032	49,233	6.61	326	49,038	6.63	325	636,954
Michigan	5,142,726	1,890,165	3.06	5,785	1,868,162	3.03	5,656	2,234,139
Minnesota	5,041,313	1,542,517	2.46	3,792	1,518,334	2.42	3,674	2,112,654
Mississippi	2,685,492	1,003,050	3.53	3,537	1,003,050	3.53	3,537	1,529,074
Missouri	3,459,999	1,316,998	2.31	3,036	1,275,317	2.27	2,896	1,690,667
Nevada	4,062,263	16,258	9.81	159	16,258	9.81	159	54,057
New Hampshire	806,322	669,626	7.77	5,202	664,315	7.78	5,168	111,988
New Mexico	92,514	20,715	1.92	40	20,715	1.92	40	10,200
North Carolina	3,605,123	1,029,196	5.15	5,297	989,314	5.14	5,084	1,735,854
North Dakota	764,425	480	10.00	5	480	10.00	5	499,480
Ohio	1,466,109	90,968	6.96	633	82,762	6.66	552	1,140,709
Oklahoma	344,269	176,040	1.76	309	172,970	1.71	296	160,819
Oregon	69,704	52,467	17.03	894	52,467	17.03	894	7,297
Pennsylvania	726,311	469,587	6.26	2,942	465,928	6.27	2,920	142,940
South Carolina	1,422,600	562,123	6.20	3,487	560,135	6.17	3,457	770,422
Tennessee	1,531,695	560,688	4.46	2,501	555,789	4.43	2,461	610,497
Texas	1,714,364	653,024	4.62	3,018	652,946	4.62	3,016	809,268
Utah	2,945,963	117,865	2.93	345	115,981	2.92	338	180,420
Vermont	580,520	207,907	9.38	1,950	168,093	10.16	1,708	278,439
Virginia	3,969,154	1,446,088	3.27	4,734	1,408,710	3.25	4,581	1,636,863
West Virginia	1,836,138	903,323	3.41	3,076	903,323	3.41	3,076	625,206
Wisconsin	2,023,158	1,365,092	2.17	2,963	1,363,383	2.17	2,956	361,702
Puerto Rico	186,155	13,829	13.79	191	12,893	13.17	170	85,734

Source: National Forest Reservation Commission, Annual Report.

No. 816.—Number of Visits to National Forests for Utilization of Recreation Resources: 1939 to 1947

[**In thousands.** Data for calendar years. See also *Historical Statistics*, series F 80-83]

TYPE	1939	1940	1941	1942	1943	1944	1945	1946	1947
Visits for utilization of recreation resources, total	**14,332**	**16,163**	**18,005**	**10,407**	**6,275**	**7,152**	**10,074**	**18,241**	**21,331**
Utilization of improved public recreation areas, total	11,466	13,053	10,688	6,066	3,412	3,586	5,072	8,763	10,506
Camp grounds	3,158	3,583	3,350	1,771	1,095	1,247	1,815	3,055	3,518
Picnic areas	7,019	7,932	5,819	3,301	2,050	2,051	2,730	4,459	5,262
Winter sports area	1,289	1,538	1,519	994	267	288	527	1,249	1,726
Organization camps	--------	--------	244	160	115	177	276	385	323
Hotels or resorts	1,988	2,258	1,918	1,136	680	715	1,271	2,286	2,110
Recreation residences	878	852	601	379	245	370	506	714	536
Wilderness areas	--------	--------	87	56	43	50	75	145	194
Other forest areas	--------	--------	4,467	2,610	1,780	2,254	2,874	5,948	7,662
Visits for utilization of highways, roads, and water routes	111,572	125,124	--------	--------	--------	10,967	14,530	36,969	56,495

Source: Department of Agriculture, Forest Service; records.

No. 817.—National Forests—Net Cash Receipts: 1905 to 1948

[In thousands of dollars. See also *Historical Statistics*, series F 99–102]

Fiscal year	Total receipts	From use of timber [1]	From use of forage	From special land use, water power, etc.	Fiscal year	Total receipts	From use of timber [1]	From use of forage	From special land use, water power, etc.
1905	73	73	----------	(2)	1927	5,167	3,253	1,531	382
1906	758	237	513	7	1928	5,442	3,325	1,714	403
1907	1,530	654	857	19	1929	6,300	4,109	1,740	451
1908	1,788	811	947	30	1930	6,752	4,390	1,943	419
1909	1,766	702	1,023	42	1931	4,993	2,608	1,961	425
1910	2,041	1,011	970	60	1932	2,294	1,049	830	415
1911	1,969	952	928	89	1933	2,626	783	1,498	345
1912	2,109	1,028	961	120	1934	3,315	1,522	1,359	434
1913	2,392	1,271	999	122	1935	3,289	1,729	1,151	408
1914	2,438	1,311	1,002	124	1936	4,063	2,203	1,441	418
1915	2,481	1,183	1,130	168	1937	4,936	2,924	1,580	431
1916	2,824	1,422	1,210	192	1938	4,671	2,518	1,696	457
1917	3,457	1,640	1,550	267	1939	4,903	2,857	1,574	472
1918	3,575	1,630	1,726	219	1940	5,859	3,943	1,463	453
1919	4,358	1,535	2,609	214	1941	6,682	4,789	1,429	464
1920	4,793	2,045	2,486	263	1942	7,165	5,094	1,595	476
1921	4,152	1,770	2,132	250	1943	10,056	7,610	1,973	473
1922	3,422	1,813	1,316	292	1944	15,617	12,623	2,459	535
1923	5,336	2,722	2,341	272	1945	16,048	11,587	2,159	2,302
1924	5,252	3,036	1,916	300	1946	13,875	10,554	2,060	1,261
1925	5,000	2,940	1,725	334	1947	18,373	15,421	2,294	658
1926	5,156	3,367	1,422	367	1948	24,236	20,594	2,898	744

[1] Commercial and cost sales. [2] Less than $500.

Source: Department of Agriculture, Forest Service; annual report, Agricultural Statistics.

No. 818.—Payments to States, Alaska, and Puerto Rico from Receipts of National Forests: 1946 to 1949

[In thousands of dollars. For years ending June 30. Payments are 25 percent of net receipts of preceding fiscal year from sales of timber, grazing fees, and miscellaneous uses of national forests (exclusive of school-fund payments to Arizona and New Mexico, and payments for acquisition of land), under Act of May 23, 1908]

State or other area	1946	1947	1948	1949	State or other area	1946	1947	1948	1949
Total	4,003	3,424	4,547	5,983	Nevada	25	23	25	34
					New Hampshire	23	28	19	25
Alabama	34	29	34	66	New Mexico	77	76	108	112
Arizona	143	157	196	229	North Carolina	67	47	53	61
Arkansas	201	145	160	278	North Dakota	(1)	(1)	(1)	(1)
California	364	414	474	561					
Colorado	143	147	183	215	Ohio	7	7	2	3
					Oklahoma	20	12	11	26
Florida	57	46	52	60	Oregon	600	559	939	1,670
Georgia	27	34	56	63	Pennsylvania	21	24	26	21
Idaho	221	210	304	328	South Carolina	54	43	66	88
Illinois	9	9	9	12					
Indiana	1	1	1	1	South Dakota	41	47	72	71
					Tennessee	27	34	31	20
Iowa	(1)	(1)	(1)	(1)	Texas	101	110	103	103
Kentucky	25	27	23	30	Utah	77	63	92	102
Louisiana	50	39	43	78	Vermont	18	15	26	30
Maine	2	2	1	7					
Michigan	39	56	62	93	Virginia	23	30	35	41
					Washington	639	398	738	835
Minnesota	52	60	78	77	West Virginia	21	23	28	25
Mississippi	505	230	103	202	Wisconsin	24	28	33	53
Missouri	12	15	15	14	Wyoming	77	74	101	117
Montana	138	135	196	207					
Nebraska	6	5	6	10	Alaska	25	14	37	11
					Puerto Rico	6	6	4	4

[1] Less than $500.

Source: Department of Agriculture, Forest Service; annual report, Agricultural Statistics.

No. 819.—Timber Cut on the National Forests—Volume and Value: 1930 to 1948

[**Volume in thousands of board feet; values in thousands of dollars.** See also *Historical Statistics*, series F 88–98]

Fiscal year	Total forest products, value	Timber cut: Commercial and cost sales, land exchanges: Volume	Commercial and cost sales, land exchanges: Value	Free use: Volume	Free use: Value [1]	Miscellaneous forest products, value [2]
1930	4,930	1,653,265	4,790	116,096	[3] 117	23
1931	3,527	1,222,361	3,348	167,680	[3] 162	17
1932	1,767	611,751	1,519	270,244	[3] 227	21
1933	1,333	473,922	1,077	265,812	237	19
1934	1,845	674,542	1,609	248,243	210	26
1935	2,260	752,368	1,938	316,769	281	41
1936	2,892	1,021,156	2,590	293,126	272	30
1937	3,505	1,290,623	3,189	317,696	277	39
1938	3,539	1,287,917	3,209	301,375	279	52
1939	3,687	1,290,561	3,375	267,785	260	52
1940	5,168	1,740,271	4,807	325,595	304	57
1941	6,084	2,067,279	5,762	284,228	260	62
1942	6,429	2,204,749	6,109	219,358	241	79
1943	8,907	2,359,473	8,672	169,057	175	60
1944	14,518	3,333,167	14,155	180,654	213	150
1945	13,291	3,144,789	13,016	154,167	171	104
1946	11,811	2,729,708	11,490	138,362	170	150
1947	16,780	3,834,588	16,400	127,555	197	183
1948	21,389	3,758,885	21,054	116,430	189	146

[1] Includes "Free use" not reducible to board feet.
[2] Includes materials not measurable in board feet, such as Christmas trees, tanbark, turpentine, seedlings, Spanish moss, etc.
[3] Calendar year data.

Source: Department of Agriculture, Forest Service; annual report, Agricultural Statistics, and records.

No. 820.—Forest Trees Planted on Farm Lands, with Costs, by States

State or other area	Forest trees planted on farm lands during calendar year 1947 (thousands)	Expenditures, year ending June 30, 1948 ($1,000): Total	Expenditures: Federal contribution [1]
Total	42,347.5	1,177.8	112.8
Alabama	599.3	21.9	2.9
Arkansas	408.6	28.6	2.6
Colorado	177.8	11.5	2.8
Connecticut	----------	1.1	.5
Delaware	30.7	1.9	.8
Florida	321.5	46.1	2.6
Georgia	3,741.3	94.5	2.9
Idaho	163.8	10.6	2.6
Illinois	1,905.4	46.8	2.9
Indiana	1,819.3	50.0	2.8
Iowa	249.8	19.1	2.8
Kansas	772.2	21.0	3.0
Kentucky	384.7	12.9	2.7
Louisiana	128.6	13.5	3.1
Maine	29.7	1.6	.8
Maryland	122.2	1.8	.5
Massachusetts	383.6	21.1	2.7
Michigan	2,061.2	21.8	2.7
Mississippi	1,396.1	77.7	3.1
Missouri	1,181.7	27.0	2.8
Montana	261.5	14.5	2.6
Nebraska	1,294.4	30.8	2.3
New Hampshire	259.2	12.5	2.6
New Jersey	458.9	28.1	2.9
New York	4,891.0	54.8	3.4
North Carolina	1,089.8	22.9	2.8
North Dakota	531.1	12.6	2.8
Ohio	1,896.1	58.6	3.0
Oklahoma	386.2	28.6	2.7
Oregon	434.0	7.7	2.7
Pennsylvania	2,705.0	109.5	3.8
South Carolina	1,368.5	47.3	3.0
South Dakota	592.1	20.5	3.2
Tennessee	625.4	12.7	2.6
Texas	1,201.3	31.8	2.6
Utah	103.6	5.4	2.6
Vermont	396.3	13.7	2.6
Virginia	560.9	13.5	2.7
Washington	115.0	20.5	2.7
West Virginia	231.8	24.7	2.7
Wisconsin	4,202.3	49.7	2.9
Wyoming	105.1	8.5	.7
Hawaii	31.4	8.6	2.6
Puerto Rico	2,729.1	9.8	2.7

[1] Provided by Clarke-McNary law, Act of June 7, 1924, and Norris-Doxey law, Act of May 18, 1937.

Source: Department of Agriculture, Forest Service; annual report, Agricultural Statistics.

No. 821.—Forest Trees Planted on Farm Lands, With Costs: 1931 to 1948

[See also *Historical Statistics*, series F 84-87]

YEAR	Forest trees planted on farm lands during calendar year (1,000)	EXPENDITURES, YEAR ENDING JUNE 30 ($1,000)		YEAR	Forest trees planted on farm lands during calendar year (1,000)	EXPENDITURES, YEAR ENDING JUNE 30 ($1,000)	
		Total	Federal contribution [1]			Total	Federal contribution [1]
1931	25,000	339	91	1940	87,468	524	140
1932	23,500	298	94	1941	97,650	526	113
1933	21,970	273	77	1942	74,219	527	115
1934	20,208	199	53	1943	39,148	448	115
1935	26,150	206	55	1944	37,980	463	119
1936	35,648	251	55	1945	37,743	572	114
1937	41,698	321	70	1946	43,588	637	113
1938	55,360	365	71	1947	42,347	886	117
1939	64,213	398	97	1948	(2)	1,178	113

[1] Provided by Clarke-McNary law, Act of June 7, 1924, and the Norris-Doxey law, Act of May 18, 1937.
[2] Not yet available.

No. 822.—Livestock Under Pay Permit on National Forests and Receipts From Grazing: 1930 to 1947

[Livestock for calendar year; receipts for fiscal year ending June 30. See also *Historical Statistics*, series F 74-75]

YEAR	Cattle and horses [1]	Hogs [1]	Sheep and goats [1]	Receipts from grazing	YEAR	Cattle and horses [1]	Hogs [1]	Sheep and goats [1]	Receipts from grazing
	Number	*Number*	*Number*	*$1,000*		*Number*	*Number*	*Number*	*$1,000*
1930	1,357,843	540	6,714,342	1,943	1939	1,208,868	220	5,131,607	1,574
1931	1,375,708	431	6,608,228	1,961	1940	1,176,991	184	4,949,196	1,463
1932	1,396,265	528	6,320,938	830	1941	1,175,749	108	4,787,369	1,429
1933	1,398,335	533	6,161,966	1,498	1942	1,191,218	----------	4,758,038	1,595
1934	1,418,936	314	6,161,368	1,359	1943	1,211,568	572	4,538,660	1,973
1935	1,344,318	292	5,691,086	1,151	1944	1,225,254	256	4,280,370	2,459
1936	1,310,808	159	5,645,050	1,441	1945	1,206,227	105	3,888,830	2,159
1937	1,283,924	241	5,484,954	1,580	1946	1,203,201	139	3,712,981	2,060
1938	1,250,075	126	5,307,300	1,696	1947	1,161,905	109	3,403,677	2,294

[1] Excludes animals under 6 months of age.

No. 823.—Livestock Under Pay Permit on National Forests and Receipts From Grazing, by States: 1947

[See headnote, table 822. No livestock grazed or money received from Alaska or Puerto Rico]

STATE OR OTHER AREA	Livestock under pay permit		Receipts from grazing [2]	STATE OR OTHER AREA	Livestock under pay permit		Receipts from grazing [2]
	Cattle and horses [1]	Sheep and goats [1]			Cattle and horses [1]	Sheep and goats [1]	
	Number	*Number*	*$1,000*		*Number*	*Number*	*$1,000*
Total	**1,161,905**	**3,403,677**	**2,294**	Nebraska	12,302	----------	23
				Nevada	56,181	142,576	102
Alabama	80	----------	(3)	New Hampshire	22	----------	(3)
Arizona	140,082	107,573	262	New Mexico	83,090	116,634	149
Arkansas	2,883	----------	2	North Carolina	10	----------	(3)
California	120,254	151,625	202	Ohio	157	----------	----------
Colorado	173,777	666,096	369	Oregon	70,714	190,913	155
Florida	1,357	----------	1	South Carlina	676	----------	(3)
Idaho	110,147	661,809	255	South Dakota	25,663	17,766	34
Illinois	861	2,000	----------	Tennessee	134	----------	(3)
Indiana	44	26	----------	Texas	1,245	----------	1
Louisiana	1,691	----------	1	Utah	112,016	524,527	265
Maine	3	----------	----------	Vermont	55	----------	(3)
Michigan	2,458	321	(3)	Virginia	292	94	(3)
Minnesota	525	42	----------	Washington	20,226	52,748	41
Mississippi	989	----------	(3)	West Virginia	1,361	1,728	3
Missouri	3,857	59	4	Wisconsin	576	32	(3)
Montana	113,157	291,953	216	Wyoming	105,020	475,155	207

[1] Excludes animals under six months of age. [2] Includes grazing trespass. [3] Less than $500.

Source of tables 821, 822, and 823: Dept. of Agriculture, Forest Service; annual report, Agricultural Statistics.

No. 824.—Lumber—Production, by Kind of Wood, and Average Mill Value

[Data not strictly comparable because of incomplete coverage of numerous small mills in the East prior to 1942 and exclusion of mills cutting less than 50 M ft. b. m. for all years prior to 1942 except 1869–1909, and 1919. Exclusion of under 50 M class of mills would affect totals less than 1 percent as reflected by 1942 survey. Data for 1943-46 include estimates based on sample surveys. Small production quantities are subject to large sampling errors.]

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

Year	Production			Average mill value	Year	Production			Average mill value
	Total	Hardwood	Softwood			Total	Hardwood	Softwood	
1869	12,756			(1)	1934	15,494	2,758	12,735	$21.47
1879	18,091			(1)	1935	19,539	3,291	16,248	20.43
1889	23,842			$11.41	1936	24,355	4,113	20,242	22.20
1899	[2] 35,078	8,634	26,146	11.13	1937	25,997	4,408	21,589	24.25
1909	44,510	10,613	33,897	15.38	1938	21,646	3,353	18,293	21.45
1919	34,552	7,145	27,407	30.21	1939 [3]	24,975	3,733	21,242	21.97
1921	26,961	4,775	22,186	23.47	1940	28,934	4,031	24,903	23.32
1923	37,166	6,262	30,904	31.78	1941	33,476	5,499	27,977	28.09
1925	38,339	6,628	31,710	28.02	1942	36,332	6,822	29,510	31.50
1927	34,532	6,090	28,442	25.80	1943	34,289	7,371	26,917	36.86
1929	36,886	7,073	29,813	26.94	1944	32,938	7,778	25,160	(1)
1930	26,051	4,729	21,323	22.81	1945	28,122	6,982	21,140	(1)
1931	16,523	2,671	13,852	18.56	1946	34,112	8,256	25,857	(1)
1932	10,151	1,406	8,746	15.12	1947	35,404	7,467	27,937	(1)
1933	13,961	2,062	11,899	18.55					

Kind of wood	Production									
	1899	1909	1919	1929	1939 [3]	1943	1944	1945	1946	1947
Softwood, total	26,146	33,897	27,407	29,813	21,242	26,917	[4] 25,160	[4] 21,140	25,857	27,937
Balsam fir		109	68	38	20	7	(1)	(1)	12	27
Cedar	233	346	332	309	264	268	(1)	303	326	366
Cypress	496	956	656	532	422	254	191	228	238	240
Douglas fir	1,737	4,856	5,902	8,689	6,494	7,951	7,864	6,237	7,640	9,042
Hemlock	3,421	3,051	1,755	2,099	665	1,213	(1)	1,039	1,216	1,244
Larch	51	421	388	245	111	229	(1)	(1)	269	292
Lodgepole pine		24	16	31	55	68	72	65	86	100
Ponderosa pine	945	1,500	1,755	3,288	3,360	3,872	3,768	3,056	3,630	3,839
Redwood	360	522	410	486	345	461	462	444	243	529
Spruce	1,442	1,749	980	564	346	557	(1)	358	[5] 369	392
Sugar pine	54	97	134	349	309	278	318	228	344	343
White fir		89	223	307	98	403	492	499	684	673
White pine	7,742	3,900	1,724	1,248	1,004	1,396	(1)	1,269	1,418	1,370
Yellow pine	9,659	16,277	13,063	11,630	7,749	9,962	8,132	7,210	9,376	9,473
Other softwood	9						(1)	203	5	7
Hardwood, total	8,634	10,613	7,145	7,073	3,733	7,371	[4] 7,778	[4] 6,982	8,256	7,467
Alder		(6)	(6)	24	21	11	13	14	34	24
Ash	269	291	155	152	90	96	(1)	84	100	106
Basswood	308	399	184	133	96	130	(1)	160	116	126
Beech		511	359	187	120	319	(1)	352	330	330
Birch	133	452	375	374	141	188	(1)	152	173	175
Chestnut	207	664	546	268	74	85	(1)	(1)	44	33
Cottonwood	415	266	144	165	130	244	(1)	209	312	381
Elm	457	347	194	176	74	158	(1)	159	180	202
Hickory	97	334	170	57	38	164	(1)	159	187	156
Magnolia		(6)	2	42	20	(7)	(1)	(1)	37	(1)
Maple	633	1,107	857	824	445	581	(1)	522	598	630
Oak	4,438	4,414	2,708	2,574	1,432	3,038	3,292	2,859	3,378	3,193
Red gum	285	707	851	1,104	383	1,044	1,017	971	1,080	803
Sycamore	30	57	28	58	27	68	(1)	(1)	67	63
Tupelo		97	144	307	271	395	372	439	612	408
Walnut	39	46	39	72	27	52	(1)	(1)	29	34
Yellow poplar	1,115	859	329	436	276	589	641	578	827	636
Other hardwood	209	62	59	120	68	[7] 208	(1)	385	152	167

[1] Data not available. [2] Includes 298,000,000 board feet of lumber not reported by kind of wood.
[3] Excludes 165,305,000 board feet of softwood lumber and 7,605,000 board feet of hardwood lumber sawed by New England mills from timber salvaged from the hurricane of 1938.
[4] Totals include species not shown separately.
[5] Includes unspecified amount of fir.
[6] Less than 500,000 board feet were reported. [7] Magnolia included in "Other hardwood."

Source: Department of Commerce, Bureau of the Census (in cooperation with Department of Agriculture, Forest Service, and Tennessee Valley Authority); reports of Census of Manufactures and annual report, Lumber, Lath, and Shingle Production, Facts for Industry Series M13G.

No. 825.—Lumber—Production, by Regions and States: 1889 to 1947

[See headnote, table 824 for explanation of lack of comparableness of statistics. Data for Pacific and Rocky Mountain States may be considered complete for entire series. Data for all States may be considered comparable for 1945 and subsequent years]

[In millions of board feet]

Region and state	1889	1899	1909	1919	1929	1939 [1]	1945	1946	1947
United States	**23,842**	**35,078**	**44,510**	**34,552**	**36,886**	**24,975**	**28,122**	**34,112**	**35,404**
Northeastern States	**4,726**	**5,709**	**5,197**	**2,584**	**1,232**	**966**	**1,883**	**2,163**	**2,324**
Maine	597	785	1,112	596	258	213	374	411	459
New Hampshire	277	572	650	339	192	187	290	382	323
Vermont	384	376	352	218	120	106	195	216	204
Massachusetts	212	344	361	167	72	67	88	118	132
Connecticut	49	108	168	87	30	17	17	17	20
Rhode Island	8	19	25	11	7	5	2	3	3
New York	925	878	681	358	160	108	283	317	383
New Jersey	34	74	62	37	16	14	31	27	32
Pennsylvania	2,133	2,333	1,463	630	314	186	464	526	580
Maryland	82	184	268	113	55	51	116	117	154
Delaware	23	36	55	27	10	11	22	28	34
Central States	**3,130**	**5,643**	**5,487**	**3,016**	**2,347**	**1,231**	**2,235**	**2,509**	**2,393**
Ohio	565	990	543	280	176	111	257	247	265
Indiana	755	1,037	556	282	170	111	147	163	180
Illinois	222	388	170	65	38	27	66	93	100
Missouri	402	724	660	321	228	74	241	257	259
West Virginia	302	778	1,473	763	633	324	476	443	484
Kentucky	423	775	861	512	339	207	421	414	439
Tennessee	460	951	1,224	792	764	376	627	893	665
Southern States	**3,718**	**8,404**	**14,796**	**12,704**	**12,484**	**7,549**	**7,940**	**10,033**	**9,397**
Georgia	575	1,312	1,342	894	1,386	907	1,510	1,982	1,687
Florida	412	790	1,202	1,137	1,137	603	485	593	534
Alabama	589	1,101	1,691	1,799	2,059	1,412	1,585	2,158	1,795
Mississippi	454	1,206	2,573	2,390	2,669	1,201	1,313	1,559	1,397
Arkansas	538	1,624	2,111	1,772	1,348	1,110	[2] 1,090	1,245	1,285
Louisiana	304	1,115	3,552	3,164	2,232	1,036	1,024	1,066	1,269
Texas	843	1,232	2,099	1,380	1,452	1,137	933	1,343	1,347
Oklahoma	3	22	226	168	200	143	(2)	88	83
North Carolina Pine States	**1,129**	**2,712**	**5,177**	**3,374**	**2,979**	**2,367**	**2,936**	**3,832**	**3,577**
Virginia	416	959	2,102	1,098	708	679	995	1,217	1,166
North Carolina	515	1,287	2,178	1,654	1,202	1,042	1,215	1,614	1,540
South Carolina	199	466	898	622	1,068	646	727	1,001	871
Lake States	**8,251**	**8,750**	**5,476**	**2,692**	**1,771**	**781**	**923**	**1,117**	**1,310**
Michigan	4,300	3,018	1,890	876	571	333	421	520	580
Minnesota	1,084	2,342	1,562	700	357	111	186	205	244
Wisconsin	2,866	3,389	2,025	1,116	843	337	316	392	486
Pacific States	**2,028**	**2,901**	**6,905**	**8,798**	**14,149**	**10,693**	**10,522**	**12,432**	**14,216**
Washington	1,064	1,429	3,863	4,961	7,302	4,244	3,258	3,422	3,705
Oregon	446	735	1,899	2,577	4,784	4,765	5,004	6,328	7,102
California and Nevada	[3] 518	738	[3] 1,144	[3] 1,259	2,063	1,685	2,261	2,681	3,409
Rocky Mountain States	**249**	**556**	**1,292**	**1,299**	**1,843**	**1,336**	**1,550**	**1,915**	**2,062**
Montana	90	256	309	287	389	271	342	414	500
Idaho	28	65	646	765	1,029	675	780	864	951
Arizona	5	36	63	74	175	119	158	241	220
New Mexico	26	31	92	87	148	106	99	144	127
Colorado	80	134	142	65	72	84	88	139	145
Utah	14	18	13	12	5	15	29	50	38
Wyoming	6	17	29	9	26	65	54	64	81
All other	**612**	**401**	[4] **179**	[4] **85**	**81**	**51**	**132**	**111**	**125**
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	3.9	6.7	6.3	6.6
Central States	13.1	16.1	12.3	8.7	6.4	4.9	7.9	7.4	6.8
Southern States	15.6	24.0	33.2	36.8	33.8	30.2	28.2	29.4	26.5
North Carolina Pine States	4.7	7.7	11.6	9.8	8.1	9.5	10.4	11.2	10.1
Lake States	34.6	24.9	12.3	7.8	4.8	3.1	3.3	3.3	3.7
Pacific States	8.5	8.3	15.5	25.5	38.4	42.8	37.4	36.4	40.1
Rocky Mountain States	1.0	1.6	2.9	3.8	5.0	5.3	5.5	5.6	5.8
All other	2.6	1.1	.4	.2	.2	.2	.5	.3	.4

[1] Excludes 165,305,000 board feet of softwood lumber and 7,605,000 board feet of hardwood lumber sawed by New England mills from timber salvaged from the hurricane of 1938.
[2] Arkansas and Oklahoma combined.
[3] California only; for 1909 and 1919 Nevada included with "All other."
[4] Includes Nevada.

Source: Department of Commerce, Bureau of the Census (in cooperation with Department of Agriculture, Forest Service, and Tennessee Valley Authority); reports of Census of Manufactures and annual report, Lumber, Lath, and Shingle Production, Facts for Industry Series M13G.

No. 826.—Lumber—Average Mill Value per 1,000 Board Feet: 1899 to 1943

[See headnote, table 824. See also *Historical Statistics*, series F 120-122, for data on value of all kinds, all softwoods, and all hardwoods.]

KIND OF WOOD	1899	1909	1919	1929	1937	1938	1939	1940	1941	1942	1943
All kinds [1]	$11.13	$15.38	$30.21	$26.94	$24.25	$21.45	$21.97	$23.32	$28.09	$31.50	$36.86
Softwoods	(2)	14.08	28.39	24.31	22.97	20.42	20.97	22.48	27.26	30.73	35.57
Balsam fir	(2)	13.99	32.23	25.49	21.82	20.72	19.43	20.92	24.93	28.93	37.92
Cedar	10.91	19.95	33.80	34.83	37.00	36.41	40.68	39.56	44.68	49.77	51.92
Cypress	13.32	20.46	38.38	35.29	36.79	35.14	35.50	36.07	40.64	45.39	51.75
Douglas fir	8.67	12.44	24.62	20.05	19.67	17.29	17.91	19.49	25.45	30.51	33.04
Hemlock	9.98	13.95	29.16	18.90	20.58	18.99	19.39	22.19	27.33	31.36	34.79
Larch	8.73	12.68	23.39	18.35	17.23	16.05	16.80	16.03	19.47	23.89	28.41
Lodgepole pine	(2)	16.25	29.98	17.97	16.34	16.85	17.76	19.01	19.71	23.41	29.77
Ponderosa pine	9.70	15.39	27.75	26.47	24.53	22.22	22.75	24.29	28.65	32.52	36.79
Redwood	10.12	14.80	30.04	31.00	36.30	36.72	34.56	40.35	46.20	50.47	46.80
Spruce	11.27	16.91	30.76	28.64	25.73	23.72	26.68	26.84	31.71	37.70	44.76
Sugar pine	12.30	18.14	35.99	43.08	34.71	30.16	30.10	30.28	38.75	41.66	46.28
White fir	(2)	13.10	25.66	20.63	18.95	18.22	17.34	18.05	23.36	27.64	34.27
White pine	12.69	18.16	32.83	29.87	29.20	26.77	25.90	27.87	30.32	33.17	39.03
Yellow pine	8.46	12.69	28.71	25.66	22.18	19.01	19.70	21.35	25.50	27.80	34.79
Hardwoods [1]	(2)	19.52	37.22	38.04	30.49	27.09	27.66	28.47	32.34	34.87	41.57
Alder	(2)	15.03	34.67	27.18	23.07	25.41	24.63	27.11	28.10	32.57	38.27
Ash	15.84	24.44	52.69	43.14	37.11	34.30	34.33	35.18	42.10	44.03	47.52
Basswood	12.84	19.50	40.03	39.88	35.65	32.78	31.94	32.98	37.85	42.63	48.33
Beech	(2)	13.25	29.98	28.39	25.08	22.33	22.03	24.24	26.49	30.11	36.16
Birch	12.50	16.95	35.79	39.35	36.11	34.72	33.11	34.63	41.78	47.68	55.47
Chestnut	13.37	16.12	32.30	29.51	24.87	19.88	21.94	20.89	24.93	30.43	32.94
Cottonwood	10.37	18.05	32.24	29.70	25.24	22.05	21.41	22.40	26.87	28.77	34.24
Elm	11.47	17.52	36.39	35.28	25.48	23.84	24.54	26.11	29.64	33.14	37.06
Hickory	18.78	30.80	44.37	40.33	32.12	28.17	26.75	29.99	29.70	35.31	37.79
Magnolia	(2)	15.00	28.01	38.11	29.02	29.67	27.26	29.20	39.49	39.46	(2)
Maple	11.83	15.77	35.56	36.93	24.14	32.34	32.51	34.54	38.29	43.56	48.79
Oak	13.78	20.50	37.87	38.43	29.60	25.41	26.32	26.20	29.74	32.96	40.53
Red gum	9.63	13.20	32.68	34.42	26.63	22.43	23.28	25.67	31.15	30.88	35.95
Sycamore	11.04	14.87	30.32	30.07	22.75	21.42	22.26	22.93	26.82	26.81	33.25
Tupelo	(2)	11.87	28.42	25.39	23.31	20.24	22.09	24.01	28.86	30.68	38.20
Walnut	36.49	43.79	72.13	119.15	85.10	71.26	63.18	71.43	77.20	81.13	132.98
Yellow poplar	14.03	25.39	41.65	41.66	31.60	25.75	26.98	26.04	30.70	32.31	41.99

[1] Includes some hardwoods not shown separately. [2] Data are not available.

Source: Department of Commerce, Bureau of the Census (in cooperation with Department of Agriculture, Forest Service, and Tennessee Valley Authority); reports of Census of Manufactures and annual report, Lumber, Lath, and Shingle Production, Facts for Industry Series M 13G.

No. 827.—Lumber and Shingles—Production, for Alaska: 1899 to 1947

YEAR	Number of mills reporting	LUMBER SAWED (M FEET, B. M.)					Shingle (squares)[1]
		Total	Spruce	Hemlock	Cedar	All other	
1899	10	6,571	6,056	15	(2)	[3] 500	----------
1904	6	7,974	7,933	----------	(2)	[3] 41	1,158
1919	22	21,673	21,182	491	----------	----------	----------
1923	20	36,076	33,504	2,266	(2)	[3] 306	2,849
1925	28	40,857	35,718	2,938	(2)	[3] 2,201	3,295
1927	21	41,395	34,571	6,291	(2)	[3] 533	4,535
1929	19	30,393	21,850	8,205	(2)	[3] 338	2,943
1931	16	16,535	12,091	4,189	(2)	[3] 255	1,063
1933	20	12,901	10.292	1,523	1,086	----------	1,380
1935	20	23,499	14,769	8,069	658	3	2,182
1937	20	25,276	15,794	8,477	994	11	2,181
1939	24	25,885	18,162	6,071	1,595	57	2,471
1941	27	36,547	28,064	7,515	933	35	3,718
1943	29	62,603	48,633	13,355	603	12	1,117
1945	35	59,056	51,623	6,258	1,175	----------	565
1946	42	57,506	47,487	8,710	1,296	13	2,432
1947	40	80,480	69,105	9,872	1,497	6	(4)

[1] Reported in thousands for 1932 and prior years and converted on basis of 800 shingles to the square.
[2] Included in "All other." [3] Includes figures for cedar lumber.
[4] Data not published to avoid disclosing operations of individual establishments.

Source: Department of Commerce, Bureau of the Census (in cooperation with Department of Agriculture, Forest Service, and Tennessee Valley Authority); reports of Census of Manufactures and annual report, Lumber, Lath, and Shingle Production, Facts for Industry Series M 13G.

No. 828.—Lath and Shingles—Production: 1899 to 1946

[**Lath in thousands and shingles in squares.** Shingles reported in thousands prior to 1933 and converted to squares on basis of 800 shingles to square. See headnote, table 824 for explanation of lack of comparability of statistics. Data for shingles reasonably comparable over a period of years, because of complete enumeration of Red Cedar Shingle Industry, this industry's production comprising over 90 percent of total shingle production]

YEAR (CALENDAR)	Lath	Shingles	YEAR (CALENDAR)	Lath	Shingles
1899	2,523,998	15,127,521	1935	620,038	4,416,709
1909	3,703,195	18,634,214	1936	810,909	5,901,692
1919	1,724,078	11,490,880	1937	839,085	[1] 5,649,792
1926	3,083,130	7,510,432	1938	583,777	[1] 6,319,236
1927	2,372,333	8,054,835	1939	562,207	[1] 6,500,242
1928	1,903,887	7,004,612	1940	523,428	[1] 6,126,230
1929	1,705,858	7,638,340	1941	521,406	[1] 5,957,040
1930	1,097,255	4,955,138	1942	306,959	[1] 5,266,673
1931	614,250	3,392,465	1943	189,512	[1] 3,736,961
1932	406,089	2,639,125	1944 [2]	132,859	[1] 3,587,602
1933	408,192	3,662,250	1945	113,268	[1] 3,156,613
1934	416,308	3,477,063	1946 [3]	135,602	[1] 3,462,612

[1] Includes data for shakes.
[2] Data incomplete since mills idle during war were not canvassed for 1944 production.
[3] Incomplete; see table 829 for States canvassed.

No. 829.—Lath and Shingles—Production by States: 1943 to 1946

[**Lath in thousands and shingles in squares.** See headnote, table 828]

STATE	LATH				SHINGLES [1]			
	1943	1944	1945	1946	1943	1944	1945	1946
Alabama	1,663	----------	(2)	534	1,198	(2)	(2)	5,048
Arkansas	2,548	(2)	(2)	300	726	(2)	(2)	56
California	10,185	(2)	5,651	12,172	45,090	63,371	89,328	130,591
Florida	5,943	(2)	(2)	----------	6,215	(2)	(2)	254
Georgia	----------	(2)	----------	1,350	2,763	(2)	(2)	68
Idaho	19,741	19,620	17,192	16,999	15,975	21,721	24,522	42,849
Louisiana	10,853	6,436	(2)	----------	3,228	(2)	----------	----------
Maine	2,671	(2)	16,629	(3)	42,745	24,898	33,079	(3)
Michigan	2,759	(2)	(2)	(3)	12,928	(2)	(2)	(3)
Minnesota	1,818	(2)	5,543	(3)	714	(2)	(2)	(3)
Mississippi	4,715	(2)	(2)	300	115	----------	----------	----------
Montana	8,024	7,300	(2)	(2)	3,081	(2)	(2)	(2)
North Carolina	714	(2)	(2)	69	15,467	24,548	17,444	11,879
Oregon	43,439	39,918	25,394	46,701	656,329	636,425	686,337	804,950
South Carolina	264	----------	(2)	40	6,379	(2)	(2)	1,535
Texas	10,181	----------	(2)	6,123	5,065	(2)	----------	1,956
Virginia	3,905	(2)	(2)	4,056	136	(2)	(2)	----------
Washington	44,951	24,866	20,284	37,671	2,903,178	2,788,340	2,288,219	2,460,731
West Virginia	444	----------	(2)	(3)	188	----------	----------	(2)
Wisconsin	9,864	[4] 9,302	(2)	(3)	9,504	(2)	(2)	(3)
All other	4,830	[4] 25,416	22,575	[5] 9,287	5,937	[4] 28,299	17,684	[5] 2,695

[1] Includes data for shakes.
[2] Included in "All other."
[3] Not available.
[4] Data incomplete since mills idle during war were not canvassed for 1944 production.
[5] Includes only Colorado, Montana, New Mexico, Oklahoma, South Dakota, Tennessee, Utah, and Wyoming. Other states not canvassed for lath and shingles production.

Source of tables 828 and 829: Department of Commerce, Bureau of Census (in cooperation with Department of Agriculture, Forest Service, and Tennessee Valley Authority); reports of Census of Manufactures and annual report, Lumber, Lath, and Shingle Production, Facts for Industry Series M13G.

No. 830.—Veneer and Plywood—Log Consumption and Production: 1943 to 1948

[No later data for hardwood veneer and plywood; survey suspended]

Log consumption (M ft., log scale)			Veneer and plywood production		
Kind of wood	1943	1944	Type of veneer and plywood	1943	1944
Hardwood, total	934,860	885,960	**Hardwood veneer (M sq. ft., surface measure)**	9,870,597	9,270,351
Mahogany	26,252	23,004	Aircraft and boat	1,627,145	629,708
Sweet gum	261,534	240,962	Commercial	3,066,269	3,315,069
Black gum [1]	175,757	167,044	Container	5,177,183	5,325,574
Birch	76,350	63,692	**Hardwood plywood (M sq. ft., surface measure)**	1,211,814	1,166,243
Maple	60,418	58,183	Aircraft and boat	141,868	50,472
Yellow poplar	66,769	53,623	Commercial	563,930	625,662
Beech and elm	32,160	33,507	Container	506,016	490,109
Cottonwood and sycamore	49,727	55,462	Softwood plywood (M sq. ft., 3/8" equivalent) [3]	1,495,168	1,484,889
All other woods [2]	185,893	190,483			
Softwood [3]	654,478	646,946			
	1947	1948		1947	1948
Softwood [3]	750,633	848,177	Softwood plywood (M sq. ft., 3/8" equivalent) [3]	1,700,446	1,961,429

[1] Includes tupelo and magnolia.
[2] Includes a small quantity of softwoods reported by hardwood veneer and plywood producers.
[3] Principally Douglas fir.

Source: Department of Commerce, Bureau of the Census; Facts for Industry Series 16-3 and M13B.

No. 831.—Cooperage Stock—Production, by Kind: 1909 to 1947

[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; in 1933, 61,161,000; in 1935, 51,818,000; in 1937, 68,152,000; and in 1939, 32,209,000, nearly all elm]

Year and kind of wood	Staves (thousands)		Heading (thousand sets)	
	Tight	Slack	Tight	Slack
1909	379,231	2,029,548	20,691	140,234
1919	353,825	1,121,324	24,274	87,381
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	154,575	426,585	13,031	37,461
1935	221,619	439,970	15,259	35,992
1937	205,286	574,768	13,377	54,318
1939	182,431	526,315	14,277	46,465
1947 [2]	131,104	406,761	9,807	35,445
1939				
Douglas fir	19,573	26,018	1,445	1,639
Elm	(1)	35,977	(1)	7
Oak	90,451	(1)	5,337	(1)
Pine	46,637	199,337	3,412	34,776
Red gum	13,017	169,225	1,529	1,828
Spruce	2,977	38,140	1,341	5,275
Other	9,776	57,618	1,213	2,940

Class	1929	1935	1937	1939
Tight staves (thousands)	357,353	221,619	205,286	182,431
Whisky, spirit, and wine	16,292	60,887	65,629	48,724
Oil, tierce, and pork	185,801	83,503	76,915	60,274
Beer and ale	(1)	3,467	2,615	1,956
Other and not specified	155,260	73,762	60,127	71,477
Tight heading (thousand sets)	30,329	15,259	13,377	14,277
Whisky, spirit, and wine	1,381	4,371	2,910	1,991
Oil, tierce, and pork	21,195	4,865	4,241	4,520
Beer and ale	(1)	145	418	124
Other and not specified	7,753	5,878	5,808	7,642

[1] Not called for on schedule.
[2] Excludes small amount produced in other than cooperage stock and cooperage industries.

Source: Department of Commerce, Bureau of the Census (in cooperation with Department of Agriculture, Forest Service); reports of Biennial of Manufactures.

No. 832.—Pulpwood—Consumption by Mills and Mill Cost

[Data cover domestic and imported wood. Cost is f. o. b. pulp mill. See also *Historical Statistics*, series F 132, for data on consumption]

Year	Quantity, all kinds (cords)	Cost: Total (1,000 dollars)	Cost: Average per cord	Year	Quantity, all kinds (cords)	Cost: Total (1,000 dollars)	Cost: Average per cord	Year	Quantity, all kinds (cords)	Cost: Total (1,000 dollars)	Cost: Average per cord
1899	1,986,310	9,838	$4.95	1927	6,750,935	95,452	$14.14	1939	10,816,466	84,539	$7.82
1909	4,001,607	34,478	8.62	1929	7,645,011	100,054	13.09	1940	13,742,958	109,740	7.99
1919	5,477,832	87,386	15.95	1931	6,722,766	73,524	10.94	1945	16,911,861	(1)	(1)
1921	4,557,179	91,589	20.10	1933	6,581,674	48,508	7.37	1946	17,817,560	(1)	(1)
1923	5,872,870	95,306	16.23	1935	7,628,274	58,244	7.64	1947	19,714,229	(1)	(1)
1925	6,093,821	94,340	15.48	1937	10,393,800	82,885	7.97	1948	21,189,458	(1)	(1)

Kind of wood	Total consumption (cords): 1919	1929	1935	1937	1938	1939	1940
Total	**5,477,832**	**7,645,011**	**7,628,274**	**10,393,800**	**9,193,991**	**10,816,466**	**13,742,958**
Spruce:							
Domestic	2,313,419	2,074,267	1,755,112	2,010,720	1,447,457	1,567,643	2,045,519
Imported	873,795	1,029,913	625,462	826,528	832,295	906,806	963,195
Hemlock:							
Domestic	} 795,154	{1,309,170	}1,521,271	{2,264,565	1,677,181	}2,218,678	{2,636,118
Imported		15,379		37,447	37,243		152,653
Yellow pine (southern)	234,463	1,036,272	1,785,228	2,658,949	3,261,404	3,834,644	5,013,478
Poplar:							
Domestic	180,160	329,466	333,773	441,401	324,868	354,125	489,866
Imported	158,220	157,829	54,283	90,365	95,758	123,148	108,809
Balsam fir:							
Domestic	181,840	317,552	298,812	320,715	321,984	283,506	388,577
Imported	106,974	45,412	54,313	71,447	65,392	74,705	83,609
Jack pine [2]	51,581	205,760	[3] 224,538	300,786	258,570	359,755	477,975
Beech, birch, and maple [3]	184,111	76,950	152,054	257,410	[2] 168,796	[2] 241,039	[2] 298,895
Tamarack (larch) [3]	44,042	51,835	9,587	8,945	9,937	8,450	11,324
Yellow poplar [3]	72,605	129,697	(4)	47,882	(4)	(4)	(4)
Gum [3]	30,355	39,685	29,299	[5] 25,967	47,967	[5] 47,370	(4)
White fir [3]	31,138	111,054	174,075	[2] 135,384	98,878	159,428	[2] 213,445
Other wood	44,894	153,485	317,675	329,898	315,101	318,155	584,560
Slabs and mill waste	175,081	561,285	292,792	565,391	231,160	319,014	274,935

[1] Data not available. [2] Domestic and imported. [3] Domestic only.
[4] Included with "Other wood." [5] Red gum only.

Source: Department of Commerce, Bureau of the Census; reports of the Census of Manufactures; alternating with these reports, a series of reports for even-numbered years through 1940. See source, table 833, concerning later data.

No. 833.—Pulpwood—Consumption, by Kind of Wood: 1943 to 1948

[**Cords of 128 cu. ft. (rough wood basis).** Data cover domestic and imported wood. Comparable data for detail shown in table 832 not available]

Kind of wood	1943	1944	1945	1946	1947	1948
Total	**15,644,500**	**16,757,400**	**16,911,861**	**17,817,560**	**19,714,229**	**21,189,458**
Softwood, total	**13,477,074**	**13,931,075**	**14,519,870**	**15,384,176**	**17,021,974**	**18,490,916**
Spruce and fir	3,633,239	3,290,466				
Hemlock	2,081,609	2,246,833				
Pine	7,343,615	7,994,650	(1)	(1)	(1)	(1)
Western fir	243,891	260,643				
Western spruce	174,720	138,483				
Hardwoods, total	**1,287,983**	**1,550,117**	**2,391,991**	**2,433,384**	**2,692,255**	**2,698,542**
Aspen	687,486	661,710				
Yellow poplar	149,724	284,882				
Gum	66,617	160,166	(1)	(1)	(1)	(1)
Chestnut	384,156	434,982				
Birch	----------	8,377				
Other woods [2]	641,838	988,873	----------	----------	----------	----------
Saw mill waste	237,605	287,335	----------	----------	----------	----------

[1] Data by kind not available. [2] Includes hardwoods and softwoods not classified by kind.

Source: Data for 1943, 1944 and the first 8 months of 1945 collected and compiled by War Production Board. Thereafter, compiled by Dept. of Commerce, Bureau of the Census. 1945-48 data published in Facts for Industry Series M14A.

No. 834.—Wood Pulp and Paper and Paperboard—Production: 1899 to 1948

[Tons of 2,000 pounds. See also *Historical Statistics*, series F 133-134]

YEAR	Wood pulp[1] (*old basis*)	Paper and paperboard (*old basis*)	YEAR	Wood pulp[1] (*old basis*)	Paper and paperboard (*old basis*)	Wood pulp (*new basis*)[2]	Paper and paperboard (*new basis*)[3]
1899	1,179,525	2,167,503	1937	6,572,918	12,837,003		
1909	2,495,523	4,216,708	1938	5,933,560	11,380,814		
1914	2,893,150	5,270,047	1939	6,993,334	13,509,642		
1919	3,517,952	6,098,530	1940	8,851,740	14,483,709	8,959,559	
1921	2,875,601	5,431,265	1941	10,046,193	17,093,092	10,375,422	[4] 17,933,607
1923	3,788,672	8,029,482	1942	10,364,175	16,477,663	10,783,430	[4] 17,083,862
1925	3,962,217	9,182,204	1943	9,175,013	16,501,597	9,680,462	17,035,688
1927	4,313,403	10,002,070	1944	9,550,150	16,866,831	10,108,443	17,182,804
1929	4,862,885	11,140,235	1945			10,167,200	17,370,965
1931	4,409,334	9,381,840	1946			10,606,527	19,277,667
1933	4,276,204	9,190,017	1947			11,945,864	21,101,833
1935	4,925,669	10,479,095	1948			12,872,292	22,048,766

[1] Beginning 1914 includes screenings.
[2] Includes data for existing mills not classified as producers of pulp before 1940. In that year data for 6 mills not previously classified as producers of wood pulp were included for first time. For same reason, an additional mill was included in 1941, and 2 more added in 1943.
[3] Includes data for 25 existing mills not previously classified as producers of paper and paperboard.
[4] Includes estimated production of insulating board for 1 mill. Estimates were made on assumption that production of this mill was proportionately the same in 1941 and 1942 as in 1943.

Source: Department of Commerce, Bureau of the Census; reports of Census of Manufactures; Census of Forest Products, 1940; and annual report, Census of Pulp Mills and of Paper and Paperboard Mills, Facts for Industry Series M14A.

No. 835.—Wood Pulp—Production, by States and by Process: 1909 to 1948

[Tons of 2,000 pounds]

STATE AND PROCESS	1909	1919	1929	1939	1945[1]	1946[1]	1947[1]	1948[1]
Total	2,495,523	3,517,952	4,862,885	6,993,334	10,167,200	10,606,527	11,945,864	12,872,292
Alabama	(2)	(2)	(2)	(2)	[3] 456,877	[3] 455,837	411,739	
Florida	(2)	(2)	(2)	449,162	689,364	694,594	783,258	
Louisiana		(2)	246,590	589,672	949,221	989,366	1,128,727	
Maine	620,705	916,764	981,433	941,273	1,097,939	1,185,232	1,237,075	
Michigan	64,369	106,194	178,015	200,325	201,811	219,873	222,678	
Minnesota	37,295	129,560	189,664	160,665	337,332	318,605	392,254	
Mississippi	(2)	(2)	(2)	(2)	477,199	463,456	476,264	
New Jersey	(2)	(2)	(2)	(2)	52,304	62,700	68,620	
New Hampshire	212,599	232,134	212,774	(2)	182,964	177,434	174,137	(6)
New York	679,534	811,958	662,988	460,652	497,314	555,847	645,955	
North Carolina	(2)	(2)	(2)	179,636	[4] 880,219	[4] 923,920	(2)	
Pennsylvania	135,525	215,686	213,083	193,958	262,498	272,598	288,757	
Vermont	(2)	(2)	(2)	(2)	17,653	(2)	(2)	
Virginia	48,641	(2)	206,050	402,929	[5] 612,085	[5] 647,172	630,384	
Washington	(2)	83,575	523,948	1,126,114	1,265,436	1,332,940	1,591,229	
Wisconsin	324,509	506,549	733,617	655,816	875,408	889,139	922,732	
Other States	372,346	515,532	714,723	1,633,132	1,311,576	1,417,808	2,962,055	
ALL PROCESSES								
Groundwood	1,179,266	1,518,829	1,637,653	1,444,875	1,696,184	1,811,622	2,049,814	2,175,107
Defibrated, exploded, asplund fiber and similar grades[7]					690,675	761,544	693,282	744,671
Sulphite	1,017,631	1,449,829	1,681,511	1,946,452	2,359,731	2,476,468	2,795,962	2,811,216
Sulphate		120,378	918,084	2,962,657	4,471,875	4,588,016	5,356,710	6,013,696
Soda	298,626	411,693	520,729	441,565	429,757	476,211	491,580	509,864
Semi-chemical, off quality, screenings and misc		47,223	104,908	197,785	518,978	492,666	558,516	617,738

[1] New basis, see table 834.
[2] Included in "Other States" to avoid disclosing data for individual establishments.
[3] Includes Tennessee. [4] Includes South Carolina. [5] Includes Maryland.
[6] Data by States not available.
[7] These processes represent recent developments; production for 1939 and earlier years only a small proportion of total.

Source: Department of Commerce Bureau of the Census; reports of Census of Manufactures; annual report, Census of Pulp Mills and of Paper and Paperboard Mills, Facts for Industry Series M14A.

No. 836.—Paper and Board—Production By Type: 1946, 1947, and 1948

[Tons of 2,000 pounds. Production in 1946 from special annual survey, in 1947 from Census of Manufactures, and in 1948 from monthly surveys]

TYPE OF PAPER	1946	1947	1948 [1]
All types	**19,277,667**	**21,101,833**	**22,048,766**
Paper, total	**9,787,493**	**10,692,851**	**11,194,860**
Newsprint	772,797	833,038	866,235
Groundwood printing and specialty paper, total	775,779	821,318	836,576
Printing	473,620	546,008	541,026
Converting	252,006	240,924	262,112
Other	50,153	34,386	33,438
Book paper, total	1,933,428	2,207,923	2,284,245
Printing	1,458,003	1,696,570	1,755,679
Converting	457,062	498,368	507,666
Other	18,363	12,985	20,900
Fine paper, total	1,145,576	1,171,539	1,156,703
Writing, total	901,670	918,349	904,141
Rag (including index)	175,514	174,110	135,588
Chemical wood pulp	726,156	744,239	768,553
Cover and text	93,352	93,178	77,611
Bristols (except rag index)	82,414	86,801	84,780
Thin	64,961	73,211	69,898
Other	3,179	----------	20,273
Coarse paper, total	2,690,490	2,903,450	3,143,263
Glassine, greaseproof and vegetable parchment	158,251	156,310	128,916
Wrapping, total	763,193	667,028	816,813
Unbleached kraft	348,862	346,026	378,197
Other	414,331	321,002	438,616
Bag, total	523,633	539,864	675,053
Unbleached kraft	492,120	495,665	619,243
Other	31,513	44,199	55,810
Shipping sack	550,374	670,889	667,499
Converting, total	695,039	869,359	854,982
Unbleached kraft	----------	598,229	497,454
Other	----------	271,130	357,528
Special industrial	286,478	289,499	317,858
Sanitary	860,658	894,032	963,366
Tissue	183,837	194,624	230,325
Absorbent	102,811	100,486	108,614
Building paper	1,035,639	1,276,942	1,287,675
Paperboard, total	**8,396,233**	**9,186,810**	**9,440,668**
Liners	2,794,108	3,293,234	3,347,285
Corrugating material	1,234,340	1,370,492	1,376,076
Container chip and filler board	286,490	279,968	318,534
Folding boxboard (for use in folding box plants only)	2,317,496	2,249,136	2,153,313
Set-up boxboard (for use in set-up box plants only)	520,772	594,755	597,374
Cardboard	89,310	91,858	79,593
All other paperboard	1,153,717	1,307,367	1,568,493
Wet machine board, total	**137,583**	**149,800**	**139,803**
Shoe board	65,565	55,195	48,985
Binder board	55,697	52,596	45,715
Other	16,321	42,009	45,103
Building board	956,358	1,072,372	1,273,435

[1] Preliminary.

Source: Department of Commerce, Bureau of the Census; 1947 Census of Manufactures reports, and annual report, Census of Pulp Mills and of Paper and Paperboard Mills, Facts for Industry Series M14A.

No. 837.—Turpentine and Rosin—Production, 1899 to 1948, and by States, 1944 to 1948

Year [1]	Turpentine (gallons)			Rosin (drums 520 lbs. net)		
	Total	From gum [2]	From wood [3]	Total	From gum [2]	From wood [3]
1899	37,733,500	37,733,500	(4)	1,947,946	1,947,946	(4)
1904	31,129,236	30,687,051	442,185	1,571,739	1,571,739	(4)
1909	[5] 29,714,132	28,988,954	706,868	1,462,208	1,462,208	(4)
1914	[5] 27,648,939	26,980,981	575,557	[5] 1,319,328	1,292,514	23,218
1919	19,228,174	17,693,841	1,534,333	1,015,774	910,928	104,846
1929-30	35,940,124	31,320,871	4,619,253	1,963,349	1,580,505	382,844
1932-33	28,756,550	[6] 25,050,000	[7] 3,706,550	1,658,664	[6] 1,362,720	295,944
1933-34	31,238,050	[6] 26,300,000	[7] 4,938,050	1,837,870	[6] 1,430,448	407,422
1934-35	30,154,650	[6] 25,500,000	[7] 4,654,650	1,783,298	[6] 1,387,200	396,098
1935-36	30,145,400	24,850,000	5,295,400	1,821,193	[8] 1,360,950	460,243
1936-37	31,726,000	24,139,350	7,586,650	1,865,569	[8] 1,286,347	579,222
1937-38	35,016,550	25,922,700	9,093,850	2,049,573	[8] 1,388,343	661,230
1938-39	35,460,900	26,714,550	8,746,350	2,089,913	[8] 1,466,344	623,569
1939-40	30,238,900	19,139,050	11,099,850	1,835,177	[8] 1,054,236	780,941
1940-41	28,317,050	17,196,900	11,120,150	1,717,492	[8] 938,911	778,581
1941-42	27,439,800	14,252,500	13,187,300	1,708,474	[8] 791,710	916,764
1942-43	28,017,550	16,096,500	11,921,050	1,655,803	[8] 868,698	787,105
1943-44	25,421,600	14,419,100	11,002,500	1,462,831	[8] 783,565	679,266
1944-45	23,562,150	12,259,700	11,302,450	1,317,912	[8] 692,212	625,700
1945-46	24,406,550	12,212,600	12,193,950	1,452,036	[8] 694,476	757,560
1946-47	28,499,250	13,514,300	14,984,950	1,720,248	[8] 752,535	967,713
1947-48	32,045,150	14,701,400	17,343,750	1,990,831	[8] 828,128	1,162,703

State	Production from crude gum [1]							
	Turpentine (gallons)				Rosin (drums 520 lbs. net) [9]			
	1944-45	1945-46	1946-47	1947-48	1944-45	1945-46	1946-47	1947-48
Alabama	698,650	686,750	534,100	1,010,950	38,997	38,550	29,391	56,841
Florida	2,881,200	2,199,300	2,890,000	3,293,550	160,774	123,537	159,160	184,527
Georgia	8,376,900	9,035,750	9,850,250	10,253,000	467,477	507,526	542,304	575,001
Mississippi	160,400	154,950	139,750	36,700	8,962	8,711	7,664	1,648
Louisiana	33,350	45,500	43,850	58,300	1,847	2,538	2,381	3,295
South Carolina	109,200	90,350	56,350	48,900	6,089	5,076	3,125	2,471

[1] Figures for turpentine and rosin from crude gum, beginning 1929-30, and from wood beginning 1933-34, relate to crop year ended Mar. 31. All other figures relate to calendar years.
[2] Figures compiled from data reported by establishments in Turpentine and Rosin industry.
[3] Figures compiled from data reported by establishments in 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, 3,596 drums of rosin, reported by establishments engaged in manufacture of lumber and timber products.
[6] Estimated by J. E. Lockwood; complete data not available. Figures include estimates of rosin produced from reclaimed gum, as follows: 1932-33, 26,720 drums; 1933-34, 28,048; 1934-35, 27,200.
[7] Includes estimates by J. E. Lockwood for production of turpentine from steam-distilled wood.
[8] Includes data for rosin produced from reclaimed gum: For 1935-36, 43,350 drums; 1936-37, 34,155; 1937-38, 21,017; 1938-39, 31,983; 1939-40, 31,414; 1940-41, 20,181; 1941-42, 19,765; 1942-43, 11,297; 1943-44, 9,824; 1944-45, 8,066; 1945-46, 8,538; 1946-47, 8,449; 1947-48, 4,345.
[9] Figures do not include data for rosin produced from reclaimed gum. See note 8.

Source: Figures for 1899 to 1932, Department of Commerce, Bureau of the Census; reports of Census of Manufactures. Figures for 1933 and subsequent years, Department of Agriculture, Bureau of Agricultural and Industrial Chemistry; Naval Stores Report on Turpentine and Rosin.

26. Fisheries

The Fish and Wildlife Service, Branch of Commercial Fisheries in the Department of the Interior, conducts annual surveys for various statistical information on the fishery industries. These data are published in greater detail in publications of the Service and include data on the volume of the catch of individual species of fish and shellfish and their value, employment in the fisheries, quantity of gear operated, the number of fishing and transporting craft employed in the capture and transporting of fishery products, employment in wholesale and manufacturing establishments, and volume and value of the production of manufactured fishery products. In addition to the basic statistics on employment, yield, and the production of manufactured fishery products for individual States and various geographical sections, there are included in reports data on imports and exports of fishery commodities; landings by fishing craft at Boston, Gloucester, New Bedford, and on Cape Cod, Massachusetts; at Maine ports; and Seattle, Washington; shad fisheries of the Hudson and Potomac Rivers; alewife fishery in the Potomac; seed oyster fisheries; a review of the Pacific Coast halibut fishery; a statement on whaling operations by United States firms; data on the sponge fishery; and lists of firms producing various manufactured fishery products. These data are summarized in the Statistical Abstract. The more detailed information may be obtained from the Fish and Wildlife Service, Washington 25, D. C.

Historical statistics.—In this section, tabular headnotes (as "See also *Historical Statistics*, series F 166–192") provide cross-references, where applicable, to Historical Statistics of the United States, 1789–1945. In that historical supplement to the Statistical Abstract, statistics are carried back year by year as far as possible. See also the historical appendix of the present issue of the Abstract for specific titles of series and the earliest year shown in the supplement.

No. 838.—Fisheries—Summary of Total Catch and Value: 1930 to 1947

[Includes Alaska beginning with 1941, data partly estimated. See also *Historical Statistics*, series F 155]

YEAR	Quantity (1,000 pounds)	Value to fishermen (1,000 dollars)	YEAR	Quantity (1,000 pounds)	Value to fishermen (1,000 dollars)
1930	3,286,580	109,349	1941	5,080,341	134,172
1931	2,657,317	77,344	1942	3,876,524	170,338
1932	2,634,704	55,532	1943	4,202,281	204,029
1937	4,352,549	100,845	1944	4,500,000	213,000
1938	4,253,445	93,547	1945	4,575,500	269,900
1939	4,443,328	96,532	1946 (prel.)	4,455,600	310,000
1940	4,059,524	98,957	1947 (prel.)	4,378,000	303,000

No. 839.—Fisheries—Catch, by Sections

[See also *Historical Statistics*, series F 166–192, for data on quantity of catch]

SECTION	Year	Fishermen	Fishing vessels	Fishing boats	CATCH	
					Quantity	Value to fishermen
		Number	*Number*	*Number*	*1,000 pounds*	*1,000 dollars*
New England States	1945	20,386	828	9,973	845,471	56,589.0
Middle Atlantic States	1945	10,848	490	5,377	494,193	23,224.2
Chesapeake Bay States	1945	17,673	299	13,268	304,463	30,363.2
South Atlantic and Gulf States	1945	[1] 29,697	[1] 1,735	[1] 16,371	746,027	54,330.0
Pacific Coast States	1945	34,028	2,142	7,643	1,428,278	62,694.3
Great Lakes States	1946	[2] 5,142	[2] 499	[2] 1,785	78,334	11,677.9
Mississippi River States	1931	15,884	----------	14,546	82,383	2,897.3
Alaska	1946	10,194	1,132	3,968	651,446	28,876.3

[1] Data for Florida for 1940. [2] Data for 1940.

Source of tables 838 and 839: Department of the Interior, Fish and Wildlife Service; annual bulletins.

No. 840.—Fisheries—Quantity and Value of Catch, by Sections and States: 1880 to 1946

[Values represent the value of fish to fishermen]

Calendar year	New England states					
	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	92.7
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
1935	655,430	17,983.6	112,219	3,309.2	354	61.6
1940	626,054	20,493.7	88,088	2,606.4	788	105.2
1942	705,085	36,293.6	168,392	5,229.2	1,652	332.0
1943	645,590	43,003.2	133,920	7,010.1	3,128	611.5
1944	713,692	41,909.6	161,285	7,053.2	1,673	322.4
1945	845,471	56,589.0	184,425	12,499.1	1,549	487.7
	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
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
1935	503,417	12,147.9	24,524	1,247.9	14,916	1,217.0
1940	510,938	15,755.8	12,060	966.2	14,180	1,060.2
1942	509,099	28,377.5	12,889	1,366.6	13,053	988.3
1943	477,012	32,328.5	16,134	1,619.6	15,396	1,433.5
1944	520,539	31,441.0	15,787	1,797.8	14,408	1,295.1
1945	625,878	39,643.3	20,525	2,376.9	13,094	1,582.0

Calendar year	Middle Atlantic states									
	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
1930	193,868	13,063.7	45,495	4,933.7	97,275	7,474.4	17	2.8	51,081	652.8
1935	279,438	6,415.7	84,939	3,135.4	107,802	2,844.3	31	5.7	86,666	430.4
1940	355,553	7,651.0	91,959	4,216.2	160,554	2,956.9	23	2.4	103,017	475.4
1942	319,193	12,468.2	84,396	6,613.1	145,120	5,080.9	26	1.8	89,651	772.4
1943	321,026	18,045.8	84,898	10,358.8	148,860	6,752.3	--------	--------	87,268	934.7
1944	422,980	21,329.9	102,632	11,523.7	166,051	8,271.2	--------	--------	154,297	1,535.0
1945	494,193	23,224.2	117,548	10,052.7	207,647	11,062.5	--------	--------	168,998	2,109.0

Calendar year	Chesapeake Bay states					
	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
1930	316,393	11,472.0	71,099	3,984.7	245,294	7,487.3
1935	265,827	5,524.5	48,235	2,003.6	217,592	3,520.9
1940	320,736	7,456.4	51,085	2,598.6	269,651	4,857.9
1942	202,240	10,061.0	46,787	4,089.2	155,454	5,971.8
1944	267,391	19,823.2	51,563	7,377.0	215,828	12,446.2
1945	304,463	30,363.2	51,676	8,844.9	252,787	21,518.3

Calendar year	South Atlantic states									
	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
1928	262,118	6,196.2	141,899	2,629.2	7,432	316.8	42,069	866.3	70,718	2,383.9
1930	275,807	4,270.0	168,938	1,836.4	5,106	252.9	34,873	536.3	66,890	1,644.4
1934	261,080	3,624.1	163,462	1,672.2	5,891	225.3	27,141	359.5	64,586	1,367.1
1940	325,515	4,064.1	170,581	1,864.6	9,446	265.8	12,672	380.6	132,816	1,553.1
1945	401,208	14,654.2	198,169	5,495.2	10,856	899.3	21,398	1,349.5	170,785	6,910.2

No. 840.—Fisheries—Quantity and Value of Catch, by Sections and States: 1880 to 1946—Continued

Calendar year	Gulf states: 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
1928	191,007	9,866.3	61,121	3,866.5	14,466	586.8
1930	141,953	6,794.9	53,525	3,001.4	7,113	315.5
1934	186,834	6,369.6	54,215	2,267.6	7,964	253.4
1940	250,018	10,580.8	54,676	3,451.6	11,344	561.9
1945	347,387	41,060.9	73,060	11,925.9	15,137	2,443.3

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
1928	30,701	1,060.1	69,507	3,477.9	15,212	875.0
1930	15,736	740.1	49,886	1,960.4	15,693	777.5
1934	22,153	652.3	76,633	2,284.6	25,869	911.7
1940	38,002	623.1	126,627	4,951.5	19,369	992.7
1945	70,786	1,711.4	166,471	21,395.1	21,933	3,585.2

Calendar year	Pacific coast states: Total		Washington		Oregon		California		Alaska	
	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
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	9,306.0	170,594	5,321.0	34,693	1,479.0	99,509	2,506.0	--------	--------
1925	627,025	24,580.5	139,457	9,476.4	40,008	3,442.4	447,560	11,661.7	616,136	9,860.7
1930	833,389	23,064.1	110,039	8,334.8	26,459	2,256.3	696,891	12,473.0	620,702	12,755.6
1935	1,676,236	23,088.8	124,086	6,328.7	85,392	2,076.8	1,466,758	14,683.3	648,710	9,093.2
1940	1,456,281	29,578.0	111,632	6,676.3	54,203	2,741.8	1,290,446	20,159.9	563,688	10,612.1
1942	1,374,688	49,244.1	138,162	16,042.1	65,326	7,191.2	1,171,200	26,010.8	522,179	17,933.6
1943	1,453,263	57,322.7	155,310	17,859.5	70,289	7,780.6	1,227,664	31,682.5	594,645	20,505.9
1944	1,667,695	59,794.6	154,402	16,559.3	71,026	7,936.3	1,442,267	35,299.0	561,199	20,413.5
1945	1,428,278	62,694.3	196,136	18,154.6	72,774	7,507.3	1,159,369	37,032.4	596,052	22,288.1

Calendar year	Great lakes [1]: Total [2]		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
1927	81,327	6,794.9	15,302	918.1	23,681	2,354.8	15,711	1,444.4	23,796	1,831.3
1930	94,948	6,050.3	14,694	695.3	30,973	2,159.0	16,377	1,319.9	29,540	1,655.5
1935	90,223	5,944.9	17,874	940.6	25,089	1,942.6	13,676	1,224.1	30,357	1,643.6
1940	79,296	5,623.4	20,672	904.4	22,814	2,049.5	9,099	679.9	22,944	1,772.0
1942	75,246	8,629.5	19,228	1,498.3	21,404	3,203.8	8,465	1,011.5	24,131	2,740.6
1943	78,221	12,267.6	18,372	2,214.8	22,174	4,597.7	8,610	1,075.3	27,114	4,134.3
1944	75,688	10,948.2	19,245	2,246.4	19,252	4,341.9	6,432	831.7	28,837	3,320.0
1945	78,643	13,800.1	18,725	2,574.0	22,090	5,570.9	7,475	1,129.0	28,631	4,266.9
1946	78,334	11,677.9	17,848	2,218.9	22,392	3,907.4	7,147	842.2	29,121	4,489.2

[1] Collected for most part by State fishery agencies and compiled by Fish and Wildlife Service since 1927.
[2] Includes, in addition to lakes shown, small amounts for Lake Ontario and also prior to 1927, Lake St. Clair and St. Clair and Detroit Rivers and beginning 1927, Lake-of-the-Woods, Namakan Lake, and Rainy Lake.

No. 840.—Fisheries—Quantity and Value of Catch, by Sections and States: 1880 to 1946—Continued

MISSISSIPPI RIVER AND TRIBUTARIES

CALENDAR YEAR	Total	
	1,000 pounds	1,000 dollars
1894	44,545	1,384.6
1899 [3]	96,797	1,781.0
1903 [3]	93,374	1,841.2
1908 [3]	148,284	3,125.0
1922	105,734	4,503.5
1931	82,383	2,897.3
	Mississippi and minor tributaries	
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	2,034	136.3	[4] 777	[4] 49.9
Atchafalaya	4,579	254.7	9,231	523.1
Cumberland	728	14.7	106	13.0
Illinois [4]	12,661	617.3	5,985	159.7
Missouri [4]	1,232	105.2	1,051	94.3
Ohio River and minor tributaries	7,458	379.1	1,221	96.5
Red [4]	6,677	324.5	6,417	277.4
St. Francis [4]	3,684	108.9	2,173	65.6
Tennessee [4]	4,990	98.3	5,222	75.0
Wabash [4]	12,063	357.8	8,388	152.0
White (Missouri and Arkansas) [4]	14,662	405.9	12,363	256.7
Yazoo	1,022	55.6	[4] 1,311	[4] 57.8

[3] Excluding Atchafalaya River. [4] Including tributaries.

No. 841.—Fisheries—Catch of Principal Species: 1931 to 1947

[In thousands of pounds. Includes Alaska]

GROUP AND SPECIES	1931	1939	1941	1942	1943	1944	1945	1946 [1]	1947 [1]
FISH									
Cod	112,303	124,347	(2)	73,456	71,643	(2)	153,027	95,000	71,000
Haddock	182,561	170,975	177,659	145,687	125,693	142,692	154,988	156,000	170,000
Herring, sea	169,574	262,810	(2)	145,779	154,545	(2)	236,919	280,000	311,000
Mackerel	61,645	113,503	(2)	103,628	134,308	(2)	112,390	108,000	(2)
Menhaden	230,398	575,480	775,087	474,821	615,554	685,980	778,464	916,000	948,000
Pilchard or sardine	300,204	1,240,975	1,328,378	974,680	986,563	1,135,582	849,971	531,000	253,000
Salmon	601,095	526,978	629,480	508,598	500,613	430,997	498,892	478,261	488,500
Tuna and tunalike	60,059	182,165	135,720	121,791	130,043	170,053	185,925	224,000	271,000
Rosefish	237	78,206	(2)	128,107	114,744	(1)	131,834	178,200	146,600
SHELLFISH									
Crabs	83,701	109,414	(2)	(2)	(2)	(2)	121,050	(2)	(2)
Shrimp	99,432	150,250	(2)	(2)	(2)	(2)	191,345	(2)	(2)
Oysters	101,036	93,006	(2)	(2)	(2)	(2)	75,655	(2)	(2)
Whale products	--------	5,159	495	806	496	99	----------	--------	744

[1] Preliminary.
[2] Complete data not available.

No. 842.—Fisheries—Disposition of Domestic Catch: 1942 to 1947

[Includes Alaska. A large portion of waste derived from canning, filleting, and dressing fish and shellfish is utilized in production of fish meal and oil in addition to whole fish used in manufacture of these products. About 600,000,000 pounds of waste were used in production of meal and oil each year shown. See also *Historical Statistics*, series F 155–159]

FORM MARKETED	ROUND WEIGHT OF CATCH (thousands of pounds)					
	1942	1943	1944	1945	1946 [1]	1947 [1]
Total	**3,877,000**	**4,202,000**	**4,500,000**	**4,575,500**	**4,455,600**	**4,378,000**
Fresh and frozen	1,407,000	1,547,000	1,585,000	1,846,500	1,710,600	1,678,000
Canned	1,230,000	1,150,000	1,225,000	1,230,000	1,220,000	1,275,000
Cured	115,000	105,000	110,000	110,000	115,000	115,000
Byproducts, bait, etc	1,125,000	1,400,000	1,580,000	1,389,000	1,410,000	1,310,000

[1] Preliminary.

Source of tables 840, 841, and 842: Department of the Interior, Fish and Wildlife Service; annual bulletins.

No. 843.—Landings by Fishing Craft at Principal Atlantic Ports: 1942 to 1947

Port and year	Total, all species	Cod	Haddock	Hake	Pollock	Cusk	Whiting	Mackerel	Rosefish	Flounders	Miscellaneous
	Quantity (thousands of pounds)										
Boston:											
1942	194,687	35,410	100,199	1,730	10,613	1,866	11,400	14,130	9,949	7,338	2,052
1943	142,975	28,760	74,845	1,676	6,131	1,164	7,672	9,781	5,087	5,896	1,963
1944	153,123	43,108	73,692	1,669	6,983	877	5,295	14,274	2,033	4,163	1,029
1945	188,161	72,895	66,354	1,123	10,300	281	9,958	17,725	1,377	6,908	1,240
1946	158,152	35,655	71,414	2,205	13,028	391	6,684	14,081	5,195	8,035	1,464
1947	202,663	34,409	107,465	3,536	8,031	572	10,231	13,321	10,526	11,581	2,991
Gloucester:											
1942	157,741	6,353	7,830	1,479	13,883	548	15,611	14,257	91,285	6,139	356
1943	170,099	11,428	14,939	2,254	9,928	503	13,431	26,919	83,992	4,211	2,494
1944	192,710	19,965	16,156	5,193	10,141	680	9,850	33,545	91,582	4,216	1,382
1945	213,498	25,797	21,786	11,544	15,792	773	16,830	11,890	102,038	4,830	2,218
1946	217,968	16,898	16,188	4,286	18,393	844	8,857	15,498	130,900	3,989	2,115
1947	163,713	8,276	12,692	2,524	5,569	487	9,126	24,011	95,357	2,115	3,556
New Bedford:											
1942	57,884	2,956	4,787	56	83	1	17	3,346	54	0,874	5,759
1943	62,164	5,816	7,926	860	136	1	97	6,330	3	3,614	7,384
1944	74,936	8,211	22,466	2,174	223	(1)	135	6,196	72	7,580	7,944
1945	101,363	10,768	34,427	5,913	1,131	2	101	12,076	152	8,799	8,131
1946	90,324	11,568	33,020	323	1,394	2	8	2,252	195	31,364	10,198
1947	73,115	3,914	15,389	2,520	123	1	355	4,456	498	34,499	11,360
Provincetown and Cape Cod:											
1945	43,418	3,615	4,420	537	685	85	19,243	4,262	53	5,905	4,613
1946	40,970	3,765	5,558	477	1,249	56	14,520	4,868	764	5,512	4,201
1947	34,566	3,006	3,251	536	534	52	14,422	2,580	216	5,183	4,786
New York City:											
1942	26,945	2,118	7,136	224	94	(1)	673	471	17	10,443	5,769
1943	22,121	1,870	8,007	320	100	1	1,073	759	7	5,895	4,089
1944	19,143	1,505	7,467	173	94	------	226	365	-------	3,567	5,746
1945	16,596	1,006	7,788	232	142	------	227	91	-------	3,517	3,593
1946	18,015	1,486	7,530	109	149	(1)	98	375	-------	3,270	4,998
1947	9,611	740	4,110	108	58	------	31	210	-------	2,388	1,966
	Value (thousands of dollars)										
Boston:											
1942	12,548.7	2,100.1	6,910.3	135.3	644.2	119.0	584.8	870.1	359.7	484.2	341.0
1943	12,603.6	2,595.4	7,004.3	139.2	507.9	91.3	342.6	762.9	249.4	482.8	427.8
1944	10,685.4	2,983.9	5,634.5	112.7	381.1	56.6	215.4	799.7	84.0	296.6	120.9
1945	13,789.6	5,198.8	5,224.7	81.0	622.6	19.0	449.4	1,563.5	55.4	430.3	144.9
1946	13,693.8	2,779.5	7,385.3	151.7	562.2	24.0	300.4	1,106.0	236.3	665.9	482.3
1947	14,973.4	2,344.9	8,547.6	223.5	368.9	33.4	434.7	783.7	478.3	1,035.8	722.6
Gloucester:											
1942	6,083.9	423.0	486.6	69.0	757.9	22.6	635.4	683.0	2,740.3	252.8	13.3
1943	9,046.5	990.8	1,300.9	153.3	551.7	33.6	562.5	1,616.9	3,399.0	298.3	139.5
1944	9,260.5	1,362.6	1,215.1	256.4	507.8	41.0	388.7	1,483.3	3,560.8	279.1	165.7
1945	11,183.9	1,813.3	1,744.5	401.8	832.8	46.5	742.5	925.2	3,956.8	311.5	409.0
1946	10,822.3	1,146.8	1,260.8	200.2	714.2	46.1	374.5	753.7	5,839.6	251.1	235.4
1947	7,636.0	433.9	881.0	93.4	205.3	17.7	371.8	1,121.3	4,199.7	114.4	197.5
New Bedford:											
1942	4,552.8	212.7	352.1	1.6	5.0	(1)	.5	177.9	(1)	1,994.5	1,808.5
1943	5,979.9	452.6	628.9	32.1	8.8	(1)	3.5	566.8	-------	2,506.3	1,780.9
1944	6,281.1	576.7	1,682.4	53.2	11.3	(1)	4.9	313.1	(1)	2,026.4	1,613.1
1945	8,600.8	775.5	2,654.6	122.3	72.1	(1)	3.7	1,032.8	.6	2,302.0	1,637.2
1946	12,241.4	930.4	2,951.2	21.1	84.1	(1)	(1)	177.4	8.6	2,874.3	5,194.0
1947	10,417.3	279.7	1,155.3	37.0	4.7	(1)	7.2	198.7	14.5	3,347.5	5,372.8
Provincetown and Cape Cod:											
1945	2,294.6	260.5	320.1	34.7	30.8	5.0	525.0	284.3	2.1	430.8	401.3
1946	2,399.7	310.6	462.0	24.9	56.0	2.3	337.4	360.1	32.5	418.1	395.8
1947	2,432.2	235.5	251.9	22.0	24.3	1.4	335.0	159.9	7.9	449.9	944.3

[1] Less than 500 pounds or $500.

Source: Department of Interior, Fish and Wildlife Service; annual bulletins.

No. 844.—Canned Fishery Products, Fish Meal, and Fish Oil—Production and Value: 1937 to 1947

[Includes Alaska]

YEAR	Canned		Scrap and meal		Oil (except vitamin)		Vitamin oil
	1,000 pounds	*1,000 dollars*	*Tons*	*1,000 dollars*	*1,000 gallons*	*1,000 dollars*	*1,000 dollars*
1937	717,270	105,175	219,942	7,566	31,391	12,695	2,204
1938	649,413	83,446	205,216	7,418	30,445	9,876	2,476
1939	688,277	96,628	226,102	9,094	29,069	8,601	4,472
1940	681,194	94,182	193,244	7,834	18,250	5,632	5,088
1941	885,962	138,684	236,844	13,096	22,016	11,893	14,872
1942	660,549	144,997	171,080	11,626	19,549	12,518	10,372
1943	620,880	141,189	190,403	13,629	22,264	14,971	14,842
1944	658,660	152,914	212,000	15,200	27,324	17,771	13,237
1945	646,386	152,801	200,675	14,405	23,698	16,034	11,202
1946	699,378	227,629	199,621	20,439	19,135	21,223	13,619
1947	754,133	310,680	186,440	22,380	15,900	20,107	11,643

Source: Department of the Interior, Fish and Wildlife Service; annual bulletins.

No. 845.—Canned Fishery Products—Production and Value: 1933 to 1947

[Includes Alaska. See also *Historical Statistics*, Series F 200–209, for total fishery products, salmon, sardines, and tuna and tunalike fishes]

YEAR	Total	Salmon	Sardines		Tuna and tuna like fishes	Mackerel	Shrimp	Clam products	Oysters	Other
			Maine	Calif.						
	Quantity (thousands of pounds)									
1933	518,996	305,398	19,912	69,275	31,976	33,686	24,201	10,239	5,222	19,087
1934	681,304	402,386	23,197	88,652	43,567	57,394	16,974	16,392	6,578	26,164
1935	647,642	289,339	33,614	108,902	55,691	81,550	18,230	16,674	7,513	36,129
1936	769,573	430,328	37,471	117,744	59,506	55,658	15,366	19,123	7,931	26,446
1937	717,270	362,642	34,109	126,560	69,522	37,837	21,523	19,577	10,634	34,806
1938	649,413	349,427	13,634	101,776	60,945	43,453	18,113	19,312	7,237	35,516
1939	688,277	287,621	44,872	139,864	79,695	40,023	20,651	24,515	9,080	41,956
1940	681,194	269,040	22,690	132,565	91,144	63,985	16,744	24,257	9,668	51,101
1941	885,962	375,918	63,565	225,322	61,563	42,075	16,468	25,271	9,190	66,590
1942	660,549	280,080	55,219	168,508	52,500	32,454	14,450	21,331	7,326	28,681
1943	620,880	273,802	47,772	150,961	56,563	42,176	9,907	12,197	4,842	22,660
1944	658,660	246,655	61,627	164,291	70,185	55,128	8,425	13,661	3,830	34,858
1945	646,386	235,596	51,061	169,469	88,978	31,174	3,225	21,502	3,164	42,217
1946	699,378	221,554	61,315	133,973	93,888	43,297	7,832	40,493	5,472	91,554
1947	754,133	270,837	57,544	74,367	117,469	78,973	7,085	36,136	5,747	105,975
	Value (thousands of dollars)									
1933	59,800	36,242	2,397	3,805	6,934	1,868	3,479	1,766	1,076	2,233
1934	80,021	45,818	3,315	5,481	10,010	3,245	4,403	2,713	1,871	3,165
1935	74,999	32,475	5,143	6,237	12,824	4,976	4,722	2,681	2,045	3,896
1936	94,564	50,061	5,740	7,302	14,715	3,543	4,672	2,976	2,181	3,374
1937	105,175	52,934	4,998	8,592	18,996	2,674	7,131	3,013	2,933	3,904
1938	83,446	42,366	2,367	7,102	15,184	2,896	4,872	3,190	1,886	3,583
1939	96,628	41,781	7,075	9,554	20,080	2,589	5,398	3,798	2,379	3,974
1940	94,182	38,050	3,736	8,975	23,728	4,101	4,318	3,778	2,527	4,969
1941	138,684	67,417	12,476	18,092	19,398	3,504	4,883	3,711	2,997	6,206
1942	144,997	61,974	11,692	15,510	30,742	3,693	7,347	3,791	3,599	6,649
1943	141,189	62,935	10,686	14,352	31,430	5,271	5,361	2,802	2,822	5,530
1944	152,914	56,383	14,224	15,226	40,836	7,034	4,855	3,821	2,283	8,252
1945	152,801	52,586	11,520	15,346	47,407	4,047	1,919	7,391	2,030	10,555
1946	227,629	73,641	19,549	19,896	59,136	7,575	8,429	11,145	5,249	23,009
1947	310,680	120,660	27,678	16,538	90,609	15,019	8,192	8,642	4,259	19,083

Source: Department of the Interior, Fish and Wildlife Service; annual bulletins.

No. 846.—Fresh and Frozen Packaged Fish—Production, by Principal Species: 1931 to 1947

[Includes Alaska]

YEAR	Total	Cod	Flounders	Haddock	Rosefish	Whiting [1]	Other
	Quantity (thousands of pounds)						
1931	65,074	8,721	1,494	42,311	----------	----------	12,548
1932 [2]	51,975	7,786	1,687	33,401	----------	----------	9,101
1933	62,732	11,577	3,756	35,149	----------	----------	12,250
1934	80,106	15,239	4,648	36,666	[3] 550	----------	23,003
1935	107,494	17,747	6,166	46,484	4,320	----------	32,777
1936	113,356	17,896	5,850	41,187	15,521	----------	32,902
1937	116,992	22,507	7,870	40,241	15,509	----------	30,865
1938	129,976	21,189	8,115	41,453	19,152	7,603	32,464
1939	137,268	19,401	10,645	38,432	25,003	12,421	31,366
1940	129,420	14,541	11,245	36,747	22,997	13,256	30,634
1941	182,951	16,790	20,455	46,912	41,817	24,019	32,958
1942 [4]	173,362	12,930	24,869	41,875	37,680	24,583	31,425
1943 [4]	158,639	13,714	24,517	32,219	31,012	22,315	34,862
1944 [4]	172,294	22,083	18,073	38,403	34,531	18,510	40,694
1945 [4]	204,927	28,864	19,961	44,197	35,456	29,959	46,490
1946 [4]	184,480	18,132	21,900	42,441	49,507	22,129	34,371
1947 [4]	184,967	14,032	20,594	43,205	50,587	28,018	28,531
	Value (thousands of dollars)						
1931	9,452	1,118	289	6,152	----------	----------	1,893
1932 [2]	5,742	857	266	3,357	----------	----------	1,262
1933	6,967	1,242	568	3,457	----------	----------	1,700
1934	9,001	1,677	722	3,801	[3] 55	----------	2,746
1935	11,202	1,751	973	4,427	440	----------	3,611
1936	12,147	1,895	906	4,266	1,514	----------	3,566
1937	12,861	2,262	1,287	4,162	1,495	----------	3,655
1938	12,315	2,025	1,253	3,428	1,568	362	3,679
1939	14,028	1,930	1,432	3,783	2,544	562	3,777
1940	14,345	1,760	1,542	4,479	2,272	561	3,731
1941	23,930	2,435	3,171	6,848	4,808	1,484	5,184
1942 [4]	33,991	2,778	5,867	9,661	6,907	2,240	6,538
1943 [4]	37,589	3,516	7,299	9,091	6,952	2,194	8,537
1944 [4]	40,820	5,461	5,423	10,597	7,745	1,955	9,639
1945 [4]	48,371	7,452	6,086	12,349	7,673	3,098	11,713
1946 [4]	46,283	4,747	6,877	12,987	11,710	2,168	7,794
1947 [4]	44,662	3,459	7,004	12,094	11,941	2,658	7,506

[1] Data incomplete for years prior to 1938. [2] Excludes California production. [3] Estimated.
[4] Excludes California production. In 1941, yield of packaged fish in California totaled 5,384,000 pounds, valued at $1,032,000 of which 1,380,000 pounds were flounders, valued at $226,000.

Source: Department of the Interior, Fish and Wildlife Service; annual bulletins.

No. 847.—Frozen Fishery Products—Production: 1939 to 1948

[**In thousands of pounds.** Includes Alaska. Through 1942 for month ending on 15th, thereafter for calendar month. For cold storage holdings, see table 801. See also *Historical Statistics*, Series F 199, for annual figures]

MONTH	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948
Total	183,408	196,155	246,588	247,165	246,053	266,537	286,001	280,065	246,625	291,988
January	6,714	8,849	8,077	8,740	6,740	9,021	4,925	6,228	4,394	6,384
February	6,465	6,895	7,604	6,559	6,792	8,813	4,191	6,231	3,439	7,927
March	4,460	6,324	5,838	7,018	9,150	11,262	6,890	11,077	8,225	14,365
April	6,903	5,664	8,568	10,376	9,958	17,375	12,962	12,504	11,711	15,227
May	15,240	11,772	18,910	22,669	22,220	32,640	27,630	34,375	25,188	38,088
June	21,163	23,200	25,698	25,459	36,025	34,849	39,392	38,203	30,039	40,920
July	22,689	25,064	30,819	34,038	34,438	40,573	42,856	43,269	33,280	40,351
August	22,442	24,616	34,208	35,634	34,766	32,602	45,623	37,940	39,809	34,598
September	20,485	23,707	28,562	28,564	26,913	28,004	33,257	27,372	27,730	29,112
October	17,024	21,558	27,226	26,281	18,806	23,733	27,472	29,983	29,625	27,113
November	18,434	22,190	29,482	22,701	24,948	18,104	26,212	20,308	16,848	22,379
December	21,389	16,316	21,596	19,126	15,297	9,561	14,591	12,575	16,337	15,524

Source: Department of the Interior, Fish and Wildlife Service; current and annual bulletins.

No. 848.—Fishery Products—Imports and Exports: 1937 to 1947

YEAR	IMPORTS				EXPORTS			
	Total	Edible products		Non-edible	Total	Edible products		Non-edible
	1,000 dollars	*1,000 pounds*	*1,000 dollars*	*1,000 dollars*	*1,000 dollars*	*1,000 pounds*	*1,000 dollars*	*1,000 dollars*
1937	50, 636	364, 668	33, 911	16, 725	14, 567	119, 068	13, 729	838
1938	39, 307	302, 624	28, 349	10, 958	14, 415	118, 029	13, 798	617
1939	45, 999	346, 240	32, 404	13, 595	14, 207	124, 974	13, 580	627
1940	41, 830	302, 518	29, 073	12, 757	17, 785	144, 804	17, 115	670
1941	40, 981	305, 875	28, 040	12, 941	22, 008	215, 990	21, 479	529
1942	39, 629	277, 199	28, 984	10, 645	31, 989	167, 080	27, 875	4, 114
1943	67, 231	324, 389	43, 669	23, 562	48, 586	239, 260	43, 244	5, 342
1944	78, 519	339, 431	53, 431	25, 088	36, 033	112, 230	31, 929	4, 104
1945	101, 251	404, 768	76, 434	24, 817	38, 558	136, 013	30, 903	7, 655
1946 (prel.)	129, 615	473, 366	89, 961	39, 654	68, 224	205, 941	39, 629	28, 595
1947 (prel.)	109, 972	407, 636	83, 275	26, 697	81, 543	211, 631	50, 318	31, 225

Source: Department of the Interior, Fish and Wildlife Service; compiled from data furnished by Department of Commerce, Bureau of the Census.

No. 849.—Fish Propagation by Fish and Wildlife Service—Output of Eggs, Fry, and Fingerlings, 1895 to 1947, and by Species, 1947

[All quantities in thousands]

YEAR ENDING JUNE 30—	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
1930	7, 570, 482	2, 553, 481	4, 766, 831	250, 170	120. 50
1935	5, 071, 725	3, 381, 794	1, 556, 246	133, 683	117. 22
1940	7, 407, 247	5, 826, 059	1, 498, 157	83, 031	134. 87
1943 (Dec. 31)	6, 894, 962	4, 649, 768	2, 163, 796	81, 398	144. 82
1944 (Dec. 31)	5, 740, 180	3, 393, 619	2, 267, 662	78, 899	196. 38
1945 (Dec. 31)	5, 454, 558	3, 176, 357	2, 203, 672	74, 529	214. 15
1946 (Dec. 31)	4, 661, 303	2, 899, 242	1, 674, 515	87, 546	319. 42
1947 (Dec. 31)	2, 656, 094	1, 346, 401	1, 218, 249	91, 444	594. 01

GROUP	1947			GROUP	1947		
	Eggs	Fry	Fingerlings or larger		Eggs	Fry	Fingerlings or larger
Catfish (bullheads)			374	Northern pike	6, 071	5, 390	12
Channel catfish		131	117	Walleyed pike		7, 860	47
Catfish (yellow)			4	Crappie (black)			46
Buffalofish	152, 250		11	Crappie (White)			225
Shad		14, 311	2	Largemouth black bass		2, 032	5, 362
Striped bass		7, 756		Smallmouth black bass		851	192
Atlantic salmon			150	Rock bass			14
Chinook salmon	8, 971	26, 852	31, 136	Warmouth bass			20
Chum salmon		8, 021		Bluegill sunfish			31, 784
Landlocked salmon	1		31	Green sunfish			57
Silver salmon			1, 776	Red-eared sunfish			490
Sockeye salmon	10		4, 074	Pickerel			10
Steelhead trout			263	Yellow perch			34
Rainbow trout	11, 774	208	5, 985	White perch		1, 950	
Cut-throat trout	14, 471	3, 897	2, 596	Cod	87, 600		
Lock Laven trout or brown trout	2, 275	76	1, 844	Haddock	27, 200		
Lake trout	11	108	509	Flounder		1,136,738	
Brook trout	11, 754	904	4, 224	Pollock	1,021,934		
Grayling	2, 079		48	Lobster		1, 164	
				Terrapin			7

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

Source: Department of the Interior, Fish and Wildlife Service; annual bulletins and reports.

27. Mining and Mineral Products

This section summarizes the principal statistics relating to the mineral industries and mineral products. It includes not only the crude and prepared minerals associated with the mineral extraction, but also some of the finished products manufactured from minerals. Statistics relating to the manufacture of mineral products are also included in section 32, Manufactures. Additional information relating to the mineral industries and mineral products appear also in other sections of this Abstract such as the section on labor force, prices, foreign commerce, and others.

Most of the statistics in this section are from the Bureau of Mines and the Bureau of the Census, with additional material from other Government agencies such as the Bureau of Labor Statistics, Bureau of the Mint, and the Interstate Commerce Commission and from non-Government sources such as the Engineering and Mining Journal, American Metal Market, the Iron Age, and the American Gas Association. Data in this section cover the following areas unless otherwise indicated: Bureau of Mines production statistics, continental United States, and, for leading products, outlying areas; Bureau of Census statistics, continental United States; foreign trade statistics, the United States customs area, which includes Alaska, Hawaii, Puerto Rico, and for 1935 to 1939, the Virgin Islands.

Mineral statistics, with principal emphasis on commodity detail, have been collected annually or at more frequent intervals by the United States Geological Survey or by the Bureau of Mines since 1880. The principal statistics have been published annually through 1931 in Mineral Resources of the United States and thereafter in the Minerals Yearbook. Data available from Bureau of Mines publications include quantities and values of minerals produced, sold or used by producers, or shipped; quantities of minerals stocked; crude materials treated and prepared minerals recovered, by method of treatment; and mineral content of materials produced. Data on production are sometimes available by method of extraction. Shipments or sales of products are classified in many cases by grade, by end use, or by State of destination. The Bureau of Mines also collects and publishes separate data on employment and accidents. The number of workers and man-days or man-hours worked, as measures of exposure to accidents, are tabulated only for broad industry groups.

Censuses of mineral industries have been taken approximately every 10 years since 1840. The statistics are collected and published in the Census volumes in such a manner as to relate the statistics on the production of the various minerals as nearly as possible to data on employment, principal expenses, fuels and power consumed, and other information available only for each establishment as a whole. Each establishment is classified according to its most valuable product. The data are also collected and compiled in a manner to permit integration with other Census statistics such as for manufactures and wholesale and retail trade. Data are available on the number of operations, quantity and value of products, number of persons engaged (sometimes by department or type of work), principal expenses (wages, salaries, cost of supplies and materials, fuel, purchased electric energy, and work done on contract), horsepower of power equipment, and sometimes other items, such as man-hours, cost of buildings, machinery and equipment, number and type of power-loading machines, cost of drilling oil and gas wells, development work, and capital invested. Commodity statistics on many of the manufactured mineral products are also collected by the Bureau of the Census at monthly, quarterly, or annual intervals.

To avoid misinterpretation, it should be noted that the Census of Mineral Industries statistics in tables 854–856 relate to operations primarily engaged in extracting minerals and in such primary mineral-preparation activities (crushing, screening, washing, flotation, etc.) as are needed to render the minerals marketable. Many of the statistics collected by the Bureau of Mines represent products of operations beyond the limits covered by the Census of Mineral Industries. Value totals based on Bureau of Mines publications, as shown in tables 850 and 853, are not comparable with the Census value totals, as shown in tables 854–856. Census values represent crude or prepared minerals f. o. b. the mine, well, or mineral-preparation plant. Bureau of Mines value totals include for most metallic products the value of ingot metal rather than the value of ores and concentrates, the value of natural gas at points of consumption rather than at wells, and the value of such manufactured products as cement and lime rather than the value of the limestone used in producing them.

Historical statistics.—In this section, tabular headnotes (as "See also *Historical Statistics*, series G 1–5") provide cross-references, where applicable, to Historical Statistics of the United States, 1789–1945. In that historical supplement to the Statistical Abstract, statistics are carried back year by year as far as possible. See also the historical appendix of the present issue of the Abstract for specific titles of series and the earliest year shown in the supplement.

No. 850.—Mineral Products of the United States—Value, for Metallic and Nonmetallic: 1881 to 1947

[All figures in millions of dollars. See general note, p. 757. See also *Historical Statistics*, series G 1-5]

Yearly average or year	Total	Metallic	Nonmetallic			Year	Total	Metallic	Nonmetallic		
			Total	Fuels[1]	Other				Total	Fuels[1]	Other
1881-1885	426	194	232	171	61	1929	5,888	1,480	4,407	3,191	1,217
1886-1890	541	249	292	215	78	1930	4,765	986	3,779	2,765	1,015
1891-1895	592	245	347	248	99	1931	3,167	570	2,597	1,892	704
1896-1900	828	366	462	307	154	1932	2,462	286	2,176	1,743	432
1901-1905	1,392	578	814	546	267	1933	2,555	417	2,138	1,683	455
1906-1910	1,887	769	1,118	746	372	1934	3,325	549	2,776	2,233	543
1911-1915	2,220	821	1,400	967	433	1935	3,650	733	2,917	2,330	587
1916-1920	5,129	1,798	3,331	2,602	729	1936	4,557	1,082	3,475	2,759	716
1921-1925	5,151	1,154	3,997	2,943	1,054	1937	5,413	1,468	3,945	3,201	745
1926-1930	5,556	1,276	4,280	3,088	1,192	1938	4,363	893	3,471	2,820	650
1931-1935	3,032	511	2,521	1,977	544	1939	4,914	1,292	3,623	2,834	788
1936-1940	4,972	1,283	3,690	2,946	744	1940	5,614	1,679	3,935	3,117	819
1941-1945	7,817	2,260	5,557	4,562	995	1941	6,878	2,132	4,746	3,708	1,038
1923	5,987	1,512	4,475	3,317	1,157	1942	7,576	2,364	5,212	4,103	1,109
1924	5,306	1,233	4,072	2,899	1,174	1943	8,072	2,488	5,584	4,608	976
1925	5,678	1,382	4,295	3,059	1,237	1944	8,417	2,340	6,077	5,178	899
1926	6,214	1,405	4,808	3,542	1,266	1945	8,141	1,975	6,166	5,212	954
1927	5,530	1,221	4,309	3,060	1,249	1946	8,896	1,825	7,071	5,760	1,311
1928	5,385	1,288	4,097	2,885	1,212	1947	12,393	2,915	9,478	7,843	1,635

[1] Coal, natural gas, natural gasoline and allied products, petroleum.

Source: Department of the Interior, Bureau of Mines; Minerals Yearbook.

No. 851.—Nonferrous Metals—Yearly Average Prices, by Kind: 1896 to 1948

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

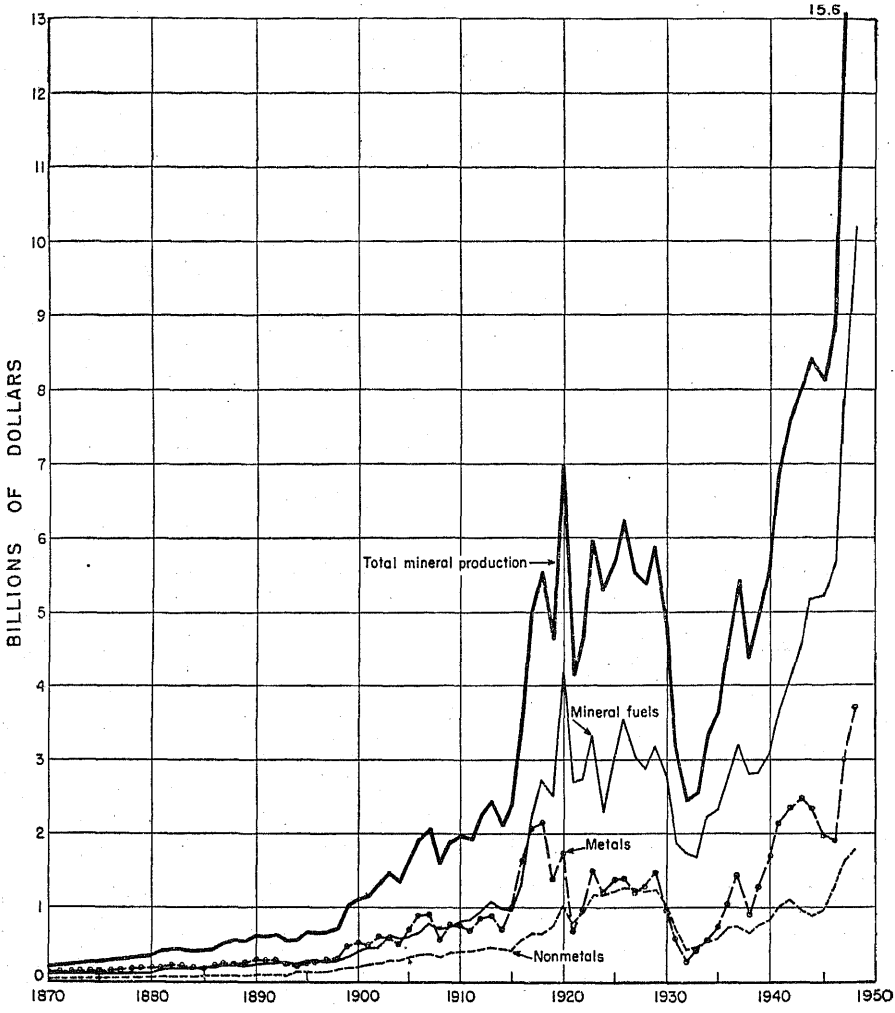
Year	Copper, electrolytic (New York)	Lead (New York)	Tin (New York)[1]	Zinc (St. Louis)	Aluminum, delivered[2]	Antimony (New York)	Quicksilver (New York)[3]	Platinum (New York)
1896-1900	[4] 13.41	3.84	19.54	[5] 4.55	37.15	8.204	42.17	[6] 16.66
1901-1905	13.877	4.330	28.19	[7] 5.284	33.80	7.398	43.17	19.55
1906-1910	15.642	4.780	34.26	5.432	31.12	11.885	44.12	26.58
1911-1915	14.973	4.359	41.10	7.205	23.84	12.373	52.77	45.16
1916-1920	23.031	7.355	[8] 54.43	8.783	42.14	15.063	105.71	103.54
1921-1925	13.474	6.933	42.64	6.189	23.88	9.331	64.76	105.42
1926-1930	14.475	6.765	51.38	6.135	24.80	11.062	114.15	77.90
1931-1935	7.555	3.843	37.64	3.806	22.40	8.271	70.07	34.75
1936-1940	10.980	5.138	48.39	5.495	20.12	13.261	105.28	41.05
1941-1945	11.77	6.355	52.01	8.095	15.37	15.433	165.97	35.42
1929	18.107	6.833	45.16	6.512	23.90	8.956	122.15	67.66
1930	12.982	5.517	31.69	4.556	23.79	7.667	115.01	45.36
1931	8.116	4.243	24.47	3.640	23.30	6.720	87.35	35.67
1932	5.555	3.180	21.98	2.876	23.30	5.592	57.93	36.46
1933	7.025	3.869	39.12	4.029	23.30	6.528	59.23	30.99
1934	8.428	3.860	52.23	4.158	21.58	8.901	73.87	36.47
1935	8.649	4.065	50.39	4.328	20.50	13.616	71.99	34.15
1936	9.474	4.710	46.42	4.901	20.50	12.240	79.92	42.93
1937	13.167	6.009	54.29	6.519	20.08	15.355	90.18	51.77
1938	10.000	4.739	42.28	4.610	20.00	12.349	75.47	35.90
1939	10.965	5.053	49.11	5.110	20.00	12.359	103.94	36.75
1940	11.296	5.179	49.84	6.335	20.00	14.000	176.87	37.92
1941	11.797	5.793	52.03	7.474	16.87	14.000	185.02	36.00
1942	11.78	6.481	52.00	8.250	15.00	15.559	196.35	36.00
1943	11.78	6.500	52.00	8.250	15.00	15.928	195.21	35.08
1944	11.75	6.500	52.00	8.250	15.00	15.839	118.36	35.00
1945	11.75	6.500	52.00	8.250	15.00	15.839	134.89	35.00
1946	[9] 14.04	8.109	54.54	8.726	15.00	17.306	98.24	57.20
1947	[9] 21.30	14.673	77.95	10.500	15.00	34.852	83.74	59.09
1948	[9] 22.33	18.043	99.25	13.589	15.73	38.168	76.49	86.25

[1] 99 percent tin, 1896-1919; Straits tin thereafter.
[2] Prices 1896 to 1929 for pure aluminum (No. 1 virgin 98-99 percent); beginning 1930, for 99 percent+virgin ingot.
[3] Flasks of 75 pounds prior to 1927; 76 thereafter.
[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, 1903-05; average for New York zinc 1901-05, 5.058 cents.
[8] Average for 4 years.
[9] Connecticut Valley.

Sources: Engineering and Mining Journal and The Mineral Industry; American Metal Market, annual reports; and The Iron Age, annual review issue.

FIGURE W.—VALUE OF MINERAL PRODUCTION: 1870 TO 1948

[See table 850]



Source: Department of the Interior, Bureau of Mines.

No. 852.—Mineral Production—Value, by States and for Alaska: 1943 to 1947

[Sum of State totals in table below does not agree with total for United States given in tables 850 and 853 chiefly because (1) figures for certain of products included in United States total are not available by States of origin; (2) use of iron ore values in State totals and pig iron values in United States total; (3) use of mine figures for gold, silver, copper, lead, and zinc in State totals and mint and smelter figures in United States total; (4) inclusion of estimates in United States total for a few products for which no canvass has been conducted for many years and for which no estimate by States is made; and (5) use of natural gas values *at wells* in State totals and values *at point of consumption* in United States total]

[In thousands of dollars]

DIVISION AND STATE	1943	1944	1945	1946	1947
Continental United States	6,005,167	6,372,364	6,251,281	7,067,214	9,710,708
New England	21,558	21,357	21,028	33,826	40,762
Maine	2,720	2,150	2,521	4,389	6,049
New Hampshire	1,350	1,164	802	1,451	1,574
Vermont	6,404	7,672	8,249	12,096	14,818
Massachusetts	5,441	5,263	5,450	9,745	11,859
Rhode Island	808	612	508	561	785
Connecticut	4,835	4,496	3,498	5,584	5,677
Middle Atlantic	987,275	1,080,322	1,033,177	1,211,093	1,441,270
New York	84,410	84,286	88,678	103,571	130,735
New Jersey	37,583	33,828	31,267	33,518	44,250
Pennsylvania	865,282	962,208	913,232	1,074,004	1,266,285
East North Central	739,367	756,807	748,754	849,369	1,071,118
Ohio	170,726	174,582	179,682	221,356	296,147
Indiana	82,524	89,760	88,802	107,479	141,086
Illinois	320,077	329,147	330,184	358,628	428,327
Michigan	147,110	140,520	127,869	133,310	170,616
Wisconsin	18,930	22,798	22,217	28,596	34,942
West North Central	471,111	451,255	449,742	505,395	671,752
Minnesota	177,687	170,488	167,138	155,734	219,685
Iowa	24,187	22,452	25,008	35,957	39,378
Missouri	72,156	72,890	74,347	88,357	107,021
North Dakota	4,367	4,334	4,505	5,118	7,629
South Dakota	8,606	5,471	7,137	18,389	23,636
Nebraska	6,800	5,060	4,963	7,277	7,383
Kansas	177,308	170,560	166,644	194,563	267,020
South Atlantic	676,760	717,651	699,591	793,099	1,128,003
Delaware	367	182	131	491	613
Maryland	17,508	15,264	15,329	21,991	25,604
District of Columbia	100	111	229	710	746
Virginia	85,758	86,951	81,965	90,823	128,700
West Virginia	500,099	547,851	537,212	588,925	855,150
North Carolina	22,172	22,199	14,766	20,428	23,699
South Carolina	4,759	4,192	5,043	8,189	10,362
Georgia	20,927	19,005	19,988	30,449	37,137
Florida	25,070	21,896	24,928	31,093	45,992
East South Central	398,309	442,553	441,321	497,290	708,050
Kentucky	210,352	250,735	250,919	272,558	395,745
Tennessee	64,480	63,994	58,672	68,031	84,425
Alabama	102,584	109,149	110,360	123,029	159,788
Mississippi	20,893	18,675	21,370	33,672	68,092
West South Central	1,433,114	1,641,401	1,674,581	1,916,152	2,766,422
Arkansas	77,191	64,079	58,257	65,985	90,833
Louisiana	198,258	217,733	222,413	273,882	397,312
Oklahoma	221,631	225,833	243,314	263,282	351,578
Texas	936,034	1,133,756	1,150,597	1,313,003	1,926,699
Mountain	750,535	708,662	627,109	623,860	971,093
Montana	85,208	82,290	68,829	62,114	87,167
Idaho	57,475	51,321	44,348	44,444	67,786
Wyoming	64,925	68,034	74,620	78,745	118,422
Colorado	87,335	79,137	77,236	77,573	105,135
New Mexico	111,142	112,180	104,234	111,938	156,554
Arizona	124,584	115,592	98,574	118,086	186,751
Utah	163,341	148,308	127,961	95,506	206,639
Nevada	56,525	51,800	31,307	35,454	42,639
Pacific	527,138	552,356	555,978	637,130	912,238
Washington	37,593	36,483	31,301	33,029	40,027
Oregon	12,267	9,657	9,463	11,807	16,658
California	477,278	506,216	515,214	592,294	855,553
Alaska	9,055	6,903	10,174	12,426	18,387

Source: Department of the Interior, Bureau of Mines; Minerals Yearbook.

No. 853.—Mineral Products of the United States—Quantities and Values: 1930 to 1947

[**Short tons are 2,000 pounds; long tons, 2,240 pounds.** 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 1947 are preliminary. Total values of metallic and nonmetallic products include figures which Bureau of Mines is not at liberty to publish and estimated figures for certain products for which data are not available. In some cases, neither quantity nor value can be shown and those products are not listed here but data for them are included in totals. On the other hand, values for certain products, such as coke, are excluded from totals to eliminate duplication, since values of products derived therefrom, or of raw materials used, are accounted for under other items. See also *Historical Statistics*, series G 1–5, 13–18, and 43–130]

PRODUCT	QUANTITY						VALUE (THOUSANDS OF DOLLARS)					
	1930	1935	1940	1945	1946	1947	1930	1935	1940	1945	1946	1947
Grand total (approximate)	----------	----------	----------	----------	----------	----------	4,764,800	3,650,000	5,613,900	8,141,000	8,896,000	12,393,000
Total metallic products (approximate)	----------	----------	----------	----------	----------	----------	985,790	733,130	1,678,600	1,975,000	1,825,000	2,915,000
Aluminum ... 1,000 pounds	229,037	119,295	412,560	990,120	819,260	1,143,500	50,961	22,670	75,292	140,864	115,812	161,626
Antimonial lead [1] ... short tons	13,711	[1] 16,384	[1] 29,752	[1] 56,495	[1] 50,480	[1] 86,075	1,393	(1)	(1)	(1)	(1)	(1)
Antimony, metal ... do	[2] 1,685	[3] 2,134	(3)	(3)	(3)	(3)	[2] 258	(3)	(3)	(3)	(3)	(3)
Antimony, ore and concentrates ... do	----------	3,616	1,124	14,966	13,962	20,020	----------	(4)	73	562	798	3,272
Bauxite ... long tons	330,612	233,912	434,988	[5] 981,009	[5] 1,104,054	[5] 1,202,055	1,928	1,557	2,579	[5] 5,591	[5] 6,893	[5] 6,885
Beryllium ore ... short tons	(4)	(4)	121	39	100	145	(4)	(4)	4	6	18	25
Cadmium:												
Metal ... pounds	2,777,762	3,477,091	6,467,260	7,938,658	6,180,265	7,852,907	1,778	(4)	4,527	6,107	6,095	12,359
Compounds ... do	(4)	(4)	205,900	451,050	270,789	500,859	(4)	(4)	144	347	267	788
Chromite ... long tons	80	515	2,662	12,476	3,666	846	2	6	29	532	105	(4)
Copper,[6] sales value ... short tons	697,195	381,294	909,084	782,726	599,656	862,872	181,271	63,295	205,453	[7] 184,723	[7] 172,701	[7] 360,680
Ferro-alloys ... do	728,269	663,237	1,292,660	1,661,657	1,551,624	1,841,682	51,900	48,892	128,128	210,510	176,274	220,022
Gold [8] ... 1,000 troy ounces	2,286	3,609	6,003	929	1,462	2,165	47,248	126,325	210,109	32,511	51,182	75,786
Iron, ore [9] ... 1,000 long tons	55,201	33,426	75,198	88,137	70,090	93,315	145,619	83,035	189,087	243,761	215,006	320,865
Iron, pig ... 1,000 short tons	33,494	23,719	46,959	53,265	45,076	58,368	512,165	358,145	840,442	1,172,435	1,103,929	1,770,659
Lead ... short tons	608,088	324,164	516,628	443,467	338,099	440,947	60,809	25,933	51,663	56,764	56,801	126,111
Magnesium (new ingot) ... do	280	2,121	6,412	43,496	8,916	5,264	269	(4)	[10] 3,462	17,874	3,654	(4)
Manganese ore (35% or more Mn) ... do	75,080	29,599	44,038	182,337	140,635	131,627	1,437	557	1,169	7,320	4,811	4,201
Manganiferous ore (5% to 35% Mn) ... do	879,637	587,086	1,272,933	1,522,854	1,171,183	1,174,355	2,402	1,323	3,348	3,514	3,127	3,447
Mercury, metal ... flasks (76 pounds net)	21,553	17,518	37,777	30,763	25,348	23,244	2,479	1,261	6,682	4,150	2,490	1,946
Molybdenum ... 1,000 pounds	3,759	10,892	25,329	33,683	16,787	22,190	2,068	7,261	17,189	23,976	11,529	15,178
Nickel ... short tons	308	160	554	1,155	352	646	214	130	(4)	(4)	(4)	(4)
Ores (crude), old tailings, etc.:												
Copper ... 1,000 short tons	47,382	19,103	69,278	76,856	61,741	87,633	(11)	(11)	(11)	(11)	(11)	(11)
Lead-copper, zinc-copper, zinc-lead-copper ... do	246	1	93	992	810	544						
Dry and siliceous (gold and silver) ... do	7,767	14,016	18,700	1,984	2,995	4,235						
Lead ... do	8,080	3,494	6,144	6,730	5,651	6,165						
Zinc-lead ... do	10,645	7,471	12,866	12,355	12,730	12,530						
Zinc ... do	5,980	7,944	9,521	16,308	14,895	10,045						
Platinum, etc., value, N. Y. C ... troy ounces	43,502	42,060	47,339	33,592	30,237	17,442	2,049	1,414	1,986	1,543	1,802	990
Selenium ... pounds	278,309	232,831	368,709	604,445	405,226	612,611	455	(4)	(4)	(4)	(4)	(4)
Silver [12] ... 1,000 troy ounces	50,748	45,924	69,586	29,063	21,103	38,587	19,538	33,008	49,483	20,667	19,100	34,923
Tantalum and columbium ores ... pounds	5,100	7,681	----------	6,649	3,475	3,257	3	5	----------	14	9	9
Tellurium ... do	4,717	22,610	88,996	60,328	38,523	59,290	8	(4)	(4)	(4)	(4)	(4)

Tin (metallic equivalent) ..... short tons	17	50	49	----	----	1	10	50	55	----	----	2
Titanium concentrates (ilmenite) ..... do	(4)	(4)	20,702	308,518	282,708	336,061	(4)	(4)	184	7,359	4,879	5,029
Titanium concentrates (rutile) ..... do	(4)	(4)	2,657	6,837	7,514	5,157	(4)	(4)	393	870	997	534
Tungsten ore (60 percent concentrates) ..... do	702	2,395	5,319	5,534	5,193	3,094	509	1,921	6,576	7,693	6,283	4,350
Vanadium ..... 1,000 pounds	(4)	(4)	2,091	2,964	1,272	2,118	(4)	(4)	(4)	1,767	711	1,285
Zinc,[6] sales value ..... short tons	489,361	412,184	589,988	467,084	459,205	510,058	46,979	36,272	74,338	[7] 80,338	[7] 81,738	[7] 109,152
Total nonmetallic products (approximate)	----	----	----	----	----	----	3,779,010	2,916,870	3,935,300	6,166,000	7,071,000	9,478,000
Arsenious oxide ..... short tons	17,425	12,670	23,339	24,810	12,039	18,188	1,008	497	561	1,197	655	1,534
Asbestos ..... do	4,242	8,920	20,060	12,226	14,075	24,035	289	293	675	446	505	919
Asphalt, native ..... do	702,777	349,938	500,281	703,873	845,898	1,071,922	4,463	2,201	2,766	3,816	4,263	5,503
Asphalt, oil (including road oil) [9] ..... do	2,167,068	2,715,104	5,262,959	6,311,815	7,056,882	8,165,631	20,851	24,112	41,399	68,930	82,911	116,002
Barite (crude) ..... do	234,932	225,111	409,353	696,062	724,362	834,082	1,538	1,251	2,597	5,349	5,243	6,171
Boron minerals ..... do	177,360	272,967	243,355	325,935	430,689	501,935	5,352	5,382	5,643	7,635	9,576	11,844
Bromine ..... 1,000 pounds	8,463	16,429	59,266	79,710	42,781	78,178	2,110	3,483	11,773	14,796	8,560	14,837
Calcium-magnesium chloride (75 percent $NaCl_2$) ..... short tons	116,160	83,546	99,536	218,320	262,147	271,206	2,208	1,039	998	1,818	2,279	2,650
Cement ..... 1,000 bbl. (376 lb. net)	160,846	76,244	132,864	107,833	172,101	190,420	231,249	114,810	193,465	175,431	296,552	361,978
Clay products [13]	----	----	----	----	----	----	275,134	155,536	114,000	86,275	178,756	219,004
Clay, raw (sold by producers) ..... 1,000 short tons	3,963	2,923	4,701	18,628	30,265	33,270	[9] 12,521	[9] 10,824	18,162	39,795	57,160	69,613
Coal, bituminous [14] ..... do	467,526	372,373	[15] 460,772	577,617	533,922	619,000	795,483	658,063	[15] 879,327	1,768,204	1,835,539	2,562,375
Coal, Pennsylvania anthracite ..... do	69,385	52,159	51,485	54,934	60,507	57,190	354,574	210,131	205,490	323,944	413,417	413,019
Coke [9] ..... do	47,972	35,141	57,072	67,308	58,498	73,446	209,137	176,853	273,832	508,540	486,729	776,406
Emery ..... short tons	555	176	1,046	7,856	6,188	5,798	6	2	9	76	62	67
Feldspar (crude) ..... long tons	171,738	189,550	290,763	373,054	508,380	459,910	1,067	1,005	1,272	2,022	2,594	2,411
Fluorspar ..... short tons	95,849	123,741	233,600	323,961	277,940	329,484	1,747	1,861	4,745	9,897	9,039	10,955
Fuller's earth ..... do	335,644	227,745	146,568	296,368	298,752	329,068	4,327	2,230	1,471	3,464	3,703	4,661
Garnet for abrasive purposes ..... do	5,003	3,060	4,716	6,306	7,743	8,722	314	257	259	375	570	614
Graphite, amorphous ..... do	1,941	(4)	(4)	} 5,334	4,844	5,207	{ 21	(4)	(4)	} 289	253	221
Graphite, crystalline ..... do	(4)	(4)	----				(4)	(4)	----			
Grindstones and pulpstones ..... do	18,700	14,587	3,323	(4)	11,677	10,696	771	505	496	(4)	505	482
Gypsum [16] ..... 1,000 short tons	3,471	1,904	3,699	3,812	5,629	6,208	27,051	18,860	5,228	6,984	12,442	16,530
Helium [17] ..... M cu. ft	9,806	10,218	9,451	128,441	63,403	63,199	140	114	85	937	479	541
Iodine ..... pounds	(4)	245,696	(4)	(4)	(4)	(4)	(4)	249	(4)	(4)	(4)	(4)
Kyanite ..... short tons	(4)	(4)	4,241	(4)	(4)	(4)	(4)	(4)	94	(4)	(4)	(4)
Lime ..... 1,000 short tons	3,388	2,987	4,887	5,921	5,993	6,779	25,616	21,749	33,956	45,918	51,033	63,826
Lithium minerals ..... short tons	1,797	1,154	2,011	2,446	3,065	2,441	56	27	81	286	304	151
Magnesite (crude) ..... do	129,320	177,154	333,166	336,458	324,640	375,993	1,033	1,192	2,488	2,325	2,226	2,597
Magnesium compounds (MgO equivalent) [18] ..... 1,000 pounds	73,255	109,602	216,532	539,612	430,744	292,000	1,071	1,287	2,453	9,675	8,316	9,110
Marl, calcareous ..... short tons	34,012	88,062	25,516	154,122	213,448	176,187	113	97	42	188	249	235
Marl, greensand ..... do	12,761	7,589	6,697	4,986	5,140	8,337	221	220	390	478	425	433
Mica, scrap [19] ..... do	6,732	18,852	22,386	41,060	53,602	49,797	109	244	315	812	1,041	1,096
Mica, sheet ..... 1,000 pounds	1,465	937	1,625	1,299	1,079	416	177	161	292	737	218	116
Millstones	----	----	----	----	----	----	18	10	7	15	15	23

For footnotes, see p. 765.

No. 853.—Mineral Products of the United States—Quantities and Values: 1930 to 1947—Continued

Product	Quantity						Value (thousands of dollars)					
	1930	1935	1940	1945	1946	1947	1930	1935	1940	1945	1946	1947
Nonmetallic—continued												
Mineral pigments:												
Natural pigments and manufactured iron oxide pigments ..... short tons	(20)	(20)	(20)	101,014	115,097	115,367	(20)	(20)	(20)	8,825	10,004	11,167
Zinc and lead pigments [21] ..... do	147,948	137,972	164,775	194,448	225,822	242,230	18,420	13,828	19,334	26,556	32,355	46,508
Natural gas [22] ..... 1,000,000 cu. ft.	1,943,421	1,916,595	2,660,222	3,918,686	4,030,605	4,444,693	416,090	429,374	577,939	837,852	885,878	1,032,200
Natural gasoline and allied products:												
Natural gasoline and cycle products ..... 1,000 gal.	2,210,494	1,651,986	2,339,400	3,290,949	3,451,688	3,654,520	128,160	70,940	68,261	145,570	146,202	218,800
Liquefied petroleum gases ..... do	(23)	(23)	(23)	1,413,224	1,409,345	1,889,524	(23)	(23)	(23)	41,994	36,079	68,200
Oilstones, etc ..... short tons	651	439	(4)	(4)	(4)	(4)	137	106	(4)	(4)	(4)	(4)
Olivine ..... do	(4)	(4)	2,500	(4)	7,649	10,838	(4)	(4)	15	(4)	93	129
Peat ..... do	(24)	37,060	70,097	107,000	140,707	136,232	(24)	199	517	821	1,006	869
Petroleum ..... 1,000 barrels (42 gal.)	898,011	996,596	1,353,214	1,713,655	1,733,939	1,856,107	1,070,200	961,440	1,385,440	2,094,250	2,442,550	3,548,266
Phosphate rock ..... 1,000 long tons	3,926	3,042	4,003	5,807	6,861	9,087	13,997	10,952	12,335	23,951	31,044	47,462
Potassium salts (K_2O) ..... short tons	56,610	224,721	393,058	870,370	928,374	1,053,266	2,986	4,993	12,562	30,314	32,176	34,716
Pumice ..... do	56,843	60,000	82,407	157,011	319,883	442,552	336	247	450	1,051	1,586	2,022
Pyrites ..... long tons	347,512	514,192	626,640	722,596	813,372	940,652	1,029	1,583	1,920	2,700	3,228	4,070
Salt ..... 1,000 short tons	8,054	7,927	10,360	15,394	15,132	16,138	25,009	21,838	26,475	43,914	44,913	52,276
Sand and gravel:												
Sand, glass ..... do	1,849	2,126	2,760	4,682	4,849	5,321	3,211	3,735	4,882	8,374	9,541	11,395
Sand (molding, building, etc.) and gravel ..... 1,000 short tons	195,203	121,798	235,548	190,842	249,282	282,338	111,966	58,242	105,806	120,463	161,845	205,474
Sand-lime brick ..... thousands	[12] 191,193	[13] 61,757	[13] 104,519	(13)	(13)	(13)	[13] 1,951	[13] 555	[13] 1,174	(13)	(13)	(13)
Silica (quartz) ..... short tons	13,156	17,178	31,865	57,764	73,179	73,347	121	112	176	237	294	369
Slate ..... do	463,610	330,200	473,450	551,890	759,770	876,010	7,912	3,650	5,738	5,659	8,844	11,686
Sodium salts (carbonates and sulfates), natural ..... short tons	122,930	131,936	317,267	372,241	414,406	550,345	1,792	1,449	3,158	4,559	5,122	9,191
Stone ..... 1,000 short tons	126,996	[25] 83,159	[25] 153,733	[25] 153,405	[25] 178,852	[25] 207,555	178,949	[25] 87,824	[25] 160,044	[25] 179,308	[25] 234,339	289,344
Sulfur ..... 1,000 long tons	1,990	1,635	2,559	3,833	4,128	4,828	35,800	29,300	40,900	61,300	66,100	85,200
Sulfuric acid, byproduct (60° Baumé) [26] ..... 1,000 short tons	1,188	604	841	1,085	922	934	9,544	4,548	6,797	10,137	8,227	9,178
Talc, pyrophyllite, and soapstone [27] ..... short tons	179,385	172,716	281,375	398,384	457,066	516,094	2,108	1,848	3,008	5,407	6,445	7,682
Tripoli ..... do	32,439	27,375	30,212	18,247	28,955	34,578	508	383	367	307	549	751
Vermiculite ..... do	(4)	7,068	22,299	64,808	86,390	131,385	(4)	88	138	648	868	1,339

[1] From both domestic and foreign ores. Beginning 1935, data represent antimonial lead produced at primary refineries from both primary and secondary sources, and are not comparable with data for prior years; estimate of value of primary antimony and lead content of antimonial lead from domestic sources included in total value of metallic products.

[2] Content of antimonial lead. Value of the antimony in antimonial lead excluded from total value.

[3] Largely from foreign ore beginning 1935. Value not included in total value. Bureau of Mines not at liberty to publish value figures or quantity figures for 1940–1947.

[4] Figures not available or Bureau of Mines not at liberty to publish them; value included in total value of metallic or nonmetallic products.

[5] Represents dried bauxite equivalent.

[6] Product from domestic ores only.

[7] Value does not include premiums paid miners by the Government. Total premiums for copper, lead, and zinc amounted to approximately $79,000,000 in 1945, $77,000,000 in 1946, and $21,000,000 in 1947. In addition, exploration premiums totaling $6,214,000 were paid to miners from July 1, 1946, through Dec. 1, 1947, to encourage exploration and development of copper, lead, and zinc deposits.

[8] According to Bureau of the Mint; valued at $20.67+per ounce through 1930, at $35 per ounce in 1935 and subsequent years.

[9] Value not included in total value; see headnote.

[10] Value calculated at nominal price, 27 cents per pound.

[11] Figures not available. Value of products derived therefrom, or of raw materials used, is included elsewhere.

[12] According to Bureau of the Mint.

[13] Figures obtained through cooperation with Bureau of the Census. For 1940, total is estimate based on figures issued by Bureau of the Census as somewhat incomplete. For 1944–46 there was no canvass; total for clay products is estimate by Bureau of Mines; no estimate was made for sand-lime brick. Value of clay products excludes values of pottery and refractories for 1940 and subsequent years.

[14] Includes brown coal and lignite, and anthracite mined elsewhere than in Pennsylvania.

[15] Quantities as reported by Department of the Interior, National Bituminous Coal Division; values include selling expenses.

[16] Gypsum mined: For 1940 and subsequent years, value of crude at mine; for earlier years, value as sold (crude and calcined).

[17] Figures cover fiscal year ending June 30 of year stated.

[18] 1947 includes compounds from raw sea water, well brines, sea-water bitterns, brucite, and serpentine only Data for earlier years are not quite comparable with 1947 in that the former are on a gross-weight basis and include some compounds made from a combination of sea water and dolomite and of well brines and dolomite.

[19] Beginning 1935, includes mica recovered by grinding mica schist; excluded in prior years shown.

[20] Figures not available; value of iron ore sold for paint included in total value of nonmetallic products.

[21] Includes sublimed blue lead, sublimed white lead, leaded zinc oxide, and zinc oxide except that in 1946–47 data for sublimed blue and white lead are excluded but value is included in total value of nonmetallic products.

[22] Valued at point of consumption.

[23] Figures not available.

[24] No canvass. Estimate of value included in total value of nonmetallic products.

[25] Includes soapstone used as dimension stone.

[26] From copper and zinc smelters and zinc roasters and from roasting of high-sulfide gold and silver concentrates.

[27] For 1930 figures exclude soapstone. For 1935 and thereafter, figures cover talc, pyrophyllite, and ground soapstone. Dimension soapstone is included in stone. Value of soapstone in 1930 is included in total value of nonmetallic products; Bureau of Mines not at liberty to publish figures.

Source: Department of the Interior, Bureau of Mines; Minerals Yearbook.

No. 854.—MINERAL INDUSTRIES—

[See headnote,

Line number	INDUSTRY	Number of operating companies [1]	Number of mines, quarries, and wells	Number of preparation plants	Quantity of major product (tons of 2,000 pounds except as noted)	Value of all products (thousands of dollars) [2]	NUMBER OF PERSONS ENGAGED: Total	Wage earners (average for year) [3]	Salaried employees [4]	Proprietors and firm members [5]
1	**All operations**	20,927	361,202	5,450	(8)	[9] 3,430,259	[10] 878,180	779,032	[10] 82,809	16,339
2	**Producing operations**	18,920	361,040	5,418	(8)	3,221,927	[10] 827,410	736,150	[10] 77,019	14,241
3	**Fuels, total**	13,345	353,969	1,291	(8)	2,392,754	635,506	566,956	57,509	11,041
4	Crude petroleum and natural gas.	7,782	347,645	-----	(13)	1,375,954	141,592	105,166	30,322	6,104
5	Natural gasoline	295	-------	734	[14] 2,141,779	96,338	10,347	8,332	2,005	10
6	Bituminous coal	5,009	5,686	365	391,728,862	727,358	393,308	369,156	19,656	4,496
7	Lignite	130	131	-----	2,978,046	3,457	1,739	1,480	115	144
8	Pennsylvania anthracite [15]	346	507	192	51,865,328	189,648	88,520	82,822	5,411	287
9	**Metallic ores, total**	1,733	1,992	678	(8)	515,009	99,608	88,394	10,110	1,104
10	Iron ore	100	177	41	[17] 51,645,269	150,872	22,397	20,137	2,228	32
11	Major nonferrous metallic ores.	1,487	1,640	508	(18)	338,092	72,544	64,232	7,337	975
12	Gold, total	1,124	1,180	329	(18)	114,090	23,398	20,507	2,089	802
13	Lode gold	820	841	329	(18)	86,063	19,433	17,279	1,612	542
14	Placer gold	306	339	(19)	(18)	28,027	3,965	3,228	477	260
15	Silver ore	150	163	32	(18)	19,716	4,697	4,244	368	85
16	Copper ore	35	51	27	(18)	141,635	26,752	23,844	2,908	-------
17	Lead ore	62	76	29	(18)	31,467	8,015	6,984	998	33
18	Zinc ore	138	170	91	(18)	31,184	9,682	8,653	974	55
19	Other nonferrous metallic ores.	153	175	129	(8)	26,045	4,667	4,025	545	97
20	Bauxite	10	12	11	[20] 388,000	2,527	827	727	100	-------
21	Chromite and antimony ore.	4	3	1	[17] 3,417	47	40	31	8	1
22	Manganese ore	26	34	14	[17] 47,672	945	557	504	41	12
23	Mercury	64	61	58	[21] 18,222	1,830	721	662	74	45
24	Molybdenum ore	5	5	5	21,068	15,411	1,025	910	112	3
25	Titanium ore	3	3	3	16,471	458	196	183	13	-------
26	Tungsten ore	35	49	31	[23] 3,214	3,354	855	690	134	31
27	Vanadium and uranium ore.	8	8	6	103,846	1,473	446	378	63	5
28	**Stone, total**	1,521	1,929	1,369	133,991,959	117,034	41,302	37,287	3,158	857
29	Crushed and broken	1,183	1,533	1,335	130,240,936	101,581	34,350	30,937	2,770	643
30	Rough dimension	345	396	34	3,751,023	15,453	6,952	6,350	388	214
31	Limestone, total	965	1,256	1,041	109,777,773	80,656	28,312	25,619	2,129	564
32	Crushed, etc	911	1,192	1,028	108,436,772	77,147	27,055	24,482	2,031	542
33	Rough dimension	55	64	13	1,341,001	3,509	1,257	1,137	98	22
34	Granite, total	199	242	86	7,460,299	12,876	4,913	4,417	384	112
35	Crushed, etc	59	79	74	6,500,177	7,030	2,354	2,100	232	22
36	Rough dimension	141	163	12	960,122	5,846	2,559	2,317	152	90
37	Basalt, total	101	120	116	9,822,020	9,658	2,226	1,910	278	38
38	Crushed, etc	97	116	115	9,801,339	9,632	2,198	1,886	278	34
39	Rough dimension	4	4	1	20,681	26	28	24	-------	4
40	Sandstone, total	117	127	55	3,295,036	4,445	1,916	1,737	132	47
41	Crushed, etc	60	68	50	2,522,789	2,930	1,246	1,134	98	14
42	Rough dimension	57	59	5	772,247	1,515	670	603	34	33

[1] Companies with operations in more than 1 industry are counted only once in totals.
[2] See note 3, table 856. [3] See note 4, table 856. [4] See note 5, table 856. [5] See note 6, table 856.
[6] Represents permanent additions and major alterations (including installation costs); minor additions and replacements and cost of land are excluded.
[7] See note 9, table 856. [8] Not shown because of dissimilar products.
[9] Includes amounts received by or due contractors for services performed during year.
[10] Includes statistics for 334 salaried employees paid $1,091,000 at central offices that served more than 1 mineral dustry.
[11] Contractors performing oil- and gas-field services were not asked to report expenditures for supplies and materials, fuel, purchased electric energy, or contract work, and contractors performing general services for mineral industries were not asked to report expenditures for contract work. These expenditures are not included in totals shown. Expenditures by "Contract-service operations" duplicate in part expenditures for "Contract work" reported by producing operations.
[12] Oil- and gas-field contractors were not asked to report expenditures for buildings, machinery, and equipment, and contractors performing general services for mineral industries were asked to report only combined expenditures for these items, which amounted to $150,000. These expenditures are not included in totals shown.
[13] Crude petroleum, 1,228,133,816 barrels (42 gallons); natural gas, 2,929,184,828 M cubic feet, of which 2,287,413,256 M cubic feet were marketed.
[14] Thousands of gallons. [15] Includes data for 58 strip-pit and culm-bank contractors.

SUMMARY, BY INDUSTRIES: 1939

table 856]

Total man-hours worked by wage earners (thousands)	PRINCIPAL EXPENSES DESIGNATED BELOW (THOUSANDS OF DOLLARS)							COST OF BUILDINGS, MACHINERY, AND EQUIPMENT ERECTED OR INSTALLED DURING YEAR (THOUSANDS OF DOLLARS) [6]		Aggregate horsepower rating of prime movers and electric motors driven by purchased energy [7]	Line number
	Total	Wages	Salaries	Supplies and materials	Fuel	Purchased electric energy	Contract work	Buildings	Machinery and equipment		
1,296,611	[10] [11] 1,829,398	975,442	[10] 205,399	[11] 307,980	[11] 60,965	[11] 69,245	[11] 210,368	[12] 27,435	[12] 263,097	14,323,958	1
1,224,707	[10] 1,747,282	915,558	[10] 189,355	306,297	60,374	68,892	206,805	27,020	261,475	13,045,784	2
875,808	1,324,284	707,640	140,306	200,509	35,318	38,338	202,174	18,121	228,694	8,543,120	3
190,078	533,947	155,170	78,792	78,037	19,460	6,739	195,748	9,588	188,578	3,386,341	4
16,634	37,856	13,212	5,052	8,653	6,600	355	3,984	1,460	11,569	772,302	5
542,100	594,512	430,427	44,120	88,064	5,291	24,711	1,898	5,303	25,258	3,326,209	6
3,027	2,182	1,384	219	342	80	145	11	16	94	21,052	7
123,969	155,787	107,446	12,123	25,412	3,887	6,389	[16] 532	1,753	3,196	1,037,216	8
188,060	250,882	125,411	26,404	67,898	10,212	18,527	2,431	5,284	17,568	2,196,013	9
38,187	50,183	27,201	5,794	10,621	2,267	4,083	217	770	3,603	573,296	10
141,489	189,479	93,199	19,187	53,969	7,290	13,798	2,036	4,136	12,917	1,537,602	11
48,930	63,111	32,563	5,166	17,369	2,101	4,796	1,117	1,775	7,369	396,549	12
40,842	50,224	26,931	4,004	13,588	1,402	3,323	976	1,640	3,579	286,115	13
8,088	12,887	5,631	1,162	3,780	699	1,473	142	135	3,790	110,434	14
9,036	10,213	6,004	895	2,502	178	573	61	161	391	43,260	15
51,241	75,703	34,486	8,078	23,562	4,168	4,899	511	1,822	4,084	752,707	16
14,085	19,922	9,921	2,848	4,897	267	1,851	137	144	470	193,248	17
18,198	20,530	10,225	2,201	5,639	577	1,679	209	234	603	151,838	18
8,384	11,219	5,012	1,422	3,308	655	645	178	378	1,048	85,115	19
1,176	1,380	578	241	269	187	60	46	20	180	13,290	20
59	75	42	12	11	3	6	--------	7	27	686	21
959	805	483	84	162	37	40	--------	3	35	5,035	22
1,388	1,289	737	155	222	138	34	3	66	185	8,388	23
1,987	4,120	1,435	534	1,713	39	358	42	30	77	33,981	24
322	270	140	42	38	15	35	(22)	15	72	2,251	25
1,614	2,241	1,100	241	648	97	114	42	160	286	14,660	26
879	1,038	497	112	244	140	--------	45	77	186	6,824	27
74,665	72,698	37,591	6,983	16,961	4,756	5,534	873	1,203	5,372	1,096,649	28
62,366	63,349	31,492	6,163	15,733	4,309	4,867	786	1,155	5,047	961,604	29
12,299	9,348	6,099	820	1,228	447	667	87	48	325	135,045	30
51,101	50,355	26,167	4,638	11,584	3,466	3,800	699	895	4,210	790,138	31
48,901	48,544	24,903	4,453	11,425	3,404	3,684	675	886	4,141	756,332	32
2,200	1,811	1,264	185	159	62	117	25	9	69	33,806	33
8,841	8,146	4,156	937	1,956	392	656	50	109	415	105,248	34
4,574	4,343	1,782	573	1,405	223	334	26	75	260	48,142	35
4,267	3,803	2,373	364	551	169	321	24	33	155	57,106	36
4,037	5,416	2,465	651	1,346	418	504	32	137	386	96,713	37
4,001	5,395	2,452	651	1,344	413	503	32	137	384	96,211	38
36	21	13	[19] --------	2	5	1	--------	(22)	2	502	39
3,131	2,969	1,651	230	742	180	137	30	23	92	35,502	40
1,990	2,027	1,084	174	519	123	105	23	23	69	24,991	41
1,141	942	567	56	223	56	32	7	(22)	23	10,511	42

[16] Excludes, to avoid duplication, $10,618,000 paid strip-pit and culm-bank contractors by colliery companies.
[17] Tons of 2,240 pounds.
[18] Recoverable metals contained:

Industry	Gold (fine ounces)	Silver (fine ounces)	Copper (pounds)	Lead (pounds)	Zinc (pounds)
Major nonferrous metallic ores, total	3,867,632	62,736,783	1,434,481,327	800,010,658	1,131,548,549
Lode gold	2,455,725	6,985,914	5,978,207	20,925,993	3,295,133
Placer gold	824,555	96,896	--------	--------	--------
Silver ore	96,296	31,008,891	31,071,853	40,245,076	9,215,058
Copper ore	429,518	13,138,381	1,385,985,075	14,431,555	52,840,656
Lead ore	40,650	9,433,615	10,313,111	602,316,964	131,872,086
Zinc ore	20,888	2,073,086	1,133,081	122,091,070	934,325,616

[19] Data not available separately.
[20] Dried bauxite equivalent. Tons of 2,240 pounds.
[21] Flasks of 76 pounds.
[22] Less than $501.
[23] 60 percent WO^3.

No. 854.—MINERAL INDUSTRIES—SUMMARY,

Line number	INDUSTRY	Number of operating companies [1]	Number of mines, quarries, and wells	Number of preparation plants	Quantity of major product (tons of 2,000 pounds except as noted)	Value of all products (thousands of dollars) [2]	NUMBER OF PERSONS ENGAGED		
							Total	Wage earners (average for year) [3]	Salaried employees [4]
1	Slate, total	70	79	11	683,900	4,163	1,516	1,341	115
2	Crushed and broken	6	11	11	308,268	2,137	450	407	43
3	Rough dimension	64	68	-------	375,632	2,025	1,066	934	72
4	Marble, total	31	44	8	316,155	2,709	1,452	1,405	41
5	Crushed and broken	6	6	5	34,815	177	80	70	9
6	Rough dimension	25	38	3	281,340	2,532	1,372	1,335	32
7	Miscellaneous, crushed and broken.	60	61	52	2,636,776	2,528	967	858	79
8	**Sand and gravel, total**	**1,253**	**1,563**	**1,528**	**122,547,976**	**79,402**	**20,573**	**16,959**	**2,818**
9	Common sand and gravel	1,129	1,380	1,383	115,543,448	69,130	17,740	14,584	2,445
10	Glass sand	32	39	40	3,175,417	6,136	1,527	1,280	242
11	Foundry sand	97	144	105	3,829,111	4,136	1,306	1,095	131
12	**Clay and shale, total**	**833**	**1,061**	**205**	**21,722,410**	**24,847**	**11,624**	**10,648**	**760**
13	Kaolin and ball clay	75	95	53	1,049,810	7,239	3,460	3,168	266
14	Fire clay	200	306	44	4,200,729	7,178	4,018	3,655	255
15	Common clay and shale	517	609	70	16,061,529	6,341	3,043	2,906	61
16	Fuller's earth	21	22	18	186,961	2,107	680	562	116
17	Bentonite	27	29	20	223,381	1,982	423	357	62
18	**All other, total**	**439**	**526**	**347**	**(8)**	**92,881**	**18,463**	**15,906**	**2,330**
19	Asbestos	9	9	7	15,423	492	172	160	9
20	Barite	37	47	32	348,022	2,065	870	792	62
21	Diatomite	14	14	12	98,461	2,018	370	299	62
22	Feldspar	47	59	2	[17] 214,009	981	605	512	54
23	Fluorspar	60	61	53	305,557	3,398	1,445	1,287	109
24	Graphite, lithium minerals, pinite, and Iceland spar.	6	6	2	(8)	96	48	36	10
25	Greensand	4	3	4	4,054	285	96	79	15
26	Gypsum	34	59	25	3,302,208	4,569	1,431	1,327	97
27	Kyanite, andalusite, and dumortierite.	7	8	5	3,730	139	101	83	16
28	Magnesite and brucite	3	4	1	188,349	1,396	228	216	12
29	Mica	22	21	10	20,731	327	221	190	20
30	Native asphalt and bitumens.	23	23	15	494,864	2,968	860	730	123
31	Natural abrasives	33	41	31	101,476	1,295	435	366	45
32	Natural sodium compounds.	10	12	9	255,385	3,067	643	533	105
33	Peat	23	25	23	55,556	378	195	157	27
34	Phosphate rock	33	40	50	[17] 3,957,884	12,286	3,766	3,372	382
35	Potash	5	5	4	531,621	13,964	1,801	1,516	284
36	Pyrites	6	5	4	[17] 169,760	602	209	189	15
37	Rock salt	17	17	17	2,046,880	6,896	1,565	1,380	181
38	Sulfur	8	10	2	[17] 2,091,179	31,812	2,025	1,517	507
39	Talc and soapstone	29	38	26	253,992	3,269	1,154	970	167
40	Tripoli	9	12	8	28,995	427	159	139	20
41	Vermiculite	7	7	5	22,638	150	64	56	8
42	**Contract-service operations [24]**	**2,067**	-------	-------	-------	[25] **208,332**	**48,595**	**41,426**	**5,279**
43	Oil- and gas-field services	1,888	-------	-------	-------	[25] 203,844	46,939	40,061	5,153
44	General services for mineral industries.	179	-------	-------	-------	[25] 4,488	1,656	1,365	126
45	Nonproducing operations [26]	453	162	32	-------	-------	2,175	1,456	511

[1] Companies with operations in more than one industry are counted only once in totals.
[2] See note 3, table 856. [3] See note 4, table 856. [4] See note 5, table 856. [5] See note 6, table 856.
[6] Represents permanent additions and major alterations (including installation costs); minor additions and replacements and the cost of land are excluded.
[7] See note 9, table 856.
[8] Not shown because of dissimilar products.
[11] Contractors performing oil- and gas-field services were not asked to report expenditures for supplies and materials, fuel, purchased electric energy, or contract work, and contractors performing general services for mineral industries were not asked to report expenditures for contract work. These expenditures are not included in totals shown. Expenditures by "Contract-service operations" duplicate in part the expenditures for "Contract work" reported by producing operations.
[12] Oil- and gas-field contractors were not asked to report expenditures for buildings, machinery, and equipment, and contractors performing general services for mineral industries were asked to report only combined expenditures for these items, which amounted to $150,000. These expenditures are not included in totals shown.
[17] Tons of 2,240 pounds. [22] Less than $501.

BY INDUSTRIES: 1939—Continued

NUMBER OF PERSONS ENGAGED—con.	Total man-hours worked by wage earners (thousands)	PRINCIPAL EXPENSES DESIGNATED BELOW (THOUSANDS OF DOLLARS)							COST OF BUILDINGS, MACHINERY, AND EQUIPMENT ERECTED OR INSTALLED DURING YEAR (THOUSANDS OF DOLLARS) [6]		Aggregate horsepower rating of prime movers and electric motors driven by purchased energy [7]	Line number
Proprietors and firm members [5]		Total	Wages	Salaries	Supplies and materials	Fuel	Purchased electric energy	Contract work	Buildings	Machinery and equipment		
60	2,611	2,747	1,252	232	881	113	242	28	5	72	29,554	1
----------	803	1,420	426	93	716	39	138	8	----------	24	12,594	2
60	1,808	1,327	825	139	165	74	104	20	5	48	16,960	3
6	2,973	1,543	1,100	105	139	87	101	11	1	30	18,247	4
1	127	99	44	30	11	6	8	----------	----------	2	2,087	5
5	2,846	1,444	1,057	75	127	81	92	11	1	28	16,160	6
30	1,970	1,521	800	190	314	101	95	23	34	165	21,247	7
796	35,786	42,683	18,822	6,393	8,493	4,632	3,806	537	1,030	5,302	699,215	8
711	31,324	37,190	16,482	5,447	7,432	4,156	3,273	399	870	4,780	643,026	9
5	2,667	3,568	1,456	600	747	322	366	77	124	324	29,154	10
80	1,794	1,925	884	346	314	154	166	62	35	197	27,035	11
216	18,848	15,773	8,735	1,676	2,918	1,252	705	487	308	1,559	147,895	12
26	5,987	4,269	1,830	637	896	530	241	135	203	1,017	32,777	13
108	5,642	4,875	3,366	499	622	115	130	143	34	153	31,840	14
76	5,481	4,213	2,793	94	629	384	214	99	40	219	61,525	15
2	1,051	1,450	438	308	374	164	95	72	17	68	14,795	16
4	687	966	309	137	396	59	26	38	15	103	6,958	17
227	31,540	39,871	17,358	6,503	9,518	4,205	1,983	304	1,074	2,981	362,892	18
3	344	320	151	18	86	22	40	3	7	13	4,179	19
16	1,439	1,166	597	155	246	94	52	21	31	96	10,452	20
9	751	1,101	338	138	446	96	83	----------	34	48	6,648	21
39	1,016	618	383	113	81	28	8	5	7	39	5,668	22
49	2,568	2,104	1,134	228	506	118	61	57	106	456	20,506	23
2	63	63	26	13	16	3	4	1	1	1	679	24
2	146	154	67	30	34	22	1	----------	----------	----------	709	25
7	2,466	2,671	1,640	217	624	37	146	6	27	277	28,538	26
2	165	131	68	31	18	8	6	----------	2	32	1,574	27
----------	437	432	300	24	80	5	11	11	1	39	1,820	28
11	361	190	118	20	25	10	16	(22)	1	9	1,696	29
7	1,330	1,306	608	285	317	68	28	1	26	89	12,966	30
24	711	692	349	106	148	65	24	(22)	13	37	6,147	31
5	1,070	1,994	779	314	429	251	198	24	131	146	16,066	32
11	246	184	101	43	21	15	4	(22)	8	18	2,759	33
12	6,680	7,012	2,871	858	1,503	826	931	23	109	470	112,531	34
1	3,318	6,462	2,666	997	1,607	1,174	----------	18	246	545	44,600	35
5	348	384	204	37	95	7	34	8	3	15	2,525	36
4	2,608	3,148	1,434	540	868	153	151	3	149	212	23,002	37
1	3,031	7,406	2,545	1,911	1,690	1,128	15	116	84	297	45,135	38
17	2,068	2,017	807	382	619	45	162	2	62	102	12,049	39
----------	284	220	116	34	46	16	8	----------	22	34	1,595	40
----------	91	95	54	11	10	16	----------	4	5	6	1,048	41
1,890	69,159	[11] 74,226	58,085	15,157	[11] 624	[11] 335	[11] 25	(11)	(12)	(12)	1,148,201	42
1,725	66,479	[11] 71,289	56,419	14,870	(11)	(11)	(11)	(11)	(12)	(12)	1,096,381	43
165	2,680	[11] 2,937	1,666	287	624	335	25	(11)	(12)	(12)	51,820	44
208	2,744	7,890	1,799	886	1,059	255	328	3,562	415	1,622	129,973	45

[24] Contractors engaged chiefly in development work for other concerns in mineral industries; Pennsylvania anthracite strip-pit and culm-bank contractors are excluded. Statistics for contractors performing oil- and gas-field services exclude data for oil- and gas-field work performed on contract by concerns that also operated oil and gas wells for their own account unless separate reports were obtained for each of these two types of activities. Statistics are also excluded for concerns rendering oil- and gas-field services or producing crude petroleum, natural gas, or natural gasoline whose reports covering these activities indicated that neither the value of products and services rendered, nor reported principal expenses, nor cost of buildings, machinery, and equipment, nor cost of drilling and equipping wells amounted to as much as $2,500 during 1939. Statistics for contractors performing general services for mineral industries exclude data for contractors that received or were due less than $2,500 for work done during 1939.

[25] Represents amounts received or due for services performed during year.

[26] Statistics cover, in general, only those operations that had reported principal expenses or cost of buildings, machinery, and equipment during year of at least $2,500; for common sand and gravel corresponding minimum was $15,000. Statistics include data for oil- and gas-field operations in States in which the reporting concerns had no products, provided the concerns were large enough to come within the scope of the census as defined in headnote of table 856.

Source: Dept. of Commerce, Bureau of the Census; reports of Census of Mineral Industries, 1939, Vol. I.

No. 855.—Mineral Industries—Summary, by States: 1939

[Statistics cover producing operations only. For explanations of terms, see headnote, table 856, and appropriate footnotes, tables 854 and 856]

STATE	Number of operating companies	Number of mines and quarries	Number of oil and gas wells producing, Dec. 31, 1939	Number of preparation plants	Value of all products (thousands of dollars)	NUMBER OF PERSONS ENGAGED				Total man-hours worked by wage earners (thousands)
						Total	Wage earners (average for year)	Salaried employees	Proprietors and firm members	
United States	**18,920**	**13,395**	**347,645**	**5,418**	**3,221,927**	**827,410**	**736,150**	**77,019**	**14,241**	**1,224,707**
Alabama	282	340	--------	106	41,685	27,078	25,661	1,181	236	39,603
Arizona	164	172	--------	57	54,127	10,432	9,335	981	116	21,944
Arkansas	261	140	2,987	52	25,345	6,456	5,821	480	155	8,935
California	1,642	771	16,657	474	364,619	37,805	30,252	6,604	949	62,635
Colorado	486	544	223	107	52,059	14,884	13,259	1,288	337	22,912
Connecticut	52	63	--------	44	2,917	725	635	71	19	1,370
Delaware	9	9	--------	7	242	86	68	15	3	130
Florida	68	83	--------	83	11,155	3,480	3,070	385	25	5,995
Georgia	92	106	--------	61	8,077	3,910	3,646	224	40	7,373
Idaho	98	105	--------	48	21,918	4,989	4,550	384	55	9,507
Illinois	1,006	783	16,981	287	187,219	44,724	39,920	3,971	833	61,212
Indiana	483	455	1,885	153	35,443	12,588	11,250	978	360	18,258
Iowa	365	383	--------	91	10,816	6,260	5,580	339	341	8,583
Kansas	748	212	20,238	124	77,531	13,327	11,290	1,475	562	19,572
Kentucky	637	613	9,868	126	91,285	54,001	51,278	2,370	353	73,656
Louisiana	451	40	6,529	62	121,202	11,782	9,645	1,925	212	18,648
Maine	33	34	--------	11	896	439	379	41	19	659
Maryland and Dist. of Col.	144	171	--------	58	8,451	3,876	3,526	236	114	5,952
Massachusetts	102	112	--------	87	5,230	1,617	1,206	362	49	2,512
Michigan	463	173	3,002	106	75,397	16,144	14,293	1,566	285	27,426
Minnesota	110	170	--------	83	98,711	8,027	6,716	1,255	56	12,971
Mississippi	49	45	47	37	2,139	644	551	80	13	1,106
Missouri	387	456	132	157	27,107	11,066	9,258	1,531	277	16,422
Montana	444	296	2,067	70	44,173	11,738	10,114	1,284	340	19,560
Nebraska	37	64	--------	47	1,323	557	463	60	34	1,030
Nevada	265	279	--------	90	25,171	5,714	5,026	538	150	11,162
New Hampshire	24	26	--------	13	653	316	266	41	9	535
New Jersey	117	135	--------	108	14,124	4,010	3,369	609	32	6,451
New Mexico	241	100	2,981	30	55,559	8,266	7,340	792	134	13,463
New York	419	286	14,729	217	40,278	8,887	6,817	1,679	391	14,254
North Carolina	85	111	--------	60	4,257	1,997	1,787	178	32	3,720
North Dakota	105	106	--------	4	2,503	1,078	874	86	118	1,724
Ohio	1,189	1,102	15,011	334	63,221	28,028	24,579	2,351	1,098	40,751
Oklahoma	1,302	235	50,384	223	196,803	30,949	23,279	6,839	831	42,495
Oregon	114	123	--------	80	5,120	1,485	1,257	158	70	2,548
Pennsylvania	2,524	2,271	65,484	658	458,038	207,494	192,026	13,142	2,326	294,101
Rhode Island	20	21	--------	16	828	259	212	36	11	435
South Carolina	34	44	--------	23	3,457	1,400	1,291	97	12	2,756
South Dakota	57	55	2	23	22,680	2,924	2,633	264	27	5,960
Tennessee	220	256	41	88	22,133	12,578	11,723	739	116	19,578
Texas	2,891	192	89,568	282	555,208	52,149	38,420	11,819	1,910	71,269
Utah	160	183	7	38	62,791	10,789	9,446	1,278	65	18,294
Vermont	60	77	--------	21	5,348	1,735	1,574	121	40	3,148
Virginia	221	253	--------	113	34,436	20,122	18,988	1,041	93	28,955
Washington	146	165	12	77	13,688	4,317	3,864	343	110	6,553
West Virginia	1,041	793	26,137	239	222,780	107,488	101,815	4,934	739	155,554
Wisconsin	131	153	--------	126	8,176	2,396	2,093	229	74	4,177
Wyoming	146	89	2,673	17	35,548	6,394	5,705	619	70	8,855

No. 855.—MINERAL INDUSTRIES—SUMMARY, BY STATES: 1939—Continued

STATE	PRINCIPAL EXPENSES DESIGNATED BELOW (THOUSANDS OF DOLLARS)							COST OF BUILDINGS, MACHINERY, AND EQUIPMENT ERECTED OR INSTALLED DURING YEAR (THOUSANDS OF DOLLARS)		Aggregate horse power rating of prime movers and electric motors driven by purchased energy
	Total	Wages	Salaries	Supplies and materials	Fuel	Purchased electric energy	Contract work	Buildings	Machinery and equipment	
United States	**1,747,282**	**915,558**	**189,355**	**306,297**	**60,374**	**68,892**	**206,805**	**27,020**	**261,475**	**13,045,784**
Alabama	34,253	23,674	2,666	5,846	483	1,342	242	549	2,307	253,211
Arizona	30,604	14,495	2,492	10,428	2,012	1,059	118	789	3,118	280,525
Arkansas	15,943	5,905	1,032	2,783	872	374	4,977	149	4,138	122,902
California	132,197	51,788	17,934	28,538	7,619	6,116	20,262	3,618	37,886	1,257,118
Colorado	29,650	16,561	2,899	6,987	844	1,803	556	441	1,642	192,296
Connecticut	1,656	753	180	436	137	127	21	49	142	28,420
Delaware	153	69	33	25	14	12	--------	2	6	3,067
Florida	6,265	2,406	775	1,453	771	816	43	146	331	116,656
Georgia	5,076	2,257	503	1,263	577	345	130	240	1,079	47,770
Idaho	12,267	6,936	1,044	3,202	237	802	46	118	746	77,816
Illinois	102,901	47,441	9,773	17,529	2,303	3,784	22,071	2,545	18,795	737,958
Indiana	24,656	13,505	2,143	5,592	814	1,477	1,124	443	1,869	233,285
Iowa	7,923	5,482	570	1,147	309	362	53	46	302	64,949
Kansas	36,475	12,776	3,259	5,710	1,167	1,240	12,323	731	9,644	357,383
Kentucky	71,359	52,173	4,606	10,211	765	2,561	1,043	556	2,784	325,424
Louisiana	60,234	14,744	5,188	10,240	3,280	448	26,334	917	23,418	284,785
Maine	593	376	72	83	27	33	2	5	11	10,952
Maryland and Dist. of Col.	5,243	3,344	487	852	298	204	59	79	618	38,469
Massachusetts	3,517	1,486	1,042	433	294	256	6	64	321	58,418
Michigan	37,311	18,418	3,687	7,302	2,570	2,033	3,300	414	3,950	403,941
Minnesota	20,402	9,816	3,340	4,014	1,576	1,558	97	367	1,394	309,190
Mississippi	1,170	362	173	212	140	72	210	16	265	13,811
Missouri	18,801	8,904	3,678	3,885	541	1,621	172	146	613	220,954
Montana	27,212	14,463	2,987	6,915	504	1,793	550	380	2,273	224,646
Nebraska	811	358	86	175	89	75	29	15	88	15,059
Nevada	15,853	7,754	1,318	4,110	620	1,188	862	836	1,474	102,169
New Hampshire	479	266	87	63	44	19	(1)	2	73	6,650
New Jersey	8,947	4,314	1,612	1,720	570	636	95	163	478	90,674
New Mexico	25,815	9,468	1,945	5,223	1,389	313	7,476	983	5,624	144,175
New York	23,477	9,399	5,703	4,126	1,478	1,373	1,398	404	2,420	278,038
North Carolina	2,532	1,123	321	709	181	193	7	8	161	26,285
North Dakota	1,518	871	171	274	73	124	6	16	56	15,251
Ohio	45,573	28,334	5,041	7,001	1,704	2,048	1,445	418	3,986	358,401
Oklahoma	83,873	30,413	17,880	15,652	4,324	1,870	13,734	1,028	11,623	947,665
Oregon	3,184	1,580	317	864	254	163	6	84	216	32,405
Pennsylvania	352,536	243,512	30,539	50,947	8,125	14,048	5,365	3,596	14,103	2,301,660
Rhode Island	527	262	61	129	44	30	2	13	35	6,998
South Carolina	2,132	782	283	698	136	176	58	26	162	20,366
South Dakota	7,711	4,681	840	1,715	282	172	21	352	735	46,047
Tennessee	16,194	10,458	1,486	2,602	589	968	89	223	1,007	136,526
Texas	207,036	55,826	31,855	32,023	8,447	2,240	76,645	3,935	36,788	1,224,293
Utah	27,870	13,159	3,303	7,603	560	2,988	257	552	1,475	272,301
Vermont	3,230	1,719	297	842	92	273	6	37	92	32,120
Virginia	26,879	18,864	2,037	4,186	424	1,324	44	198	1,174	145,791
Washington	8,739	5,341	816	1,911	245	381	45	168	326	75,443
West Virginia	175,856	128,402	10,804	25,355	1,795	7,142	2,358	1,030	9,217	922,293
Wisconsin	5,069	2,604	513	1,078	365	491	18	27	413	72,806
Wyoming	15,582	7,932	1,478	2,204	388	422	3,159	99	2,095	108,422

[1] Less than $501.

Source: Department of Commerce, Bureau of the Census; reports of Census of Mineral Industries, 1939, Vol. I.

No. 856.—Mineral Industries—Summary for the United States: 1919, 1929, and 1939

[Statistics cover producing operations only. In general, those for 1939 cover only those operations (or concerns producing crude petroleum, natural gas, and natural gasoline, and rendering oil- and gas-field services) for which total value of all products, reported principal expenses, cost of buildings, machinery, and equipment during year, or cost of drilling and equipping wells during year amounted to $2,500 or more. For bituminous coal and lignite an output criterion of 1,000 tons of coal was substituted for value of all products. Statistics for common sand and gravel industry exclude data for operations that produce less than 15,000 tons of sand and gravel unless reported principal expenses or cost of buildings, machinery, and equipment during year amounted to $15,000 or more. Statistics for 1929 cover, in general, only those "enterprises" for which total value of all products or cost of development work amounted to $2,500 or more. Bituminous coal and lignite mines that produced less than 1,000 tons of coal and common sand and gravel operations that produced less than 25,000 tons of sand and gravel, were excluded. Statistics for 1919 exclude data for "enterprises" for which value of all products was less than $500 or cost of development work was less than $5,000. Noncommercial production of stone and sand and gravel obtained from mines or quarries operated by governmental agencies, public utilities, or by construction companies or contractors producing wholly for their own use or on contract for governmental agencies is excluded for all years]

ITEM	1939 (all industries)	Comparative statistics for 1939 and 1929		Comparative statistics for 1939 and 1919	
		1939 [1]	1929	1939 [2]	1919
Number of mines and quarries	13,395	12,736	11,602	10,888	13,844
Number of oil and gas wells producing December 31	347,645	----------	----------	347,645	257,673
Number of natural-gasoline plants	734	----------	----------	734	1,115
Value of all products [3] ..... 1,000 dollars	3,221,927	1,721,771	2,392,831	3,089,904	3,122,559
Number of persons engaged, total	827,410	668,771	863,948	792,423	1,077,675
Wage earners (average for the year) [4]	736,150	616,614	806,418	705,872	981,560
Salaried employees [5]	77,019	44,124	52,633	73,238	74,197
Proprietors and firm members (not applicable to corporations) [6]	14,241	8,033	4,897	13,313	21,918
Performing manual labor	6,431	5,107	(7)	6,122	5,245
Principal expenses designated below, total ..... 1,000 dollars	1,747,282	1,161,318	1,661,168	1,674,708	2,166,345
Wages [4] ..... do	915,558	740,112	1,091,990	881,122	1,295,936
Salaries [5] ..... do	189,355	103,807	137,639	180,372	149,329
Supplies and materials ..... do	306,297	216,448	293,568	290,545	519,594
Fuel ..... do	60,374	32,568	49,146	53,098	93,911
Purchased electric energy ..... do	68,892	61,429	71,769	63,617	28,195
Contract work ..... do	206,805	6,953	17,056	205,955	79,380
Cost of machinery and equipment installed during year [8] ..... 1,000 dollars	261,475	60,334	84,508	253,688	(7)
Horsepower rating of power equipment, total [9]	13,045,784	8,754,546	7,514,843	12,112,357	[10] 6,723,786
Prime movers	7,149,168	3,332,089	2,743,025	6,653,204	5,111,531
Electric motors driven by purchased energy	5,896,616	5,422,457	4,771,818	5,459,153	[10] 1,612,255
Electric energy consumed, total ..... 1,000 kilowatt-hours	8,371,670	7,396,870	7,462,790	(7)	(7)
Purchased ..... do	6,301,497	5,627,091	5,382,178	(7)	(7)
Generated by reporting companies ..... do	2,070,173	1,769,779	2,080,612	(7)	(7)

[1] Excludes statistics for common clay and shale, crude petroleum and natural gas, greensand, natural gasoline, peat, potash, and rock salt industries, for comparability with 1929.

[2] Excludes common clay and shale, common sand and gravel, glass-sand, foundry-sand, natural sodium compounds, peat, potash, and rock salt industries, and limestone mines and quarries operated in conjunction with cement and lime plants for comparability with 1919.

[3] Includes value of crude minerals produced, value added during year by preparation processes, receipts for services performed for other concerns, and value of electric energy generated and sold.

[4] Represents statistics for skilled and unskilled employees who perform manual labor, use tools, operate machines, handle materials, and care for property. Average numbers of wage earners were derived by adding numbers reported for each month and dividing sums by 12.

[5] Represents statistics for salaried employees at operations and at central and branch offices, including officers of corporations, managers, superintendents, and other supervisory personnel, responsible professional and technical employees, and clerical employees. Number of salaried employees represents number receiving pay on a representative or normal day or pay-roll period—for 1939, during normal pay-roll period ending nearest Oct. 14; for 1929, on Dec. 14 or on nearest representative day; for 1919, on Dec. 15 or on nearest representative day. Salaries represent total amount paid to salaried employees during calendar year.

[6] Represents statistics for proprietors and firm members at operations and at central and branch offices.

[7] Census statistics not available.

[8] For 1939 includes installation costs, which are excluded for 1929.

[9] Statistics for 1939 and 1929 refer to equipment in use or available for use at end of year.

[10] Includes equipment, with rating of 8,865 horsepower, operated by purchased power other than electric energy.

Source: Dept. of Commerce, Bureau of the Census; reports of Census of Mineral Industries, 1939, Vol. I.

No. 857.—Aluminum—Production, Exports, and Imports: 1913 to 1947

[See also *Historical Statistics*, series G 125–126, for earlier data on primary aluminum]

Year	Production						Imports [2]		Exports [2]	
	Quantity (1,000 pounds)			Value ($1,000)						
	Total	Primary	Secondary	Total	Primary	Secondary [1]	Quantity (1,000 lb.)	Value ($1,000)	Quantity (1,000 lb.)	Value ($1,000)
1913	56,587	47,279	9,308	11,649	9,450	2,199	25,095	4,388	--------	--------
1914	67,017	57,973	9,044	11,753	10,080	1,673	17,943	3,354	--------	--------
1915	107,504	90,504	17,000	22,082	16,280	5,802	9,294	1,766	--------	--------
1916	153,707	115,107	38,600	57,330	33,900	23,430	6,699	1,753	--------	--------
1917	162,061	129,861	32,200	62,594	45,882	16,712	89	35	--------	--------
1918	154,825	124,725	30,100	51,272	41,159	10,113	1,691	534	24,135	8,979
1919	165,859	128,477	37,382	50,573	38,558	12,015	13,852	4,531	5,020	1,745
1920	169,042	138,042	31,000	50,864	41,375	9,489	39,299	12,184	9,408	3,068
1921	72,332	54,532	17,800	14,681	10,906	3,775	32,559	7,628	2,196	801
1922	106,213	73,633	32,580	19,708	13,622	6,086	43,892	8,287	4,347	1,127
1923	171,258	128,658	42,600	39,130	28,305	10,825	42,477	8,317	5,540	1,518
1924	204,564	150,564	54,000	52,203	37,607	14,596	31,810	6,860	6,344	1,632
1925	228,116	140,116	88,000	61,246	36,430	24,816	41,997	9,806	12,642	3,366
1926	235,786	147,386	88,400	61,451	37,583	23,868	71,392	16,422	7,634	2,135
1927	256,007	163,607	92,400	62,736	39,266	23,470	62,575	13,317	14,523	3,479
1928	306,144	210,544	95,600	70,747	47,899	22,848	38,847	8,057	15,728	3,759
1929	324,773	227,973	96,800	74,999	51,864	23,135	50,881	9,935	17,032	4,150
1930	306,237	229,037	77,200	68,138	50,961	17,177	25,461	4,690	17,330	3,916
1931	238,145	177,545	60,600	50,010	37,284	12,726	14,833	2,540	4,701	986
1932	152,888	104,888	48,000	31,445	20,453	10,992	8,185	1,339	4,437	469
1933	152,125	85,125	67,000	31,517	16,174	15,343	15,247	2,746	5,708	600
1934	166,977	74,177	92,800	31,726	14,094	17,632	18,592	3,625	8,366	1,249
1935	222,095	119,295	102,800	41,088	22,070	19,018	21,291	3,694	3,970	694
1936	327,929	224,929	103,000	60,667	41,612	19,055	25,563	4,165	1,606	382
1937	417,801	292,681	125,120	79,382	55,609	23,773	45,178	6,883	5,384	1,261
1938	364,482	286,882	77,600	71,985	56,659	15,326	17,740	2,491	12,618	3,912
1939	434,984	327,090	107,894	85,909	64,600	21,309	28,673	3,385	74,216	20,892
1940	573,284	412,560	160,724	104,624	75,292	29,332	36,168	4,737	55,682	17,919
1941	831,848	618,134	213,714	135,102	100,395	34,707	26,826	3,619	14,924	4,793
1942	1,435,140	1,042,212	392,928	208,817	151,371	57,446	224,272	35,501	77,558	19,563
1943	2,468,280	1,840,358	627,922	355,926	265,380	90,546	271,644	41,303	235,276	59,093
1944	2,204,182	1,552,892	651,290	315,681	222,416	93,265	205,506	30,230	377,042	73,579
1945	1,586,894	990,120	596,774	226,161	140,864	85,297	678,570	98,285	13,406	3,116
1946	1,375,406	819,260	556,146	194,451	115,812	78,639	114,200	12,236	34,668	10,132
1947	1,833,174	1,143,500	689,674	259,077	161,626	97,451	62,658	6,300	126,242	33,188

[1] Based upon average price of primary aluminum as reported to Bureau of Mines, or as quoted by the Engineering and Mining Journal and the American Metal Market.

[2] Includes aluminum and aluminum alloy ingots, scrap, plates, sheets, bars, etc.

Source: Department of Interior, Bureau of Mines: Minerals Yearbook.

No. 858.—Copper—Production, Exports, Imports, and Consumption: 1910 to 1947

[**In short tons (2,000 pounds).** Production figures for unrefined copper cover United States and Alaska. Output of copper from foreign crude materials also shown under refined copper production. Consumption as shown represents quantity withdrawn from total new supply on domestic account (apparent consumption) not actual consumption, largely because consumers' inventories are not taken into account. Over a period of years, however, apparent consumption data give a good indication of consumption trends]

ITEM	1910	1920	1930	1935	1940	1945	1946	1947
UNREFINED COPPER								
Copper ore produced (1,000 tons) [1]	28,497	36,765	47,382	19,112	69,278	77,473	62,232	87,865
Average copper yield, percent	1.88	1.63	1.43	1.89	1.20	.93	.91	.90
Smelter output from domestic ore	540,080	604,530	697,195	381,294	909,084	782,726	599,656	862,872
Mine production	544,119	612,275	705,074	380,491	878,086	772,894	608,737	847,563
Imports, unrefined: [2]								
Ore (copper content)	32,102	26,023	50,658	7,660	[3] 11,203	8,858	4,784	14,665
Concentrates (copper content)	10,511	23,399	28,435	30,198	[3] 71,574	48,632	40,061	71,193
Matte and regulus (copper content)		8,797	2,353	2,733	60,115	19,862	732	5,223
Unrefined, in bars, pigs, etc	[4] 129,605	122,348	280,235	197,975	278,212	243,101	192,221	167,378
REFINED COPPER PRODUCTION								
New copper (primary)	711,020	763,083	1,078,530	588,805	1,313,556	1,108,599	878,662	1,159,970
Domestic	535,947	591,212	695,612	338,321	927,239	775,738	578,429	909,213
Foreign	175,072	171,871	382,917	250,484	386,317	332,861	300,233	250,757
Secondary copper	94,500	312,460	467,200	448,900	532,046	1,006,516	803,546	961,741
From new scrap	30,000	143,500	125,000	87,200	198,156	509,421	397,093	458,365
From old scrap	64,500	168,960	342,200	361,700	333,890	497,095	406,453	503,376
REFINED COPPER CONSUMPTION								
New copper produced (refinery)	711,020	763,083	1,078,530	588,805	1,313,556	1,108,599	878,662	1,159,970
Refined copper imported [2]	(4)	54,372	43,105	18,071	68,337	531,367	154,371	149,478
Refined copper exported	[5] 354,158	275,613	334,626	275,006	377,108	[6] 48,563	[6] 52,629	[6] 147,642
Stocks, Dec. 31 (refined)	61,402	329,500	307,500	175,000	91,500	130,000	96,000	60,000
Withdrawn on domestic account.								
New refined copper	366,203	526,919	632,508	441,371	1,008,785	1,415,000	1,391,000	1,286,000
New and old copper	460,700	839,500	1,099,500	890,000	1,541,000	2,422,000	2,195,000	2,248,000

[1] Old tailings included beginning with 1930.
[2] For immediate consumption plus copper entering under bond.
[3] Ore from Philippine Islands included under concentrates.
[4] Imports of refined copper in ingots, bars, or other forms included in imports of unrefined.
[5] Includes small exports of unrefined black blister and converter copper (bars, pigs, etc).
[6] Excludes refined copper in rods.

Source: Department of Interior, Bureau of Mines; Minerals Yearbook.

No. 859.—Copper—Mine Production, by States: 1910 to 1947

[**In short tons (2,000 pounds) of recoverable copper**]

STATE	1910	1920	1930	1935	1940	1945	1946	1947
Total	**544,119**	**612,275**	**705,074**	**380,491**	**878,086**	**772,894**	**608,737**	**847,563**
Alaska	2,121	35,218	16,326	7,750	55	5	2	12
Arizona	148,746	279,128	288,095	139,015	281,169	287,203	289,223	366,218
California	24,350	6,313	13,643	977	6,438	6,473	4,240	2,407
Colorado	4,180	2,022	5,257	7,327	12,152	1,485	1,754	2,150
Idaho	3,519	1,269	1,556	1,048	3,349	1,548	1,038	1,640
Michigan	111,342	77,348	84,691	32,054	45,198	30,401	21,663	24,184
Missouri	----------	756	88	34	685	3,399	1,857	1,760
Montana	142,404	88,530	98,094	77,479	126,391	88,506	58,481	57,900
Nevada	32,180	25,280	54,602	37,133	78,454	52,595	48,616	49,603
New Mexico	2,307	27,200	32,575	2,253	69,848	56,571	50,191	60,205
Tennessee	8,419	8,364	(1)	(1)	[2] 12,732	[3] 12,385	[3] 12,850	[3] 12,686
Utah	63,799	58,466	90,263	64,758	231,864	226,376	114,284	266,533
Washington	43	992	603	43	9,612	5,821	4,527	2,240
Other States	710	1,390	19,282	10,620	139	126	11	25

[1] Included under "Other States."
[2] Includes North Carolina and Pennsylvania.
[3] Includes Pennsylvania and Vermont.

Source: Department of the Interior, Bureau of Mines; Minerals Yearbook.

No. 860.—Copper—Smelter and Refinery Output: 1850 to 1947

[**Quantities in short tons (2,000 pounds); values in thousand of dollars.** Smelter output shown here represents production of unrefined copper from domestic (including Alaskan) ores. Figures on refinery output of copper from foreign crude materials (shown as imports in table 858) include copper from foreign materials smelted and refined or only refined in the United States. See also *Historical Statistics*, series G 112-113, for smelter output]

Yearly average or year	Smelter output from domestic ore		Year	Smelter output from domestic ore		Refinery output (quantity)			
						New copper			Secondary copper
	Quantity	Value		Quantity	Value	Total	Domestic	Foreign	
1850	728	320	1924	817,125	214,087	1,130,038	837,107	292,931	388,300
1860	8,064	3,709	1925	837,435	237,832	1,102,287	841,448	260,839	420,210
1870	14,112	5,977							
			1926	869,811	243,547	1,161,243	865,649	295,594	479,800
1871-1875	17,136	8,895	1927	842,020	220,609	1,162,882	859,476	303,406	490,200
1876-1880	24,976	9,679	1928	912,950	262,930	1,243,804	895,899	347,905	536,400
1881-1885	58,867	17,236	1929	1,001,432	352,504	1,370,056	991,366	378,690	626,550
1886-1890	105,214	30,345	1930	697,195	181,271	1,078,530	695,612	382,917	467,200
1891-1895	169,328	37,266							
			1931	521,356	94,887	750,721	537,303	213,418	347,000
1896-1900	265,544	74,424	1932	272,005	34,273	340,434	222,539	117,895	248,180
1901-1905	366,095	103,859	1933	225,000	28,800	370,789	240,669	130,120	338,100
1906-1910	490,248	150,924	1934	244,227	39,076	445,360	233,029	212,331	377,400
1911-1915	610,313	185,592	1935	381,294	63,295	588,805	338,321	250,484	448,900
1916-1920	821,799	395,270							
			1936	611,410	112,499	822,489	645,462	177,027	484,600
1921-1925	619,999	171,275	1937	834,661	201,988	1,066,814	822,253	244,561	532,100
1926-1930	864,682	252,172	1938	562,328	110,216	792,416	552,574	239,842	359,800
1931-1935	328,776	52,066	1939	712,675	148,236	1,009,515	704,873	304,642	499,700
1936-1940	726,032	155,678	1940	909,084	205,453	1,313,556	927,239	386,317	532,046
1941-1945	986,621	232,843							
			1941	966,072	227,993	1,395,309	975,408	419,901	726,396
1918	954,267	471,408	1942	1,087,991	[1] 256,766	1,414,561	1,064,792	349,769	927,755
1919	643,210	239,274	1943	1,092,930	[1] 257,934	1,379,263	1,082,079	297,184	1,086,047
1920	604,531	222,467	1944	1,003,379	[1] 236,797	1,221,187	973,852	247,335	950,942
1921	252,793	65,221	1945	782,726	[1] 184,723	1,108,599	775,738	332,861	1,006,516
1922	475,143	128,289	1946	599,656	[1] 172,701	878,662	578,429	300,233	803,546
1923	717,500	210,945	1947	862,872	[1] 360,680	1,159,970	909,213	250,757	961,741

[1] Excludes premiums paid to miners by Government.

Source: Department of the Interior, Bureau of Mines; Minerals Yearbook.

No. 861.—Copper—Exports and Imports: 1891 to 1948

[Exports are those classed as "domestic" in foreign trade statistics but include copper smelted or refined in 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 [1]		Year	Exports		Imports [1]	
	Quantity	Value	Quantity	Value		Quantity	Value	Quantity	Value
1891-1895 [2]	65,586	14,392	5,477	896	1937	350,317	93,626	227,479	52,562
1896-1900 [2]	137,684	36,745	24,634	5,866	1938	422,014	86,809	205,718	37,872
1901-1905 [2]	190,451	54,942	83,237	22,611	1939	427,579	97,185	230,669	44,230
1906-1910 [2]	289,445	92,334	130,111	38,026	1940	427,944	110,119	364,997	73,492
1911-1915 [2]	416,840	123,655	176,635	46,129	1941	158,906	47,690	720,708	141,789
1916-1920 [3]	376,877	208,909	244,948	103,805					
					1942	217,082	82,348	782,361	165,307
1921-1925	438,337	129,761	298,975	77,811	1943	296,016	108,719	736,464	156,514
1926-1930	491,290	149,999	407,630	108,244	1944	237,521	102,697	764,228	165,479
1931-1935	246,658	39,920	211,116	29,662	1945	132,592	55,212	896,239	194,672
1936-1940	378,054	87,680	242,530	47,608	1946	97,513	38,587	354,497	86,190
1941-1945	208,423	79,333	780,000	164,752	1947	197,114	102,489	452,822	175,829
1936	262,417	50,663	183,788	29,884	1948	[4] 209,039	[4] 113,052	486,021	202,707

[1] Imports for consumption; general imports prior to 1933.
[2] Fiscal years ending June 30. [3] Average for period July 1, 1915, to Dec. 31, 1920.
[4] Effective January 1948, includes shipments under Army Civilian Supply Program.

Source: Department of Commerce, Bureau of the Census; annual report, Foreign Commerce and Navigation of the U. S., and records.

No. 862.—Iron Ore—Production, Shipments, Exports, and Imports, 1881 to 1947, and Production, by District and Kind, 1943 to 1947

[In thousands of long tons (2,240 pounds). Nearly all exports are to Canada. Since 1905, excludes ore containing 5 percent or more of manganese. See also *Historical Statistics*, series G 93–95, for production and shipments]

Yearly average or year	Production	Shipments [1]	Exports	Imports
1881–1890	10,385	(2)	(2)	766
1891–1900	17,551	(2)	(2)	587
1901–1910	41,339	(2)	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
1931–1935	22,732	23,538	389	1,166
1936–1940	54,951	56,054	989	2,338
1941–1945	96,336	96,356	2,214	1,023
1936	48,789	51,466	645	2,232
1937	72,094	72,348	1,264	2,442
1938	28,447	26,431	592	2,122
1939	51,732	54,827	1,057	2,413
1940	73,696	75,198	1,386	2,479
1941	92,410	93,054	1,908	2,321
1942	105,526	105,989	2,515	731
1943	101,248	99,463	2,425	399
1944	94,118	95,136	2,158	464
1945	88,376	88,137	2,063	1,198
1946	70,843	70,090	1,506	2,754
1947	93,092	93,315	2,807	4,903

Production	1943	1944	1945	1946	1947
District					
Lake Superior	85,789	79,111	74,821	59,042	76,532
Southeastern	8,479	7,122	6,330	6,247	7,527
Northeastern	3,468	3,849	3,620	2,596	3,987
Western	2,860	3,442	3,088	2,451	4,503
Undistributed (by-product ore)	653	593	517	507	543
Kind					
Hematite	94,418	86,727	81,295	65,728	84,683
Brown ore	1,627	1,219	943	686	1,054
Magnetite	4,549	5,579	5,621	3,021	6,812
Carbonate	1	1	1	1	-------
Byproduct material (pyrites cinder and sinter)	653	593	517	507	543

[1] Excludes ore sold for paint.
[2] Not available.

Source: Department of the Interior, Bureau of Mines; Minerals Yearbook.

No. 863.—Lead, Recoverable—Mine Production, by States and for Alaska: 1920 to 1947

[In short tons (2,000 pounds)]

State	1920	1925	1930	1935	1940	1944	1945	1946	1947
Total	496,814	684,439	558,313	331,103	457,392	416,861	390,831	335,475	384,221
Western States and Alaska	248,131	364,387	312,413	193,439	244,974	209,018	184,152	165,092	221,357
Alaska	875	789	1,365	670	779	44	11	115	264
Arizona	6,935	11,938	4,246	7,783	13,266	16,707	22,867	23,930	23,566
Colorado	23,315	31,483	22,130	5,673	11,476	17,698	17,044	17,036	18,696
Idaho	118,565	126,521	134,058	79,020	104,834	83,530	68,447	59,987	78,944
Montana	14,846	18,765	10,653	15,589	23,036	13,105	9,999	8,280	16,108
Nevada	10,100	12,238	11,529	12,676	7,499	6,605	6,275	7,175	7,161
New Mexico	1,435	3,210	10,378	7,289	3,822	7,265	7,662	4,899	6,383
Utah	66,898	153,335	115,495	63,510	75,688	52,519	40,817	30,711	49,698
Washington	2,749	2,814	576	103	2,555	5,825	3,802	2,987	5,350
Other	2,413	3,294	1,983	1,126	2,019	5,720	7,228	9,972	10,178
Central States	246,780	317,375	237,533	132,682	207,587	201,577	201,520	164,804	157,543
Kansas	16,452	22,775	12,910	10,892	11,927	9,394	7,370	6,445	7,285
Missouri	161,812	211,566	199,632	97,493	172,052	174,683	176,575	139,112	132,246
Oklahoma	64,086	79,946	23,052	23,405	21,240	13,944	12,664	13,697	14,289
Other	4,430	3,088	1,939	892	2,368	3,556	4,911	5,550	3,723
Eastern States	[1] 1,903	2,677	8,367	4,982	4,831	6,266	5,159	5,579	5,321
New York	--------	--------	8,367	4,982	1,973	1,644	862	1,073	1,496
Tennessee	1,880	448			573	--------	54	125	22
Virginia	--------	2,229			2,285	4,622	4,243	4,381	3,803

[1] Includes small quantities produced in Massachusetts, Pennsylvania, and Georgia.

Source: Department of the Interior, Bureau of Mines; Minerals Yearbook.

No. 864.—Lead—Production of Refined Primary and Secondary Lead, 1830 to 1947, and by Class and Source, 1880 to 1947

[**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 lead content of antimonial lead, shown in next to last column]

YEAR	Production	Value	YEAR	Production	Value	YEAR	Production	Value
1830	8,000	608	1912	480,894	43,280	1930	643,033	64,303
1840	17,000	1,666	1913	462,460	40,696	1931	442,764	32,765
1850	22,000	2,112	1914	542,122	42,286	1932	281,941	16,916
1860	15,600	1,778	1915	550,055	51,705	1933	263,676	19,512
1870	17,830	2,247	1916	571,134	78,817	1934	311,236	23,031
1880	95,725	9,573	1917	610,769	105,052	1935	324,560	25,965
1890	157,844	14,206	1918	640,195	90,908	1936	399,156	36,722
1895	235,822	15,093	1919	482,220	51,115	1937	467,317	55,143
1900	367,773	32,364	1920	529,657	84,745	1938	383,669	35,298
1902	367,892	30,167	1921	448,589	40,373	1939	484,035	45,499
1903	368,939	30,991	1922	532,662	58,593	1940	533,179	53,318
1904	393,452	33,837	1923	618,322	86,565	1941	570,967	65,090
1905	388,307	36,501	1924	690,493	110,479	1942	566,839	71,422
1906	404,746	46,141	1925	766,969	133,453	1943	469,612	60,110
1907	413,389	43,819	1926	798,941	127,831	1944	464,763	59,490
1908	396,564	33,311	1927	796,530	100,363	1945	443,585	56,779
1909	446,909	38,434	1928	781,071	90,604	1946	338,197	56,817
1910	470,272	41,384	1929	774,633	97,604	1947	441,010	126,129
1911	486,979	43,828						

YEAR	CLASS		SOURCE			Average value per pound	Antimonial lead, at primary refineries	Secondary lead recovered, total
	Desilverized [1] [2]	Soft undesilverized [2]	Domestic ores and bullion [3]	Foreign ores	Foreign base bullion			
1880	68,035	27,690	95,725	----	----	$0.050	(4)	----
1890	126,493	31,351	139,720	18,124		.045	(4)	----
1900	319,752	48,021	260,918	106,855		.044	(4)	----
1910	328,954	141,318	375,402	18,065	76,805	.044	(4)	55,422
1920	339,803	189,854	476,849	8,414	44,394	.080	(4)	124,650
1930	441,672	201,361	573,740	34,348	34,945	.050	24,797	255,800
1935	227,777	96,783	310,505	13,659	396	.040	16,384	270,400
1940	379,556	153,323	433,065	83,563	16,551	.050	29,762	260,346
1941	406,257	164,710	470,517	74,166	26,284	.057	40,237	397,416
1942	(4)	(4)	467,367	81,485	17,987	.063	51,762	323,001
1943	(4)	(4)	406,544	62,936	132	.064	63,515	342,094
1944	(4)	(4)	394,443	70,225	95	.064	57,902	331,416
1945	(4)	(4)	356,535	86,932	118	.064	56,495	363,039
1946	(4)	(4)	293,309	44,790	98	.084	50,480	392,787
1947	(4)	(4)	381,109	59,838	63	.143	86,075	511,970

[1] Desilverized soft lead is included.
[2] Soft lead, both desilverized and undesilverized, includes lead derived from Missouri ores and other nonargentiferous ores.
[3] Excludes lead content of antimonial lead.
[4] Not available.

Source: Department of the Interior, Bureau of Mines; Minerals Yearbook.

No. 865.—Zinc—Production of Ore, by States, Smelter Production, and Primary Slab Zinc Available for Consumption: 1920 to 1947

All quantity figures in short tons (2,000 pounds); values in thousands of dollars. Excess of mine production over smelter production is due chiefly to export of ore. See also *Historical Statistics*, series G 116 for smelter production of primary zinc]

ITEM	1920	1925	1930	1935	1940	1945	1946	1947
Mine production (recoverable zinc content of ore)	587,524	710,847	595,425	517,903	665,068	614,358	574,833	637,608
Arizona	729	3,666	815	3,337	15,456	40,226	43,665	54,644
Colorado	24,395	30,811	36,259	1,202	5,060	35,773	36,147	38,745
Idaho	13,966	15,619	37,649	31,053	70,601	83,463	71,507	83,069
Kansas	61,073	118,778	74,304	54,110	57,032	48,394	47,703	41,497
Missouri	24,509	14,794	10,811	7,263	12,703	22,175	22,234	17,074
Montana	92,169	57,658	26,421	54,781	52,587	17,403	16,770	45,679
Nevada	5,349	7,411	14,584	15,536	11,833	21,457	22,649	16,970
New Jersey	78,511	89,261	97,626	85,708	91,406	81,392	64,454	76,871
New Mexico	5,007	9,246	32,765	22,126	30,313	40,295	36,103	44,103
New York	5,654	5,158	22,471	23,720	35,686	24,978	32,515	34,116
Oklahoma	219,727	283,371	136,153	129,763	162,935	69,300	69,552	51,052
Tennessee	19,217	16,256	[1] 48,147	[1] 48,832	[1] 51,723	[1] 49,899	[1] 41,519	[1] 48,000
Utah	4,079	26,306	44,495	31,107	43,788	33,630	28,292	43,673
Washington	213	609	352	1	11,560	11,693	11,329	13,800
Wisconsin	27,285	20,230	12,558	8,923	5,770	15,561	14,276	12,224
Other States	5,641	11,673	15	441	6,615	18,719	16,118	16,081
Smelter production (excluding remelted secondary zinc)	484,748	612,127	532,894	449,284	724,192	813,803	772,778	862,037
Primary zinc	463,377	572,946	498,045	420,634	675,275	764,561	728,262	802,495
From domestic ore	450,045	555,631	489,361	412,184	589,988	467,084	459,205	510,058
From foreign ore	13,332	17,315	8,684	[2] 8,450	[2] 85,287	[2] 297,477	269,057	292,437
Secondary, redistilled	21,371	39,181	[3] 34,849	28,650	48,917	49,242	44,516	59,542
Value of primary product from domestic ore ($1,000)	72,907	84,456	46,979	36,272	74,338	[4] 80,338	81,738	109,152
Primary slab zinc:								
Supply, total	500,170	593,700	584,230	549,861	775,471	1,094,476	1,087,770	1,050,397
Stock at smelters, Jan. 1	36,793	20,754	85,904	124,783	83,728	233,044	254,765	175,513
Production	463,377	572,946	498,045	420,634	675,275	764,316	728,262	802,495
Imports for consumption	([5])	([5])	281	4,444	[6] 16,468	[6] 97,116	[6] 104,743	[6] 72,389
Deductions:								
Exports	102,178	76,351	4,633	1,617	79,091	7,782	37,431	106,669
Stock at smelters, Dec. 31	71,037	13,080	167,293	90,539	19,212	254,765	175,513	67,046
Apparent deliveries to domestic consumers	326,955	504,269	412,304	457,705	677,168	826,627	812,819	([7])

[1] Includes Virginia.
[2] From Mexico in 1935; from Mexico, Canada, Newfoundland, and Peru in 1940; from Canada, Mexico, and Australia in 1943; from Mexico, Canada, Australia, Newfoundland, and Argentina in 1944; and from Mexico, Canada, Australia, Peru, Newfoundland, Argentina, and Bolivia in 1945.
[3] Includes small quantity of secondary electrolytic zinc. [4] Excludes premiums paid to miners by Government.
[5] Less than one-half of 1 ton. [6] General imports. [7] Not available.

No. 866.—Zinc, Primary—Smelter Production From Domestic Ore: 1875 to 1947

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

YEARLY AVERAGE OR YEAR	Quantity	Value [1]	YEARLY AVERAGE OR YEAR	Quantity	Value [1]	YEAR	Quantity	Value [1]
1875	15,833	[2] 2,217	1921–1925	426,261	56,149	1938	436,007	41,857
1880 [3]	23,239	2,277	1926–1930	576,395	73,119	1939	491,058	51,070
1885	40,688	3,540	1931–1935	314,541	25,432	1940	589,988	74,338
1886–1890	54,285	5,219	1936–1940	512,004	57,619	1941	652,599	97,890
1891–1895	82,396	6,787	1941–1946	583,609	[4] 97,772	1942	629,957	[4] 109,613
1896–1900	109,963	10,180	1933	306,010	25,705	1943	594,250	[4] 102,211
1901–1905	169,504	17,067	1934	355,366	30,561	1944	574,453	[4] 98,806
1906–1910	219,378	24,165	1935	412,184	36,272	1945	467,084	[4] 80,338
1911–1915	346,867	52,416	1936	491,803	49,180	1946	459,205	[4] 81,738
1916–1920	508,731	99,812	1937	551,165	71,651	1947	510,058	[4] 109,152

[1] Values at New York prices through 1907; at St. Louis prices, 1908 to 1914; at average price of all grades, 1915 and later years.
[2] Computed at yearly average of high and low monthly prices at New York.
[3] Census year ended May 31. [4] Excludes premiums paid to miners by the Government.

Source of tables 865 and 866: Department of the Interior, Bureau of Mines; Minerals Yearbook.

No. 867.—Gold and Silver—Production in Continental United States, Alaska, Puerto Rico, and Philippine Islands: 1792 to 1947

[Value of gold in terms of money, being at a fixed rate, is not shown in this table. Gold was valued at $20.67+ per fine troy ounce from 1837 until 1933. In 1933, however, various higher prices prevailed subsequently to Executive order of Aug. 29. Value of gold production for that year, as computed by Bureau of Mines, was $65,338,000, including $12,485,000 premium calculated at average weighted price ($25.56 per ounce). On Jan. 31, 1934, legal value of gold was fixed at $35 per fine ounce. Value given for silver is commercial value, except for 1921 to June 1923 and for 1934 and subsequent years (see footnotes 1 and 2), for which periods it has differed materially from coinage value. Excludes production of Philippine Islands after 1945]

[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	1918	3,321	67,810	66,485
1848-1850	4,838	116	152	1919	2,919	56,682	63,534
1851-1855	14,271	194	259	1920	2,476	55,362	60,802
1856-1860	12,384	309	418	1921	2,422	53,052	[1] 53,052
1861-1865	10,716	28,811	38,674	1922	2,363	56,240	[1] 56,240
1866-1870	12,226	49,113	65,261	1923	2,503	73,335	[1] 60,135
1871-1875	8,826	121,083	156,270	1924	2,529	65,407	43,823
1876-1880	10,301	157,681	182,506	1925	2,412	66,155	45,912
1881-1885	7,730	182,841	202,807	1926	2,335	62,719	39,136
1886-1890	8,078	231,819	227,495	1927	2,197	60,434	34,266
1891-1895	9,107	287,057	227,960	1928	2,233	58,463	34,201
1896-1900	15,729	279,544	172,689	1929	2,208	61,328	32,688
1901-1905	19,394	278,798	159,543	1930	2,286	50,748	19,538
1906-1910	22,993	277,333	162,916	1931	2,396	30,932	8,970
1911-1915	22,968	338,384	189,626	1932	2,449	23,981	6,763
1916-1920	17,246	326,009	298,852	1933	2,556	23,003	8,051
1921-1925	12,229	314,190	259,162	1934	3,091	32,725	[2] 21,156
1926-1930	11,259	293,692	159,829	1935	3,609	45,924	[2] 33,008
1931-1935	14,102	156,565	77,948	1936	4,357	63,812	[2] 49,423
1936-1940	5,173	66,625	[2] 47,853	1937	4,805	71,942	[2] 55,647
1941-1945	2,613	46,808	[2] 33,286	1938	5,090	62,665	[2] 40,511
1909	4,822	54,722	28,455	1939	5,611	65,120	[2] 44,202
1910	4,657	57,138	30,855	1940	6,003	69,586	[2] 49,483
1911	4,687	60,399	32,616	1941	5,976	72,336	[2] 51,439
1912	4,521	63,767	39,198	1942	3,742	56,091	[2] 39,887
1913	4,300	66,802	40,348	1943	1,395	40,900	[2] 29,085
1914	4,573	72,455	40,068	1944	1,022	35,651	[2] 25,352
1915	4,888	74,961	37,397	1945	929	29,063	[2] 20,667
1916	4,479	74,415	48,953	1946	1,462	21,103	([3])
1917	4,651	71,740	59,078	1947	2,165	38,587	[2] 34,923

STATE OR OTHER AREA	GOLD (1,000 FINE OUNCES)					SILVER (1,000 FINE OUNCES)				
	1930	1940	1945	1946	1947	1930	1940	1945	1946	1947
Total	**2,286**	**6,003**	**929**	**1,462**	**2,165**	**50,748**	**69,586**	**29,063**	**21,103**	**38,587**
Alaska	407	757	60	192	320	392	173	9	36	72
Arizona	149	299	78	70	105	4,910	6,130	3,411	2,991	4,870
California	450	1,444	143	350	422	1,434	2,225	950	1,196	1,937
Colorado	218	369	102	130	175	4,852	9,378	2,407	2,041	2,967
Idaho	21	145	19	30	60	9,710	17,477	8,228	6,219	10,701
Michigan	------	------	------	------	------	11	90	20	------	------
Missouri	------	------	------	------	------	------	------	21	68	167
Montana	47	273	42	62	88	8,597	12,152	5,494	2,748	6,069
Nevada	140	380	91	90	105	4,179	5,102	1,156	1,339	2,106
New Mexico	32	39	13	9	10	1,160	1,576	654	477	617
Oregon	14	114	1	17	18	10	192	12	8	32
South Dakota	406	587	41	308	411	105	171	41	89	111
Texas	([4])	([4])	------	([4])	([4])	469	1,295	21	34	31
Utah	209	352	271	152	402	14,451	11,686	6,244	3,531	8,396
Washington	4	84	53	50	45	30	389	288	249	375
Philippine Islands	185	1,140	13	([5])	([5])	121	1,299	17	([5])	([5])
Other	3	20	2	1	3	317	251	90	77	136

[1] For 1921, 1922, and first half of 1923, price taken at figure of $1 per ounce fixed by Pittman Act.

[2] Value 1934-37 calculated on basis of average amount per ounce returned to depositors of newly-mined domestic silver: 1934, $0.64+ per fine ounce; 1935, $0.71875; 1936, $0.7745; 1937, $0.7735. Value thereafter calculated on basis of amount per fine ounce returned to depositors of newly-mined domestic silver produced: In 1938, $0.6464+; 1939, $0.6787+; July 1, 1939-46, $0.7111+; subsequent to July 1, 1946, $0.905.

[3] Not calculated. [4] Less than 500 ounces. [5] Excluded after 1945.

Source: Treasury Department, Bureau of the Mint; Annual Report of the Director.

No. 868.—Gold and Silver for Use in Manufactures and the Arts

Yearly average or year	Gold in thousands of dollars [1]					Silver in thousands of fine ounces				
	Grand total	New material			Old material	Grand total	New material			Old material
		Total	United States coin [2,3]	Bullion and foreign coin			Total	United States coin [3]	Bullion and foreign coin	
1880	10,105	8,811	3,300	5,511	1,294	2,794	2,590	464	2,126	204
1881–1885	12,568	10,706	3,715	6,991	1,863	4,155	3,840	155	3,685	315
1886–1890	16,041	12,012	3,500	8,512	4,029	5,662	4,986	155	4,831	676
1891–1895	16,508	11,448	3,500	7,948	5,060	7,997	7,046	108	6,938	951
1896–1900	16,965	12,899	3,500	9,399	4,067	10,214	9,014	77	8,937	1,200
1901–1905	28,496	21,718	3,500	18,218	6,778	19,526	16,524	77	16,447	3,002
1906–1910	38,149	30,441	3,500	26,941	7,708	24,553	20,884	77	20,807	3,669
1911–1915	40,588	30,621	2,500	28,121	9,967	30,444	23,516	77	23,438	6,928
1916–1920	61,864	39,831	1,000	38,831	22,033	31,214	22,089	77	22,011	9,126
1921–1925	59,596	30,321	1,000	29,321	29,275	36,805	28,616	77	28,538	8,189
1926–1930	55,197	24,747	1,000	23,747	30,450	38,461	28,137	77	28,059	10,325
1931–1935	21,288	[4] *20,101*	420	[4] *20,521*	41,389	33,631	13,278	77	13,200	20,353
1936–1940	36,543	4,150	--------	4,150	32,393	52,481	31,232	77	31,155	21,249
1941–1945	100,699	75,376	--------	75,376	25,323	149,455	107,662	123	107,538	41,794
1939	38,789	7,461	--------	7,461	31,328	69,585	44,613	77	44,536	24,972
1940	41,178	13,306	--------	13,306	27,872	67,063	44,499	77	44,422	22,564
1941	67,977	37,002	--------	37,002	30,975	92,794	72,509	77	72,432	20,285
1942	75,742	47,295	--------	47,295	28,448	131,419	101,399	77	101,321	30,021
1943	96,864	86,343	--------	86,343	10,521	162,113	118,000	77	117,923	44,113
1944	122,977	97,298	--------	97,298	25,679	176,289	120,100	77	120,023	56,189
1945	139,936	108,944	--------	108,944	30,992	184,661	126,300	309	125,991	58,361
1946	199,687	153,687	--------	153,687	46,000	123,647	87,000	89	86,911	36,647
1947	98,130	48,900	--------	48,900	49,230	126,366	98,500	77	98,423	27,866

[1] Value prior to 1934 calculated on basis of $20.67+ per fine ounce; in 1934 and thereafter, $35.00 per fine ounce.
[2] U. S. gold coin not a factor after passage of Gold Reserve Act of Jan. 30, 1934.
[3] Estimated.
[4] Excess of return from industry over new material issued to industry.

No. 869.—Silver—Prices, London and New York, and Value in the Dollar: 1835 to 1947

[London price converted to basis of ounce 1.000 fine and converted to American money at par of exchange through 1930; from 1931 through 1944, at current rate of exchange; beginning 1945, [London price] reported on basis of ounce 0.999 fine and converted to American money at current rate of exchange. Commercial ratio computed on basis of London quotations through 1914; thereafter, on basis of New York average price. Beginning 1934, monetary value of gold is $35.00 per fine ounce, as against $20.67+ in previous years. Value of fine silver (371¼ grains) in dollar computed on basis of London quotations through 1917; thereafter, on basis of New York average price. See also *Historical Statistics*, series N 183–184, for data on commercial ratio to gold and value of silver in dollar]

[All figures, except "Commerical 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	------	1920	1.346	1.019	1.379	.604	20.28	0.788
1840	1.323	------	------	------	15.62	1.023	1921	.805	.631	.738	.532	32.76	.488
1845	1.298	------	------	------	15.92	1.004	1922	.754	.679	.742	.629	30.43	.525
1850	1.316	------	------	------	15.70	1.018	1923	.700	.652	.690	.629	31.69	.505
1855	1.344	------	------	------	15.38	1.039	1924	.745	.671	.724	.630	30.80	.519
1860	1.352	------	------	------	15.29	1.045	1925	.703	.694	.732	.668	29.78	.537
1865	1.338	------	------	------	15.44	1.035	1926	.629	.624	.689	.518	33.11	.483
1870	1.328	------	------	------	15.57	1.027	1927	.571	.567	.603	.542	36.47	.438
1875	1.242	1.239	1.261	1.210	16.64	.961	1928	.586	.585	.639	.568	35.34	.452
1880	1.145	1.139	1.150	1.113	18.05	.886	1929	.536	.533	.578	.468	38.78	.412
1885	1.065	1.064	1.095	1.028	19.41	.824	1930	.387	.385	.472	.311	53.74	.298
1890	1.046	1.053	1.205	.958	19.75	.809	1931	.292	.290	.376	.261	71.25	.224
1895	.654	.663	.690	.600	31.60	.506	1932	.281	.282	.313	.246	73.29	.218
1900	.620	.621	.658	.598	33.33	.480	1933	.346	.350	.453	.248	59.06	.271
1905	.610	.610	.665	.556	33.87	.472	1934	.481	.483	.561	.421	72.49	.373
1907	.662	.660	.710	.528	31.24	.512	1935	.639	.646	.813	.501	54.19	.500
1908	.535	.535	.589	.483	38.64	.414	1936	.449	.454	.501	.451	77.09	.351
1909	.520	.522	.545	.508	39.74	.402	1937	.447	.452	.471	.451	77.44	.350
1910	.541	.542	.576	.508	38.22	.418	1938	.430	.435	.451	.431	80.39	.337
1911	.539	.540	.575	.521	38.33	.417	1939	.408	.394	.431	.351	88.84	.305
1912	.615	.620	.656	.553	33.62	.475	1940	.384	.351	.359	.351	99.76	.271
1913	.605	.612	.651	.580	34.19	.468	1941	.425	.351	.354	.351	99.73	.271
1914	.553	.563	.609	.490	37.37	.428	1942	.427	.386	.451	.354	90.57	.299
1915	.519	.511	.580	.478	40.48	.401	1943	.427	.451	.451	.451	77.67	.349
1916	.686	.672	.791	.573	30.78	.531	1944	.427	.451	.451	.451	77.67	.349
1917	.895	.840	1.165	.731	24.61	.692	1945	.513	.519	.708	.448	67.40	.402
1918	1.042	.984	1.019	.889	21.00	.761	1946	.818	.802	.901	.708	43.67	.620
1919	1.250	1.121	1.383	1.014	18.44	.867	1947	.746	.718	.863	.598	48.73	.555

Source of tables 868 and 869: Treasury Dept., Bureau of the Mint; Annual Report of the Director.

No. 870.—Coke—Production, Exports, and Imports: 1896 to 1947

[See also *Historical Statistics*, series G 43-56]

Yearly average or year	Production in thousands of short tons (2,000 pounds)			Oven coke, percent of total	Production (value) in thousands of dollars	Exports	Imports[1]
	Total	Beehive coke	Oven coke			Thousands 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
1931-1935	29,965	927	29,038	96.9	145,035	716	171
1936-1940	46,509	2,042	44,467	95.8	229,455	616	201
1941-1945	69,756	7,020	62,736	89.9	458,232	978	118
1935	35,141	917	34,224	97.4	176,853	614	317
1936	46,275	1,706	44,569	96.3	232,374	670	330
1937	52,375	3,165	49,211	94.0	261,004	527	286
1938	32,496	837	31,658	97.4	167,182	487	135
1939	44,327	1,444	42,882	96.7	212,884	590	142
1940	57,072	3,058	54,014	94.6	273,832	804	113
1941	65,187	6,704	58,482	89.7	352,967	709	268
1942	70,569	8,274	62,295	88.3	425,614	840	109
1943	71,676	7,933	63,743	88.9	476,117	995	98
1944	74,038	6,973	67,065	90.6	527,922	867	63
1945	67,308	5,214	62,094	92.3	508,540	1,479	52
1946	58,498	4,568	53,929	92.2	486,729	1,231	52
1947	73,446	6,687	66,759	90.9	776,406	835	104

[1] Before 1934, figures represent general imports; thereafter, imports entered for consumption.

No. 871.—Coke—Oven and Beehive Production, by States: 1915 to 1947

[In thousands of short tons (2,000 pounds). Exclusive of screenings or breeze]

State	1915	1920	1925	1930	1935	1940	1944	1945	1946	1947
OVEN										
Total	**14,073**	**30,834**	**39,912**	**45,196**	**34,224**	**54,014**	**67,065**	**62,094**	**53,929**	**66,759**
Alabama	2,070	3,124	4,582	3,987	1,994	4,727	5,728	5,401	4,666	5,870
Colorado	-------	517	490	379	207	544	651	639	559	850
Illinois	1,687	2,137	3,012	3,576	1,669	3,015	3,879	3,682	3,192	3,806
Indiana	2,768	4,554	5,142	4,984	3,768	6,413	8,821	7,814	6,652	8,786
Maryland	313	682	1,019	1,169	930	1,683	2,058	2,025	1,662	1,975
Massachusetts	504	488	535	863	1,006	1,130	1,178	1,150	1,046	1,196
Michigan	(1)	1,393	1,751	2,604	2,482	2,872	3,005	2,806	2,500	2,819
Minnesota	128	675	518	641	430	524	894	826	861	898
New Jersey	269	726	904	919	917	1,016	1,023	1,284	1,259	1,432
New York	684	1,040	2,220	3,850	4,099	5,080	6,103	5,790	5,043	5,670
Ohio	666	5,615	7,105	6,163	5,101	7,898	10,339	9,406	8,452	10,069
Pennsylvania	3,092	7,730	9,853	12,529	8,078	14,862	16,977	15,255	12,795	16,475
West Virginia	141	447	1,056	1,479	1,604	1,900	2,638	2,463	2,163	2,822
All other States	1,749	1,706	1,725	2,051	1,939	2,350	3,773	3,556	3,082	4,091
BEEHIVE										
Total	**27,508**	**20,511**	**11,355**	**2,776**	**917**	**3,058**	**6,973**	**5,214**	**4,568**	**6,687**
Pennsylvania	22,531	15,908	9,574	2,011	564	2,550	6,171	4,584	4,027	5,913
Ohio	19	87	156	-------	-------	-------	-------	-------	-------	-------
West Virginia	1,250	1,381	490	422	155	233	379	288	221	378
Alabama	1,001	890	88	-------	-------	-------	-------	-------	-------	-------
Kentucky	285	273	(1)	-------	-------	(1)	68	74	85	95
Tennessee	234	163	128	25	3	5	9	-------	-------	-------
Virginia	630	1,028	422	220	138	198	243	191	171	212
Colorado	671	273	155	79	49	62	82	73	59	22
Utah	(1)	(1)	146	7	6	7	21	4	5	68
All other States	887	509	196	12	2	1	-------	-------	-------	-------

[1] Included in figure for "all other States."

Source of tables 870 and 871: Department of the Interior, Bureau of Mines; Minerals Yearbook.

No. 872.—Coal—Production, 1821 to 1947, and by States, 1926 to 1947

[**Quantities in thousands of short tons (2,000 pounds); values in thousands of dollars.** Figures relate to mines having an output of 1,000 tons or more a year for 1919, 1921, 1924 and subsequent years. 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 lignite and small amounts of anthracite outside Pennsylvania. Comparatively little coal is held in stock at the mines. See also *Historical Statistics*, series G 13–18]

Year or yearly average	Quantity			Year	Quantity			Value	
	Total	Anthracite	Bituminous		Total	Anthracite	Bituminous	Anthracite	Bituminous [1]
1821–1830	140	66	75	1924	571,613	87,927	483,687	477,231	1,062,626
1831–1840	1,032	722	310	1925	581,870	61,817	520,053	327,665	1,060,402
1841–1850	4,535	2,697	1,837	1926	657,804	84,437	573,367	474,164	1,183,412
1851–1860	12,513	7,645	4,868	1927	597,859	80,096	517,763	420,942	1,029,657
1861–1865	20,538	11,142	9,396	1928	576,093	75,348	500,745	393,638	933,774
1866–1870	31,706	16,281	15,425	1929	608,817	73,828	534,989	385,643	952,781
1871–1875	52,179	23,407	28,773	1930	536,911	69,385	467,526	354,574	795,483
1876–1880	62,261	25,800	36,461	1931	441,735	59,646	382,089	296,355	588,895
1881–1885	107,291	36,198	71,093	1932	359,565	49,855	309,710	222,375	406,677
1886–1890	138,398	43,952	94,446	1933	383,172	49,541	333,631	206,718	445,788
1891–1895	178,822	53,405	125,416	1934	416,536	57,168	359,368	244,152	628,383
1896–1900	227,123	55,625	171,498	1935	424,532	52,159	372,373	210,131	658,063
1901–1905	339,357	66,854	272,503	1936	493,668	54,580	439,088	227,004	770,955
1906–1910	454,555	81,142	373,413	1937	497,387	51,856	445,531	197,599	864,042
1911–1915	529,189	89,233	439,956	1938	394,644	46,099	348,545	180,600	678,653
1916–1920	626,386	92,741	533,645	1939	446,342	51,487	394,855	187,175	728,348
1921–1925	558,947	77,648	481,299	1940	512,257	51,485	460,772	205,490	879,327
1926–1930	595,497	76,619	518,878	1941	570,517	56,368	514,149	240,275	1,125,363
1931–1935	405,108	53,674	351,434	1942	643,021	60,328	582,693	271,673	1,373,991
1936–1940	468,860	51,101	417,758	1943	650,821	60,644	590,177	306,816	1,584,644
1941–1945	636,037	59,195	576,843	1944	683,277	63,701	619,576	354,583	1,810,901
1921	506,395	90,473	415,922	1945	632,551	54,934	577,617	323,944	1,768,204
1922	476,951	54,683	422,268	1946	594,429	60,507	533,922	413,417	1,835,539
1923	657,904	93,339	564,565	1947	687,814	57,190	630,624	413,019	2,622,635

State	1926–1930	1931–1935	1936–1940	1941–1945	1943	1944	1945	1946	1947
Total quantity	**595,497**	**405,108**	**468,860**	**636,037**	**650,821**	**683,277**	**632,551**	**594,429**	**687,814**
Anthracite (Pa.)	76,619	53,674	51,101	59,195	60,644	63,701	54,934	60,507	57,190
Bituminous	518,878	351,434	417,758	576,842	590,177	619,576	577,617	533,922	630,624
Alabama	18,380	9,252	12,620	17,783	17,160	18,752	18,236	16,183	19,048
Arkansas	1,579	1,012	1,387	1,821	1,718	1,972	1,854	1,631	1,871
Colorado	9,665	5,711	6,435	7,830	8,324	8,168	7,621	5,914	6,358
Illinois	57,310	40,198	48,367	68,442	72,631	76,792	73,011	63,469	67,860
Indiana	18,467	14,386	17,232	25,216	25,065	27,962	25,183	21,697	25,449
Iowa	3,879	3,492	3,376	2,569	2,771	2,141	2,046	1,788	1,684
Kansas	3,215	2,270	2,949	3,654	3,437	3,369	3,228	2,493	2,745
Kentucky	61,116	38,130	44,970	64,020	63,211	71,356	69,593	66,553	84,241
Maryland	2,700	1,654	1,496	1,854	1,933	1,870	1,763	2,003	2,051
Michigan	705	492	510	195	169	140	126	80	14
Missouri	3,538	3,624	3,577	3,947	4,310	4,779	3,983	3,733	4,236
Montana	3,139	2,396	2,871	4,245	4,833	4,844	4,467	3,723	3,178
New Mexico	2,612	1,338	1,378	1,600	1,851	1,744	1,484	1,280	1,443
North Dakota	1,622	1,750	2,161	2,447	2,500	2,366	2,522	2,555	2,760
Ohio	21,111	19,151	22,188	32,190	32,255	33,877	32,737	32,314	37,548
Oklahoma	3,346	1,368	1,444	2,623	2,838	3,209	2,909	2,647	3,421
Pennsylvania	137,038	86,592	101,556	138,876	141,050	146,052	132,965	125,497	147,079
Tennessee	5,544	4,062	5,197	7,184	7,179	7,266	6,271	5,618	6,258
Texas	1,107	738	816	200	153	[2] 109	[2] 80	[2] 56	[2] 61
Utah	4,683	2,846	3,373	6,012	6,666	7,119	6,679	5,994	7,429
Virginia	12,521	8,923	13,324	19,121	20,280	19,514	17,235	15,527	20,171
Washington	2,513	1,555	1,744	1,641	1,528	1,524	1,357	991	1,118
West Virginia	136,315	95,748	112,932	154,335	158,804	164,704	152,035	144,020	176,157
Wyoming	6,526	4,545	5,617	8,664	9,155	9,540	9,847	7,635	8,051
Other States and Alaska	246	201	238	374	356	407	385	521	393

[1] Excludes selling expenses through 1936 and for 1939. Data for other years include selling expenses.
[2] Lignite only.

Source: Department of the Interior, Bureau of Mines; Minerals Yearbook.

No. 873.—Coal—Exports, Imports, and Bunker Coal Laden on Vessels in Foreign Trade: 1891 to 1948

[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 [2]		Bunker coal	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1891–1895 [3]	3,028	10,012	1,128	4,929	1,900	5,081	1,237	3,984	--------	--------
1896–1900 [3]	4,710	13,300	1,469	6,268	3,241	7,032	1,403	3,831	--------	--------
1901–1905 [3]	7,750	24,254	1,846	8,782	5,903	15,472	2,287	6,376	--------	--------
1906–1910 [4]	12,018	36,805	2,646	13,034	9,372	23,770	1,727	4,530	[5] 5,638	[5] 18,291
1911–1915	19,132	58,362	3,753	19,624	15,379	38,738	1,437	4,069	7,289	23,890
1916–1920	27,160	151,356	4,647	32,960	22,513	118,396	1,258	5,788	7,389	43,975
1921–1925	19,852	124,958	3,502	38,476	16,350	86,482	1,833	11,364	4,908	31,588
1926–1930	21,322	115,057	2,973	32,750	18,349	82,308	865	5,717	4,353	23,126
1931–1935	10,288	47,942	1,254	12,487	9,034	35,455	672	4,295	1,385	6,709
1936–1940	13,055	62,696	1,921	16,867	11,133	45,828	[6] 590	[6] 3,327	1,376	7,370
1941–1945	25,597	155,696	3,542	36,167	22,055	119,529	[6] 561	[6] 3,009	1,468	10,132
1943	26,763	163,023	3,695	37,842	23,068	125,182	[6] 825	[6] 4,464	1,470	10,496
1944	26,981	172,910	3,737	40,580	23,243	132,330	[6] 576	[6] 3,071	1,392	9,940
1945	28,257	184,389	3,296	36,435	24,961	147,954	[6] 418	[6] 2,295	1,594	11,911
1946	42,594	301,931	5,801	63,844	36,793	238,087	[6] 397	[6] 2,308	1,233	9,894
1947	68,908	618,919	7,598	90,220	61,310	528,700	[6] 268	[6] 1,613	1,508	13,971
1948 [7]	46,965	478,985	5,961	86,203	41,005	392,781	[6] 261	[6] 2,010	944	9,855

[1] Not including fuel or bunker coal laden on vessels engaged in foreign trade.
[2] Including lignite, slack, and culm. [3] Fiscal years ending June 30. [4] Average, July 1, 1905–Dec. 31, 1910.
[5] Not including data for coal laden on vessels on Great Lakes in 1906, 1907, and 1908.
[6] Imports for consumption; general imports prior to 1933.
[7] Effective Jan. 1948, export data include shipments under Army Civilian Supply Program.

Source: Department of Commerce, Bureau of Census; annual report, Foreign Commerce and Navigation of the U. S., and records.

No. 874.—Coal—Shipments, Value, and Employment in Mines: 1890 to 1947

[See also *Historical Statistics*, series G 19–42, for items other than disposition of coal produced]

Calendar year	Disposition of coal produced thousand tons (2,000 pounds)				Average value per ton at mines (1)	Average number of men employed	Average number of days worked	Average tonnage per man		Percent mined by machine (2)	Capacity of mines [3] (million tons [4])
	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	(5)	71
1895	52,093	1,315	4,591	--------	1.41	142,917	196	2.07	406	(5)	90
1900	50,710	1,208	5,550	--------	1.49	144,206	166	2.40	398	(5)	105
1905	69,053	1,571	7,036	--------	1.83	165,406	215	2.18	470	(5)	110
1910	73,623	2,021	8,841	--------	1.90	169,497	229	2.17	498	(5)	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
1935	46,538	2,875	2,746	--------	4.03	103,269	189	2.68	505	3.5	84
1940	46,176	3,053	2,256	--------	3.99	91,313	186	3.02	562	3.5	84
1945	48,542	4,274	2,118	--------	5.90	72,842	269	2.79	751	2.2	62
1946	54,109	4,436	1,963	--------	6.83	78,145	271	2.84	770	2.0	67
1947	51,052	4,233	1,905	--------	7.22	78,600	259	2.78	720	2.1	66
Bituminous											
1890	87,373	7,008	1,607	15,332	.99	192,204	226	2.56	579	[6] 5.3	151
1895	106,287	8,340	2,086	18,404	.86	239,962	194	2.90	563	[7] 11.9	216
1900	173,072	7,868	3,740	27,635	1.04	304,375	234	2.98	697	24.9	281
1905	255,201	10,639	7,007	42,412	1.06	460,629	211	3.24	684	32.8	459
1910	342,969	12,287	9,668	52,187	1.12	555,533	217	3.46	751	41.7	592
1915	379,877	12,354	9,799	40,595	1.13	557,456	203	3.91	794	55.0	671
1920	504,873	21,289	11,896	30,608	3.75	639,547	220	4.00	881	59.8	798
1925	477,173	21,351	5,776	15,753	2.04	588,493	195	4.52	884	70.6	823
1930	437,399	22,121	3,993	4,014	1.70	493,202	187	5.06	948	77.5	770
1935	338,069	29,734	3,103	1,468	1.77	462,403	179	4.50	805	78.8	640
1940	409,881	44,403	2,443	4,045	1.91	439,075	202	5.19	1,049	80.1	703
1945	518,020	51,248	2,442	5,907	3.06	383,100	261	5.78	1,508	73.5	682
1946	475,257	51,628	1,951	5,087	3.44	[8] 396,434	214	6.30	1,347	71.6	768
1947	557,084	55,859	(5)	(5)	4.16	419,182	2.34	6.42	1,504	70.1	830

[1] Figures for bituminous coal represent average value per ton less selling expense (Bur. of Mines series) prior to 1937; thereafter, average gross realization including selling expense (Bit. Coal Div. series).
[2] Based on total production as shown in table 872.
[3] Calculated at 303.5 working days in the anthracite field and 308 working days in the bituminous field.
[4] Of 2,000 pounds. [5] Not available. [6] 1891. [7] 1896. [8] Average number of men working daily.

Source: Department of Interior, Bureau of Mines; Minerals Yearbook.

No. 875.—Consumption of Bituminous Coal and Lignite, by Consumer Class, With Retail Deliveries: 1938 to 1947

[In thousands of short tons]

Year	Total of classes shown	Colliery fuel	Electric power utilities [1]	Bunker, foreign trade [2]	Railroads (class I) [3]	Coke: Beehive ovens	Coke: By-product ovens	Steel and rolling mills	Coal-gas retorts	Cement mills [4]	Other industrials [5]	Retail-dealer deliveries [5]
1938	338,086	2,493	38,245	1,352	73,921	1,360	45,266	8,412	1,644	4,483	92,390	68,520
1939	377,773	2,565	43,979	1,477	79,072	2,298	61,216	9,808	1,614	5,274	98,900	71,570
1940	432,757	2,443	50,973	1,426	85,130	4,803	76,583	10,040	1,746	5,633	106,280	87,700
1941	494,088	2,489	61,861	1,643	97,384	10,529	82,609	10,902	1,659	6,832	120,720	97,460
1942	542,214	2,708	65,636	1,585	115,410	12,876	87,974	10,434	1,721	7,570	131,550	104,750
1943	596,164	2,702	76,403	1,647	130,283	12,441	90,019	11,238	1,605	5,851	141,211	122,764
1944	591,830	2,712	78,887	1,559	132,049	10,858	94,438	10,734	1,545	3,789	130,353	124,906
1945	559,567	2,442	71,603	1,785	125,120	8,135	87,214	10,084	(6)	4,215	127,164	121,805
1946	500,386	1,951	68,743	1,381	110,166	7,167	76,121	8,603	(6)	7,009	118,659	100,586
1947 [7]	557,243	(6)	86,009	1,689	109,296	10,475	94,325	10,048	(6)	7,938	138,300	99,163

[1] Federal Power Commission. Represents consumption by public-utility power plants in power generation, including a small quantity of coke amounting to approximately 100,000 tons annually.
[2] U. S. Bureau of Census.
[3] Association of American Railroads. Represents consumption by class I railways for all uses, including locomotive, powerhouse, shop, and station fuel. The I. C. C. reports that in 1946 consumption for all uses by class I line-haul railways, plus purchases for class II and class III railways, plus purchases by all switching and terminal companies combined, was 113,000,421 tons of bituminous coal and lignite. Similar data from the I. C. C. not yet available for 1947. [4] Includes small amount of anthracite.
[5] Estimates based upon reports collected from a selected list of representative manufacturing plants and retail dealers. [6] Included in "Other industrials." [7] Preliminary.

Source: Department of the Interior, Bureau of Mines; Minerals Yearbook.

No. 876.—Work Stoppages in Anthracite and Bituminous Coal Mining Industries, by Major Issues Involved: 1936 to 1948

[Excludes work stoppages involving fewer than 6 workers or lasting less than 1 day. Figures are for stoppages beginning in years shown. For combined statistics covering work stoppages in all industries, see table 249, p. 222]

Coal-mining industry and year	Number of work stoppages [1]: Total	Major issues: Wages and hours	Major issues: Union organization (2)	Major issues: Miscellaneous	Number of workers involved: Total	Major issues: Wages and hours	Major issues: Union organization (2)	Major issues: Miscellaneous	Number of man-days idle: Total	Major issues: Wages and hours	Major issues: Union organization (2)	Major issues: Miscellaneous
Anthracite:												
1936	26	5	6	15	23,073	3,596	13,005	6,472	264,545	43,043	153,083	68,419
1937	32	13	1	18	59,600	24,902	480	34,218	606,656	144,548	15,360	446,748
1938	17	4	3	10	26,416	2,316	5,325	18,775	357,854	35,191	181,577	141,086
1939	25	3	5	17	22,664	2,813	1,057	18,794	77,909	3,773	15,271	58,865
1940	25	1	3	21	17,355	62	2,308	14,985	105,399	496	30,470	74,433
1941	27	5	1	21	136,888	92,557	1,552	42,779	423,299	97,023	6,208	320,068
1942	31	10	------	21	36,153	19,142	------	17,011	225,921	148,460	------	77,461
1943	30	12	------	18	117,623	88,296	------	29,327	1,836,486	1,552,457	------	284,029
1944	61	18	1	42	40,624	14,278	6,730	19,616	326,922	209,054	43,590	74,278
1945	43	18	------	25	87,700	74,500	------	13,200	1,163,000	1,108,000	------	55,000
1946	34	5	1	28	109,000	81,700	20	27,600	649,000	545,000	310	104,000
1947	28	6	------	22	21,300	6,520	------	14,800	159,000	105,000	------	53,800
1948	26	5	1	20	54,500	5,710	20	48,800	274,000	33,000	100	241,000
Bituminous:												
1936	38	5	9	24	19,648	1,378	2,934	15,336	533,314	356,058	43,431	133,825
1937	54	11	21	22	99,253	45,913	27,878	25,462	1,924,951	1,048,642	400,759	475,550
1938	27	6	10	11	9,505	2,196	2,324	4,985	132,855	8,422	24,151	100,282
1939	25	2	11	12	355,383	1,102	346,524	7,757	7,302,556	22,243	7,191,984	88,329
1940	34	4	10	20	24,372	272	3,451	20,649	153,296	15,954	16,214	121,128
1941	75	19	13	43	593,352	383,829	63,180	146,343	6,747,986	5,589,678	710,220	448,088
1942	96	25	11	60	43,774	15,551	3,137	25,086	264,468	134,100	15,632	114,736
1943	400	177	17	206	487,474	423,801	3,137	60,536	7,510,397	7,247,829	23,141	239,427
1944	792	208	52	532	229,907	50,918	46,207	132,782	1,056,341	207,859	266,646	581,836
1945 [3]	598	144	49	399	581,500	203,100	238,500	139,400	5,007,000	984,000	3,308,000	713,000
1946	485	102	42	341	834,000	708,000	10,300	116,000	19,500,000	18,800,000	142,000	512,000
1947	415	74	22	319	490,000	20,400	347,000	122,000	2,190,000	184,000	1,550,000	450,000
1948	561	82	42	437	582,000	337,000	51,900	192,000	9,560,000	8,230,000	438,000	900,000

[1] Formerly designated "strikes and lockouts."
[2] Wages and hours were important issues also in some of these disputes. This is especially true in recent years.
[3] Totals include 6 stoppages, involving 500 workers and 2,000 man-days, in which issues were not reported.

Source: Department of Labor, Bureau of Labor Statistics; Bulletin No. 651, Strikes in the United States, 1880–1936; annual bulletins on work stoppages, and official records.

No. 877.—Coal—Average Retail Prices and Indexes for Large Cities Combined: 1929 to 1948

[Unweighted average for bituminous; weighted average for anthracite. Prices not directly comparable because of change in number of dealers reporting, number of quotations received, or number of cities from which prices are collected over period covered]

Year and month	Average price per ton of 2,000 pounds			Index (October 1922–September 1925=100)		
	Bituminous	Pennsylvania anthracite		Bituminous	Pennsylvania anthracite	
		Stove	Chestnut		Stove	Chestnut
1929	$8.85	$14.14	$13.70	91.5	100.5	97.7
1932	7.71	12.55	12.45	79.7	89.2	88.7
1935	8.29	11.38	11.14	85.7	80.9	79.4
1938	8.61	10.96	11.11	88.7	77.9	79.1
1941	9.10	11.92	11.97	92.6	84.7	85.2
1943	9.94	13.15	13.20	100.9	93.4	93.9
1944	10.27	13.89	13.94	104.3	98.7	99.2
1945	10.49	14.36	14.43	106.5	102.1	102.7
1946	10.95	15.96	15.97	112.5	113.4	113.8
1947	12.99	17.23	17.11	131.0	123.0	123.7
1948	15.40	19.24	19.10	153.4	137.8	138.3
1947: September	14.04	17.80	17.71	139.4	127.5	128.3
December	14.50	18.14	18.03	144.3	129.9	130.5
1948: March	14.71	18.34	18.24	146.5	131.3	132.1
June	15.29	18.73	18.60	152.3	134.1	134.7
September	15.98	20.26	20.09	159.1	145.1	145.4
December (preliminary)	15.96	20.28	20.10	159.2	145.2	145.5

Source: Department of Labor, Bureau of Labor Statistics; data through 1941 from Bulletin No. 707. Later data published currently in monthly releases and in Monthly Labor Review.

No. 878.—Natural Gas and Natural Gasoline—Production: 1906 to 1947

[**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 point of consumption. See also *Historical Statistics*, series G 59–64]

Yearly average	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	----------	----------	----------	1940	2,660,222	577,939	2,471,400	2,339,400	68,261
1911–1915	575,708	88,492	11,602	30,317	2,481	1941	2,812,658	621,333	2,763,300	2,688,714	105,815
1916–1920	762,681	154,590	412,787	268,038	48,174	1942	3,053,475	692,737	2,864,400	2,725,968	102,565
1921–1925	947,419	229,002	820,445	762,151	82,205	1943	3,414,689	760,950	3,028,000	2,773,218	122,500
1926–1930	1,637,540	362,238	1,613,811	1,852,490	136,123	1944	3,711,039	797,255	3,300,000	3,031,308	148,200
1931–1935	1,697,043	394,148	1,687,902	1,592,613	59,761	1945	3,918,686	837,852	3,653,870	3,290,949	145,570
1936–1940	2,401,592	523,609	2,116,152	2,105,410	85,455	1946	4,030,605	885,878	3,663,760	3,451,688	146,202
1941–1945	3,382,109	742,025	3,121,914	2,902,031	124,930	1947	4,444,693	1,032,200	4,100,000	3,654,520	218,800

Source: Department of the Interior, Bureau of Mines; Minerals Yearbook.

No. 879.—Natural Gas and Natural Gasoline—Production, by States

[**Gas in millions of cubic feet; gasoline in thousands of gallons.** 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. Consumption figures by States differ greatly from production figures by reason of interstate transportation]

STATE	NATURAL GAS PRODUCED AND MARKETED					Natural gas consumed, 1946	NATURAL GASOLINE PRODUCED		
	1930	1935	1940	1945	1946		1945	1946	1947 [1]
Total	[2] 1,943,421	[2] 1,916,595	[2] 2,660,222	[2] 3,918,686	[2] 4,030,605	[2] 4,012,930	3,290,949	3,451,688	3,654,520
Arkansas	18,585	6,167	14,379	46,600	45,177	87,668	53,832	50,830	53,047
California	334,789	284,109	351,950	502,442	487,904	487,904	731,422	734,227	837,313
Illinois	2,890	1,448	8,359	16,663	17,166	124,284	55,023	53,307	47,455
Kansas	37,630	57,125	90,003	145,959	165,725	175,820	58,309	63,666	72,230
Kentucky	28,023	39,738	53,056	81,714	70,396	29,494	9,395	9,062	9,741
Louisiana	278,341	249,450	343,191	542,789	525,178	331,364	428,404	448,375	484,302
Michigan	2,075	4,203	12,648	21,874	20,879	69,251	5,310	4,624	3,640
Mississippi	----	----	----	----	----	----	----	----	[6] 14,401
Montana	10,060	19,870	26,231	31,829	30,713	28,212	2,876	2,624	2,638
New Mexico	9,497	27,931	[3] 63,990	[3] 105,023	[3] 119,262	85,662	86,043	87,677	92,450
New York	[4] 9,624	[4] 8,288	[4] 12,187	[4] 9,210	[4] 5,084	32,892	8	9	10
Ohio	63,394	49,592	40,639	49,967	61,570	188,527	6,452	6,253	6,944
Oklahoma	348,116	274,313	257,626	357,530	380,938	245,981	284,334	283,915	279,617
Pennsylvania	88,706	[5] 94,464	[5] 90,725	[5] 82,188	[5] 92,443	158,587	13,588	10,540	12,579
Texas	[6] 517,880	[6] 642,366	[6] 1,063,538	[6] 1,711,401	[6] 1,776,148	1,366,457	1,467,138	1,598,520	1,646,227
West Virginia	144,180	115,772	188,751	160,225	178,958	100,733	53,242	60,854	55,454
Wyoming	43,219	26,643	27,346	35,282	33,266	23,143	[7] 35,573	[7] 37,205	[7] 36,403

[1] Preliminary. [2] Includes States not shown separately.
[3] Includes 685,000,000 cubic feet piped to Mexico in 1940, 3,281,000,000 in 1945, and 3,315,000,000 in 1946.
[4] Includes 107,000,000 cubic feet piped to Canada in 1930, 29,000,000 in 1935, 54,000,000 in 1940, 31,000,000 in 1945, and 20,000,000 in 1946.
[5] Includes 44,000,000 cubic feet piped to Canada in 1935, 36,000,000 in 1940, 160,000,000 in 1945, and 180,000,000 in 1946.
[6] Includes 1,691,000,000 cubic feet piped to Mexico in 1930, 6,727,000,000 in 1935, 4,788,000,000 in 1940, 14,735,000,000 in 1945, and 14,160,000,000 in 1946. [7] Includes Utah and Colorado.

Source: Department of the Interior, Bureau of Mines; Minerals Yearbook.

No. 880.—Gas Utility Industry—Customers, Sales, and Revenues, by Type of Gas: 1946 and 1947

[See headnote, table 881]

TYPE OF GAS	CUSTOMERS (1,000) [1]			SALES (1,000,000 CUBIC FEET)			REVENUES ($1,000)		
	1946	1947	Percent change	1946	1947	Percent change	1946	1947	Percent change
All types	20,637	21,418	+3.8	(2)	(2)	(2)	1,211,262	1,395,762	+15.2
Manufactured gas	8,730	8,642	−1.0	405,342	434,101	+7.1	381,748	413,492	+8.3
Natural gas	9,366	10,189	+8.8	2,194,948	2,515,251	+14.6	712,804	848,316	+19.0
Mixed gas	2,418	2,354	−2.7	148,547	172,069	+15.8	110,625	122,136	+10.4
Liquefied petroleum gas	123	234	+89.7	4,110	7,280	+77.1	6,086	11,818	+94.2

[1] Yearly averages.
[2] Sales for all types of gas not shown because of variations in calorific values.

Source: American Gas Association, New York, N. Y.; yearbook, Gas Facts.

No. 881.—Gas Utility Industry—Customers and Revenues, by Class of Service: 1932 to 1947

[Covers natural, manufactured, mixed, and liquid petroleum gas. Based on questionnaire mailed to all privately owned gas utilities and municipally owned gas departments in the United States, except those with annual revenues less than $25,000, which in the aggregate account for only a negligible portion of the industry]

Year	Customers (1,000)[1]				Revenues ($1,000)			
	Total	Residential	Commercial[2]	Other	Total	Residential	Commercial[2]	Other
1932	15,536	14,785	742	9	723,272	553,091	167,128	3,053
1933	15,199	14,432	757	10	679,914	510,040	166,865	3,009
1934	15,511	14,644	854	13	702,614	504,742	194,497	3,375
1935	15,874	14,985	877	12	727,092	512,603	210,994	3,495
1936	16,185	15,235	938	12	770,242	522,110	244,481	3,651
1937	16,620	15,647	961	12	801,197	531,938	265,117	4,142
1938	16,907	15,917	978	12	777,074	532,045	241,059	3,970
1939	17,147	16,142	993	12	814,009	546,866	263,293	3,850
1940	17,622	16,590	1,020	12	871,740	584,417	283,170	4,153
1941	18,149	17,097	1,040	12	914,034	587,650	320,919	5,465
1942	18,759	17,688	1,056	15	994,316	633,445	353,987	6,884
1943	19,088	18,024	1,052	12	1,064,040	661,587	394,492	7,961
1944	19,585	18,483	1,089	13	1,108,157	689,683	410,453	8,021
1945	19,977	18,690	1,275	12	1,150,622	711,767	422,948	15,907
1946	20,637	19,246	1,376	15	1,211,262	761,274	438,098	11,890
1947	21,418	19,931	1,470	16	1,395,762	869,501	508,604	17,657

[1] Figures are yearly averages.
[2] Industrial customers are included with commercial; not available separately before 1945.

Source: American Gas Association, New York, N. Y.; yearbook, Gas Facts.

No. 882.—Manufactured Gas—Solid Fuels and Oil Used by Utilities, by Type of Use: 1932 to 1947

[**Solid fuels in thousands of tons; oil in millions of gallons.** See headnote, table 881]

Fuel and type of use	1932	1935	1940	1942	1944	1945[1]	1946[1]	1947[1]
ANTHRACITE COAL								
Total	115	126	214	300	291	292	347	470
Water gas generator fuel	33	44	86	93	115	94	113	181
Boiler fuel	82	82	128	191	162	160	188	244
Other	-------	-------	-------	[2] 16	[2] 14	[3] 38	[3] 46	[3] 45
BITUMINOUS COAL								
Total	8,103	7,849	6,882	7,730	7,860	8,098	7,660	7,015
Water gas generator fuel	477	480	304	413	408	432	435	379
Boiler fuel	428	382	340	398	446	487	502	492
Oven and retort charge	7,191	6,972	6,220	6,902	7,000	7,171	6,720	6,143
Bench and producer fuel	7	15	18	17	6	8	3	1
COKE								
Total	2,915	2,589	2,599	2,803	3,129	3,551	3,782	3,881
Water gas generator fuel	1,595	1,284	1,552	1,650	1,942	2,225	2,447	2,891
Boiler fuel	539	512	384	453	484	585	601	542
Bench and producer fuel	781	793	663	700	703	741	[4] 734	[4] 748
OIL								
Total	603	510	677	752	837	934	1,069	1,239
Water gas enricher	536	465	592	654	731	797	915	1,035
Boiler fuel	9	11	27	24	23	[5] 24	38	57
Oil gas production	58	34	58	74	83	113	116	147

[1] Includes fuel used in production of manufactured gas during periods of peak demand or emergency only, for use in systems regularly distributing natural gas.
[2] Bench and producer fuel.
[3] Oven and retort charge.
[4] Includes 9,000 tons used as oven and retort charge in 1946, and 10,000 tons in 1947.
[5] Includes 500,000 gallons used as bench and producer fuel.

Source: American Gas Association, New York, N. Y.; yearbook, Gas Facts.

No. 883.—Gas Utility Industry—Customers and Revenues, by Type of Gas, Class of Service, and State: 1947

[See headnote, table 881]

Type of gas, division, and state	Customers (1,000) [1]					Revenues ($1,000)				
	Total	Residential	Commercial	Industrial	Other	Total	Residential	Commercial	Industrial	Other
U. S., all types	**21,418.0**	**19,931.4**	**1,379.3**	**90.9**	**16.4**	**1,395,762**	**869,501**	**182,962**	**325,642**	**17,657**
Manufactured gas	8,641.5	8,072.7	523.6	38.6	6.6	413,492	306,980	62,134	41,404	2,974
Natural gas	10,189.2	9,431.7	712.8	37.2	7.5	848,316	462,828	102,477	269,180	13,831
Mixed gas	2,353.6	2,215.8	122.1	14.0	1.7	122,136	91,376	15,390	14,695	675
Liquefied petroleum gas	233.7	211.2	20.8	1.1	.6	11,818	8,317	2,961	363	177
New England	**1,590.9**	**1,511.6**	**71.7**	**6.7**	**.9**	**79,076**	**60,240**	**10,419**	**7,998**	**419**
Maine	42.2	39.3	2.7	.1	.1	2,232	1,602	464	158	8
New Hampshire	39.3	36.7	2.5	.1	(2)	1,912	1,409	419	76	8
Vermont	21.4	20.2	1.1	.1	(2)	907	688	167	49	3
Massachusetts	973.3	924.3	44.3	4.1	.6	46,840	36,342	5,795	4,485	218
Rhode Island	157.5	152.5	4.3	.6	.1	7,619	5,972	896	692	59
Connecticut	357.2	338.6	16.8	1.7	.1	19,566	14,227	2,678	2,538	123
Middle Atlantic	**6,298.9**	**5,846.7**	**418.8**	**29.1**	**4.3**	**338,200**	**233,252**	**45,337**	**57,608**	**2,003**
New York	3,436.5	3,177.6	240.7	15.0	3.2	158,471	115,200	24,393	17,660	1,218
New Jersey	1,102.8	1,028.4	68.6	5.8	-------	55,146	41,217	8,479	5,212	238
Pennsylvania	1,759.6	1,640.7	109.5	8.3	1.1	124,583	76,835	12,465	34,736	547
East North Central	**5,038.7**	**4,727.6**	**286.4**	**21.5**	**3.2**	**318,646**	**207,215**	**37,200**	**73,137**	**1,094**
Ohio	1,527.2	1,411.6	110.1	4.1	1.4	120,722	75,052	14,850	30,256	564
Indiana	518.1	488.4	27.2	1.6	.9	35,629	20,837	4,029	10,491	272
Illinois	1,593.9	1,500.4	82.2	10.5	.8	83,823	55,033	10,117	18,534	139
Michigan	976.5	925.4	47.6	3.4	.1	59,838	41,885	6,097	11,737	119
Wisconsin	423.0	401.8	19.3	1.9	-------	18,634	14,408	2,107	2,119	-------
West North Central	**1,649.6**	**1,539.4**	**102.3**	**7.4**	**.5**	**132,946**	**79,890**	**16,464**	**34,010**	**2,582**
Minnesota	316.4	299.4	15.6	1.4	-------	22,172	14,723	2,313	5,126	10
Iowa	268.1	248.9	18.3	.7	.2	18,765	11,909	2,663	4,124	69
Missouri	532.2	504.8	24.9	2.5	-------	37,051	24,945	3,498	8,373	235
North Dakota	24.2	22.1	2.0	-------	.1	1,790	1,269	424	55	42
South Dakota	32.7	29.5	3.1	.1	-------	3,519	1,875	863	637	144
Nebraska	160.7	147.9	12.1	.7	-------	15,504	8,753	2,155	3,992	604
Kansas	315.3	286.8	26.3	2.0	.2	34,145	16,416	4,548	11,703	1,478
South Atlantic	**1,439.4**	**1,332.9**	**98.8**	**4.0**	**3.7**	**101,107**	**64,398**	**13,671**	**21,125**	**1,913**
Delaware	46.4	44.0	2.4	-------	-------	2,239	1,768	322	143	6
Maryland	342.0	319.5	21.9	.5	.1	20,201	14,511	2,483	2,923	284
Dist. of Columbia	169.3	156.3	11.5	.4	1.1	11,381	8,758	1,096	1,159	368
Virginia	202.0	192.4	8.3	.4	.9	11,008	8,675	1,394	749	190
West Virginia	251.4	229.9	20.9	.4	.2	22,812	10,527	2,234	9,858	193
North Carolina	64.5	58.3	5.9	.3	-------	3,886	2,678	1,019	183	6
South Carolina	37.8	34.0	3.5	.2	.1	2,306	1,646	482	151	27
Georgia	170.2	153.8	14.6	1.6	.2	16,415	9,062	2,152	4,909	292
Florida	155.8	144.7	9.8	.2	1.1	10,859	6,773	2,489	1,050	547
East South Central	**588.6**	**526.3**	**58.4**	**3.0**	**.9**	**54,344**	**27,220**	**8,048**	**18,380**	**696**
Kentucky	232.0	209.3	21.7	.4	.6	15,898	9,794	2,200	3,486	418
Tennessee	122.9	107.6	13.9	1.3	.1	12,589	6,550	2,501	3,439	99
Alabama	134.8	123.9	10.5	.4	-------	14,931	6,011	1,631	7,289	(3)
Mississippi	98.9	85.5	12.3	.9	.2	10,926	4,865	1,716	4,166	179
West South Central	**1,827.0**	**1,626.9**	**186.8**	**10.7**	**2.6**	**157,934**	**72,812**	**21,453**	**60,448**	**3,221**
Arkansas	134.7	116.0	17.4	1.3	-------	13,347	5,945	2,207	5,073	122
Louisiana	297.7	267.7	28.0	1.3	.7	29,656	10,468	2,676	15,586	926
Oklahoma	360.0	319.5	37.8	1.8	.9	29,148	15,014	4,876	8,902	356
Texas	1,034.6	923.7	103.6	6.3	1.0	85,783	41,385	11,694	30,887	1,817
Mountain	**429.1**	**381.6**	**45.4**	**2.0**	**0.1**	**47,949**	**24,340**	**7,997**	**14,976**	**636**
Montana	63.3	56.4	6.6	.3	-------	8,193	4,612	1,729	1,627	225
Idaho	.6	.5	.1	-------	-------	41	22	19	-------	-------
Wyoming	34.7	30.2	4.3	.2	-------	4,271	2,349	802	957	73
Colorado	145.7	129.5	16.0	.2	-------	13,859	7,768	2,536	3,329	226
New Mexico	52.9	47.0	5.6	.3	-------	6,794	2,909	1,240	2,602	43
Arizona	70.4	62.7	7.4	.2	.1	8,008	2,719	1,000	4,220	69
Utah	58.0	52.3	4.9	.8	-------	6,495	3,787	468	2,240	-------
Nevada	3.5	3.0	.5	-------	-------	288	174	113	1	-------
Pacific	**2,555.8**	**2,438.4**	**110.7**	**6.5**	**.2**	**165,560**	**100,134**	**22,373**	**37,960**	**5,093**
Washington	83.8	74.0	9.4	.4	-------	6,182	4,060	1,824	295	3
Oregon	119.2	109.7	8.9	.5	.1	8,571	6,490	1,769	301	11
California	2,352.8	2,254.7	92.4	5.6	.1	150,807	89,584	18,780	37,364	5,079

[1] Averages for the year. [2] Less than 50 customers. [3] Less than $500.

Source: American Gas Association, New York, N. Y., yearbook, Gas Facts.

No. 884.—Gas Prices—Net Monthly Bills for Specified Quantities, by Cities

[Based on rates as of Dec. 15, 1947 and 1948. One therm=100,000 British thermal units]

City and kind of gas	Heating value per cubic foot in British thermal units (Dec. 15, 1948)	Net monthly bills: 10.6 therms 1947	10.6 therms 1948[1]	19.6 therms 1947	19.6 therms 1948[1]	30.6 therms 1947	30.6 therms 1948[1]	40.6 therms 1947	40.6 therms 1948[1]
Atlanta ... natural	1,031	$1.51	$1.47	$2.09	$2.02	$2.73	$2.61	$3.32	$3.15
Baltimore [2] ... manufactured	500	2.73	2.88	4.39	4.67	6.07	6.51	7.60	8.18
Birmingham ... do	520	1.62	1.62	2.66	2.66	3.75	3.75	4.52	4.52
Boston ... do	530	3.07	3.58	4.65	5.65	6.58	7.99	8.35	10.10
	532	2.65	3.52	4.89	6.18	6.68	8.46	8.53	10.76
Buffalo [3] ... mixed	900	.78	.78	1.44	1.44	2.23	2.23	2.96	2.96
Chicago ... do	800	1.65	1.65	2.68	2.68	3.47	3.47	4.17	4.17
Cincinnati [4] ... do	1,050	1.04	1.01	1.67	1.61	2.39	2.29	3.04	2.92
Cleveland ... natural	1,075	[5] .88	[5] .88	1.31	1.33	1.86	1.90	2.36	2.41
Denver [6] ... do	840	[2] 1.54	1.56	[2] 2.21	2.23	[2] 2.88	2.90	[2] 3.36	3.40
Detroit [7] ... do	1,007	1.30	1.29	2.21	2.21	3.14	3.13	3.96	3.96
Houston ... do	1,088	.93	.92	1.43	1.42	2.04	2.03	2.60	2.58
	1,081	.93	.93	1.43	1.43	2.04	2.04	2.60	2.60
	1,071	.88	.87	1.35	1.34	1.91	1.90	2.43	2.41
Indianapolis ... manufactured	570	1.58	1.58	2.92	2.92	4.57	4.57	6.05	6.05
Jacksonville ... do	525	4.09	4.09	6.54	7.00	8.83	10.49	10.73	13.53
Kansas City [2] ... natural	1,025	.67	.68	1.06	1.08	1.54	1.58	1.98	2.02
Los Angeles ... do	1,100	1.18	1.18	1.66	1.66	2.20	2.20	2.67	2.67
Manchester ... manufactured	525	3.24	3.60	4.90	5.57	6.55	7.61	8.03	9.42
Memphis ... natural	980	1.39	1.39	2.26	2.26	3.28	3.28	3.83	3.83
Milwaukee ... manufactured	520	1.99	2.27	3.11	3.62	4.48	5.27	5.74	6.77
Minneapolis [8] ... natural	1,000	1.57	1.48	2.24	2.05	2.94	2.74	3.57	3.37
Mobile ... do	1,073	1.59	1.59	2.31	2.30	3.18	3.17	3.70	3.68
New Orleans ... do	1,071	1.07	1.07	1.58	1.58	2.20	2.20	2.75	2.75
New York:									
3 boroughs ... manufactured	540	2.30	2.30	4.26	4.26	6.65	6.65	8.82	8.82
Brooklyn ... do	537	2.44	2.80	3.97	4.69	5.53	6.68	6.79	8.32
	537	2.74	3.05	4.55	5.08	6.32	7.07	7.94	8.80
	538	2.74	3.24	4.58	5.49	6.46	7.89	7.87	9.78
Richmond ... do	539	3.18	3.19	5.26	5.27	7.34	7.35	9.23	9.24
Norfolk ... do	530	2.40	2.65	4.36	4.86	6.62	7.44	8.51	9.61
Philadelphia ... do	530	2.01	2.21	3.50	3.85	5.16	5.67	6.67	7.34
Pittsburgh ... natural	1,115	[5] 1.00	[5] 1.00	1.06	1.06	1.64	1.64	2.18	2.18
	1,043	1.22	1.22	1.78	1.78	2.46	2.46	3.09	3.09
	1,100	1.18	1.18	1.72	1.72	2.37	2.37	2.96	2.96
Portland, Maine ... manufactured	528	3.87	3.98	6.35	6.52	7.90	8.18	9.78	10.16
Portland, Oreg ... do	571	2.87	3.01	4.87	5.12	6.43	6.88	8.01	8.61
Richmond ... do	530	2.60	2.60	4.74	4.74	5.99	5.99	7.69	7.69
St. Louis [2] ... mixed	800	2.04	1.74	3.20	2.93	4.38	4.38	5.45	5.44
St. Paul [4] ... manufactured	991	1.96	1.77	3.13	2.56	4.54	3.47	5.80	4.20
San Francisco ... natural	1,100	.90	.90	1.21	1.21	1.59	1.59	1.93	1.93
Savannah ... manufactured	500	2.65	3.32	4.90	5.75	7.37	8.33	9.37	10.33
Scranton ... do	521	2.87	2.87	4.56	4.56	5.76	5.76	7.58	7.58
Seattle [7] ... do	500	4.05	4.62	6.83	7.86	6.80	7.95	8.55	10.01
Washington, D. C ... natural	1,100	1.52	1.52	2.66	2.66	3.98	3.98	5.11	5.11

[1] Preliminary.
[2] Bills include 2-percent tax.
[3] Bills include 1-percent tax.
[4] Changed to natural gas Apr. 15, 1948.
[5] Minimum bill.
[6] Bills include 3-percent tax effective Jan. 1, 1948.
[7] Bills include 3-percent tax.
[8] Changed from mixed to natural gas late in 1947.

Source: Department of Labor, Bureau of Labor Statistics; published annually in Monthly Labor Review.

No. 885.—Petroleum, Crude—Production: 1861 to 1947

[**Quantities in thousands of barrels (42 gallons); values in thousands of dollars.** See also *Historical Statistics*, series G 57–58]

YEARLY AVERAGE	Quantity	Value	YEAR	Quantity	Value	YEAR	Quantity	Value
1861–1865	2,479	9,965	1915	281,104	179,463	1932	785,159	680,460
1866–1870	4,013	15,795	1916	300,767	330,900	1933	905,656	608,000
1871–1875	8,221	16,430	1917	335,316	522,635	1934	908,065	904,825
1876–1880	16,816	22,926	1918	355,928	703,944	1935	996,596	961,440
1881–1885	25,508	22,933	1919	378,367	760,266	1936	1,099,687	1,199,820
1886–1890	32,990	23,830	1920	442,929	1,360,745	1937	1,279,160	1,513,340
1891–1895	51,095	35,708	1921	472,183	814,745	1938	1,214,355	1,373,060
1896–1900	59,498	56,836	1922	557,531	895,111	1939	1,264,962	1,294,470
1901–1905	102,083	83,524	1923	732,407	978,430	1940	1,353,214	1,385,440
1906–1910	172,769	119,572	1924	713,940	1,022,683			
						1941	1,402,228	1,602,000
1911–1915	247,739	185,793	1925	763,743	1,284,960	1942	1,386,645	1,643,470
1916–1920	362,661	735,698	1926	770,874	1,447,760	1943	1,505,613	1,809,020
1921–1925	647,961	999,186	1927	901,123	1,172,830	1944	1,677,904	2,032,960
1926–1930	895,762	1,205,217	1928	901,474	1,054,880	1945	1,713,655	2,094,250
1931–1935	889,311	741,071	1929	1,007,323	1,280,417	1946	1,733,939	2,442,550
1936–1940	1,242,276	1,353,226	1930	898,011	1,070,200	1947	1,856,987	3,577,890
1941–1945	1,537,209	1,836,340	1931	851,081	550,630			

Source: Department of the Interior, Bureau of Mines; Minerals Yearbook.

No. 886.—Petroleum, Crude and Refined—Production, Imports, Exports, and Bunker Oil Laden on Vessels in Foreign Trade: 1871 to 1947

[Exports of refined oils include residuum prior to 1913 and natural gasoline prior to 1932, and exclude them thereafter. Exports exclude reexports of imported oils. General imports through 1933; imports for consumption thereafter. See also *Historical Statistics*, series G 57 for production]

YEARLY AVERAGE OR YEAR	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
1931–1935	889,311	38,395	23,901	36,413	70,896	34,868	27.3	22.3	38.2	176.2	31.3
1936–1940	1,242,276	32,701	30,774	63,651	86,876	35,845	23.6	22.2	87.0	231.9	39.3
1941–1945	1,537,209	39,644	48,317	36,702	105,397	51,568	39.8	53.2	57.0	487.8	75.2
1932	785,159	44,700	30,228	27,391	69,348	38,152	30.4	29.2	27.1	168.1	29.4
1933	905,656	31,908	13,257	36,584	61,419	32,272	17.7	7.1	32.0	151.3	27.1
1934	908,065	35,772	14,952	41,127	64,750	29,899	25.9	9.6	49.8	159.5	31.3
1935	996,596	32,345	22,369	51,430	67,932	30,304	23.4	13.5	61.2	169.9	29.9
1936	1,099,687	32,957	25,460	50,313	71,402	33,407	23.2	16.5	66.1	179.0	34.3
1937	1,279,160	27,310	32,693	67,127	93,464	37,688	20.8	22.1	96.4	253.4	43.5
1938	1,214,355	26,048	27,837	77,254	102,124	36,059	18.6	19.6	111.6	249.6	37.8
1939	1,264,962	34,106	27,350	72,064	103,428	37,036	23.3	18.7	92.8	262.6	39.0
1940	1,353,214	43,085	40,528	51,495	63,960	35,037	32.2	34.0	67.8	214.9	41.9
1941	1,402,228	52,029	48,564	34,484	60,736	30,400	43.4	37.6	49.5	208.2	38.1
1942	1,386,645	13,540	25,780	35,560	71,251	25,417	12.8	23.0	51.6	273.2	35.1
1943	1,505,613	13,803	51,834	43,313	96,860	47,895	14.7	69.9	66.5	421.3	74.0
1944	1,677,904	44,846	56,663	34,802	161,854	71,815	49.0	63.6	58.9	872.8	109.4
1945	1,713,655	74,003	58,742	35,353	136,283	82,314	79.2	71.9	58.3	663.3	119.4
1946	1,733,939	89,210	57,047	42,574	90,884	62,494	101.7	57.0	74.1	306.3	94.1
1947	1,856,890	99,284	63,463	46,356	92,485	72,071	161.5	87.1	99.0	435.7	136.9

[1] Data not available.
[2] Average for years 1908–10 for total mineral oils.

Sources: Production, Dept. of the Interior, Bur. of Mines; Minerals Yearbook. Imports and exports, Dept. of Commerce, Bureau of Census; annual report, Foreign Commerce and Navigation of the U. S., and records.

No. 887.—Petroleum, Crude—World Production; United States Production, by Regions and States: 1926 to 1947

[In thousands of barrels of 42 gallons]

REGION AND STATE	1926–1930 (average)	1931–1935 (average)	1936–1940 (average)	1941–1945 (average)	1943	1944	1945	1946	1947
World total [1]	1,316,390	1,460,372	2,009,651	2,351,151	2,256,625	2,592,511	2,594,914	2,746,680	3,022,030
United States [2]	895,762	889,311	1,242,276	1,537,209	1,505,613	1,677,904	1,713,655	1,733,939	1,856,987
Percent of total	*68*	*61*	*62*	*65*	*67*	*65*	*66*	*63*	*63*
Regions:									
Appalachian	31,603	30,079	34,817	34,044	35,237	34,272	33,047	34,180	32,762
Lima—N. E. Ind.—Mich.	3,603	10,050	18,716	19,228	20,944	18,709	17,481	17,282	16,379
Illinois—S. W. Indiana	7,495	5,326	57,570	100,570	87,516	82,507	79,938	81,999	72,530
Mid-continent	527,944	566,251	694,826	764,285	736,487	818,678	846,227	871,081	949,550
Gulf	54,140	75,401	178,326	294,040	296,322	366,385	360,350	354,576	383,013
Rocky Mountain	29,468	17,984	27,765	44,830	44,919	45,560	50,130	60,108	69,621
California	241,509	184,221	230,256	280,210	284,188	311,793	326,482	314,713	333,132
States:									
Arkansas	35,010	12,144	17,485	27,717	27,600	29,418	28,613	28,375	29,948
California	241,509	184,221	230,256	280,210	284,188	311,793	326,482	314,713	333,132
Colorado	2,477	1,260	1,539	2,958	2,320	3,083	5,036	11,856	15,702
Illinois	6,654	4,551	55,722	94,710	82,260	77,413	75,094	75,297	66,459
Indiana	937	800	1,870	5,885	5,283	5,118	4,868	6,726	6,095
Kansas	41,123	43,033	63,197	96,447	106,178	98,762	96,415	97,218	105,132
Kentucky	7,103	5,494	5,549	7,425	7,883	9,621	10,325	10,578	9,397
Louisiana	22,338	30,396	92,771	123,196	123,592	129,645	131,051	143,669	160,128
Michigan	1,913	9,004	18,103	18,928	20,768	18,490	17,267	17,074	16,215
Mississippi	----------	(3)	4,507	19,673	18,807	16,337	19,062	24,298	34,925
Montana	4,826	3,153	5,861	8,117	7,916	8,647	8,420	8,825	8,742
New Mexico	3,171	15,829	35,720	37,383	38,896	39,555	37,351	36,814	40,926
New York	2,765	3,618	5,057	5,002	5,059	4,697	4,648	4,863	4,762
Ohio	7,022	4,504	3,404	3,228	3,322	2,937	2,828	2,908	3,108
Oklahoma	235,663	176,293	185,293	136,492	123,152	124,616	139,299	134,794	141,019
Pennsylvania	10,613	13,443	17,684	15,384	15,757	14,118	12,515	12,996	12,690
Texas	245,792	364,341	478,063	616,884	594,343	746,699	754,710	760,215	820,210
West Virginia	5,655	4,032	3,680	3,261	3,349	3,070	2,879	2,929	2,617
Wyoming	21,145	13,158	19,987	33,304	34,253	33,356	36,219	38,977	44,772

[1] Estimated. [2] Includes for certain years small quantities not distributed by regions and States.
[3] Not shown separately.

Source: Department of the Interior, Bureau of Mines; Minerals Yearbook.

No. 888.—Petroleum—Runs to Stills, 1945 and 1946, and Major Refinery Products, 1946, 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, 1946				
	1945	1946	1945	1946	Gasoline	Kerosene	Distillate fuel oil	Residual fuel oil	Wax
Total	1,719,534	1,730,197	70,324	62,861	748,411	104,385	287,896	431,364	840,840
East coast	273,667	276,651	1,687	1,181	95,303	13,832	55,252	80,007	310,240
Appalachian	56,199	55,756	435	505	25,914	3,309	6,015	8,616	99,960
Ind., Ill., Ky., etc	275,853	279,810	8,309	7,080	140,722	15,156	36,861	54,323	53,760
Okla., Kans., and Mo	139,176	138,385	5,310	5,594	71,102	9,116	21,457	23,406	106,960
Texas	487,927	503,431	30,377	26,620	225,693	39,957	91,831	110,292	132,720
Louisiana and Ark	127,246	143,182	5,563	3,904	57,727	18,021	28,721	22,108	89,600
Rocky Mountain	45,944	48,044	1,502	1,023	21,578	1,136	6,609	13,388	21,840
California	313,522	284,938	17,141	16,954	110,372	3,858	41,150	119,224	25,760

Source: Department of the Interior, Bureau of Mines; Minerals Yearbook.

No. 889.—Crude Petroleum, Refined Products, and Natural Gasoline—Production and Stocks: 1925 to 1948

[Barrels of 42 gallons]

ITEM	1925	1930	1935	1940	1945	1946	1947	1948 (prel.)
Crude petroleum:								
Domestic production 1,000 bbls.	763,743	898,011	996,596	1,353,214	1,713,655	1,733,939	1,856,987	2,016,282
Imports [1] do.	61,824	62,129	32,239	42,662	74,337	86,066	97,532	129,093
Exports [1] do.	13,337	23,705	51,430	51,496	32,998	42,436	46,355	39,840
Stocks, end of period:								
Refinable crude do.	345,863	408,809	314,855	264,709	218,763	224,473	224,929	246,199
California heavy crude do.	(2)	(2)	(2)	11,906	4,496	5,703	5,725	10,055
Runs to stills do.	739,920	927,447	965,790	1,294,162	1,719,534	1,730,197	1,852,246	2,030,670
Total value at wells 1,000 dolls.	1,284,960	1,070,200	961,440	1,385,440	2,094,250	2,442,550	3,577,890	(3)
Average price per barrel at wells	$1.68	$1.19	$0.97	$1.02	$1.22	$1.41	$1.93	(3)
Refined products:								
Imports [1] 1,000 bbls.	16,376	43,489	20,396	41,089	39,282	51,610	61,857	58,616
Exports [1] do.	100,497	132,794	77,557	78,970	149,985	110,687	118,122	95,114
Stocks, end of period do [2]	206,275	254,311	223,361	282,265	235,998	271,937	{267,103 / [4] 265,850}	345,469
Output of motor fuel do.	262,252	440,728	468,021	616,695	798,194	776,583	839,998	921,902
Yield of gasoline percent	32.4	42.0	44.2	43.1	40.9	39.6	40.2	40.3
Completed refineries, end of year	510	435	632	556	393	399	390	(3)
Daily crude-oil capacity of refineries 1,000 bbls.	2,853	3,943	4,117	4,719	5,316	5,569	6,034	(3)
Average dealer's net price (excl. tax) of gasoline in 50 U. S. cities [5] cents per gal.	17.46	14.49	12.02	9.08	10.33	10.40	12.33	(3)
Natural gasoline:								
Production 1,000 bbls.	26,307	52,631	39,333	55,700	112,004	115,739	132,173	145,479
Stocks, end of period do.	[6] 326	2,377	3,698	5,704	4,322	4,981	4,296	5,579

[1] Import and export figures from Bureau of Census, except for imports of crude petroleum for 1935 and later years which are as reported to Bureau of Mines. Exports include shipments to noncontiguous Territories and possessions.
[2] Figure for California heavy crude included in refined products in 1925, 1930, and 1935.
[3] Not available.
[4] For comparison with succeeding year.
[5] American Petroleum Institute figures; prior to 1939, average tank-wagon prices.
[6] At plants only.

Source: Department of the Interior, Bureau of Mines (except as noted); Minerals Yearbook.

No. 890.—Petroleum—Runs to Stills and Refinery Products, by Class: 1925 to 1948

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

PRODUCT	1925	1930	1935	1940	1945	1946	1947	1948 (prel.)
Input, total	759,556	970,617	996,815	1,333,709	1,789,858	1,793,058	1,922,938	2,106,907
Crude petroleum, total	739,920	927,447	965,790	1,294,162	1,719,534	1,730,197	1,852,246	2,030,670
Domestic	698,582	866,615	933,659	1,252,364	1,645,862	1,645,845	1,754,987	1,906,656
Foreign	41,338	60,832	32,131	41,798	73,672	84,352	97,259	124,014
Natural gasoline	19,636	43,170	31,025	39,547	70,324	62,861	70,692	76,237
Output, total	759,556	970,617	996,815	1,333,709	1,789,858	1,793,058	1,922,938	2,106,907
Gasoline	259,601	432,241	457,842	597,375	774,460	748,411	814,841	865,913
Kerosene	59,689	49,208	55,813	73,882	81,024	104,385	110,412	121,853
Distillate fuel oil	364,991	{81,551	100,235	183,304	249,224	287,896	312,173	380,639
Residual fuel oil		290,947	259,826	316,221	469,492	431,364	447,795	466,141
Lubricating oil	31,055	34,201	27,853	36,765	41,867	45,645	51,765	51,416
Wax	2,135	1,956	1,608	1,833	2,921	3,003	3,624	3,515
Coke	5,281	9,895	7,290	7,633	10,115	10,621	12,077	14,494
Asphalt	15,067	18,194	17,133	29,406	39,196	44,911	49,286	51,919
Still gas	(1)	5,377	51,184	75,950	103,458	88,136	85,564	81,159
Wax 1,000 lbs.	590,577	547,680	450,240	513,240	817,880	840,840	(1)	(1)
Coke 1,000 tons [2]	991	1,940	1,458	1,527	2,023	2,124	(1)	(1)
Asphalt do.	2,677	3,308	3,115	5,347	7,127	8,166	(1)	(1)
Still gas 1,000,000 cu. ft.	(1)	23,000	197,220	273,420	372,449	317,290	308,030	292,172
Road oil	8,044	{5,425	6,030	7,771	2,686	6,175	7,074	7,915
Other finished products		2,377	1,888	3,202	19,080	22,539	24,348	30,605
Crude gasoline (net)	----------	----------	1,032	902	[3] *4,982*	[3] *108*	984	[3] *917*
Other unfinished oils (net)	[3] *9,221*	2,242	[3] *2,412*	[3] *3,848*	[3] *5,727*	[3] *1,615*	[3] *1,227*	[3] *581*
Shortage	22,914	37,003	11,493	3,313	6,954	1,695	4,222	2,636

[1] Not available. [2] Of 2,000 pounds.
[3] Negative quantity; represents net excess of unfinished oils rerun over unfinished oils produced.

Source: Department of the Interior, Bureau of Mines; Petroleum Refinery Statistics 1930 (Bulletin 367) and Minerals Yearbook.

No. 891.—Petroleum Products—Quantity and Value: 1939 and 1947

[Money figures in thousands of dollars]

Product	Unit of measure	1939 Production Quantity	1939 Production Value f. o. b. plant (incl. tax)	1947 Receipts [1] (quantity)	1947 Shipments and interplant transfers Quantity	1947 Shipments and interplant transfers Value f. o. b. plant (excl. tax)	1947 Net shipments [2] (quantity)
Petroleum products, total			2,497,235			6,745,717	
Gasoline, total	M bbls	580,805	1,424,436	54,296	845,621	3,136,709	791,325
Aviation gasoline	do	9,420	36,269	3,271	29,967	143,964	26,696
Automotive gasoline	do	571,385	1,388,167	35,898	790,825	2,907,212	754,927
Other finished base stocks and blending agents)	do			15,127	24,829	85,533	9,702
Naphtha solvents	do	9,352	23,112	1,872	18,120	71,524	16,248
Kerosene (including range oil)	do	64,526	112,065	6,317	114,450	342,997	108,133
Distillate fuel oil, total	do	(3)	(3)	24,670	341,907	918,291	317,237
Grade No. 1 (including P. S. 100)	do	[4] 68,255	[4] 107,649	1,852	47,050	140,865	45,198
Grades No. 2, 3, and 4 (incl. P. S. 200)	do			17,958	218,867	572,837	200,909
Diesel-type fuel oil (light)	do	[5] 94,586	[5] 130,467	3,693	58,013	156,152	54,320
Other distillate fuel oils (including light gas-enrichment oil)	do			1,167	17,977	48,437	16,810
Residual fuel oil, total	do	(3)	(3)	42,323	488,069	899,581	445,746
Grade No. 5 (incl. Navy special and P. S. 300)	do	[6] 312,944	[6] 234,093	1,506	55,464	115,853	53,958
Grade No. 6 (incl. Bunker C and P. S. 400)	do			36,531	387,862	698,552	351,331
Diesel-type fuel oil (heavy)	do	(5)	(5)	609	7,046	16,163	6,437
Other residual fuel oils (including heavy gas-enrichment oil)	do	(5)	(5)	3,677	37,697	69,013	34,020
Lubricating oils, total	do	(3)	263,922	(3)	58,230	664,347	(3)
Petroleum refining industry:							
Refiners of new oils	do	[7] 38,258	[7] 237,161	6,776	50,363	539,295	43,587
Re-refiners of used oils (including crank-case drainings)	do	193	1,250	30	682	6,627	652
Lubricants, n. e. c. industry	do	(3)	25,511	1,798	6,898	110,909	5,100
Other manufacturing industries	do	(3)	(3)	(3)	287	7,516	(3)
Lubricating-oil base stocks (for blending, compounding, and grease manufacture), total	do	(7)	(7)	11,971	12,342	108,621	371
Petroleum refining industry	do	(7)	(7)	5,434	12,264	107,309	6,830
Lubricants, n. e. c. industry	do			6,537	78	1,312	−6,459
Lubricating greases, total	M lbs	(3)	(3)	(3)	1,198,254	93,697	(3)
Petroleum refining industry:							
Refiners of new oils	do	(3)	14,451	58,267	684,585	49,245	626,318
Re-refiners of used oils (including crank-case drainings)	do	(3)	(3)	224	1,978	191	1,754
Lubricants, n. e. c. industry	do	285,124	16,275	20,639	506,204	43,462	485,565
Other manufacturing industries	do	(3)	(3)	(3)	5,487	799	(3)
Asphalt, total			37,994			130,344	
200 penetration and over	M lbs	14,498	17,142	963	24,782	61,646	23,819
Less than 200 penetration	M tons	2,346	20,852	62	5,464	68,698	5,402
Petroleum waxes, total	M lbs	(3)	19,485	73,832	1,233,458	76,005	1,159,626
Microcrystalline	do	(3)	(3)	1,615	96,216	10,363	94,601
Refined and semi-refined crystalline	do	(3)	(3)	23,728	690,159	43,158	666,431
Crude-scale crystalline	do	(3)	(3)	48,489	447,083	22,484	398,594
Liquefied gases, total [8]	M bbls	3,463	4,942	7,354	22,496	110,487	15,142
For direct automotive use (not included under gasoline)	do	(3)	(3)		162	410	
Chemical raw material (including synthetic rubber components)	do	(3)	(3)		9,549	83,007	
Other liquefied gases	do	(3)	(3)		12,785	27,070	
Other finished petroleum products, total			69,466			87,069	
Still gas	Mil. cu. ft	(3)	(9)	4	26,416	9,245	26,412
Road oil	M bbls	6,020	8,539	85	9,053	19,131	8,968
Petrolatum	M lbs	(3)	2,873	120,618	455,294	11,944	334,676
Petroleum coke	M tons	1,522	4,987		1,619	12,444	1,619
Other finished petroleum products	M bbls	(3)	[9] 53,067	375	4,571	34,305	4,196
Unfinished oils	do	31,714	38,878	59,533	44,710	106,045	−14,823

[1] As billed by the shipper.
[2] Represents difference between quantities shipped and receipts.
[3] Not available.
[4] Represents distillates except gas oils and diesel oils.
[5] Figures for residual oils are included with figures for distillate oils.
[6] Represents residual fuel oils except gas oils and diesel oils.
[7] Lubricating-oil base stocks are probably included with lubricating oils.
[8] Includes propane, butane, propane-butane mixtures, pentane, and other liquefied refinery gases. Excludes liquefied petroleum gases from natural-gasoline plants.
[9] Includes still gas residuum or tar, acid oil, and other refinery products.

Source: Department of Commerce, Bureau of the Census; 1947 Census of Manufactures reports.

No. 892.—Petroleum Pipe Lines—Summary: 1925 to 1947

[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
1925	70,009	511,088	93,896	164,645	80,232	70,966	88,495
1930	88,727	772,711	96,184	237,910	99,363	121,816	123,741
1935	92,037	763,009	119,071	197,368	89,364	79,586	78,249
1936	94,060	773,743	77,239	219,057	92,899	94,491	91,742
1937	96,611	802,946	87,389	248,198	99,641	109,994	102,720
1938	95,775	807,657	70,666	228,211	98,756	95,128	92,724
1939	98,681	829,646	65,124	212,466	97,130	83,401	80,823
1940	100,156	841,977	64,095	225,760	101,919	82,558	79,857
1941	105,435	885,317	45,687	251,685	110,448	81,604	79,468
1942	106,485	918,848	44,525	245,061	123,507	58,332	56,845
1943	108,783	965,464	39,891	276,652	148,448	62,620	61,302
1944	111,615	1,000,741	62,767	310,194	172,368	67,840	65,715
1945	113,351	1,042,523	86,713	304,268	191,668	67,127	65,941
1946	116,544	1,106,454	69,991	293,723	183,869	56,485	56,094
1947	119,298	1,225,168	56,455	325,224	214,682	54,415	53,145

Source: Interstate Commerce Commission; annual report, Statistics of Oil Pipe Line Companies.

No. 893.—Oil Wells, Number and Production, 1946 and 1947, and Number of Oil and Gas Wells Drilled, 1947 and 1948, by States

State	Producing oil wells: Approximate number Dec. 31		Producing oil wells: Average production per well per day (barrels)		Wells drilled [1]: Oil		Wells drilled [1]: Gas		Wells drilled [1]: Dry	
	1946	1947	1946	1947	1947	1948	1947	1948	1947	1948
Total	**421,460**	**426,280**	**11.3**	**12.0**	**18,001**	**22,585**	**3,305**	**2,897**	**9,536**	**12,026**
Arkansas	3,350	3,590	23.6	23.6	182	151	10	5	137	145
California	23,180	24,420	38.0	38.3	1,639	2,395	45	21	369	460
Colorado	420	600	91.5	84.4	152	149	7	10	50	48
Illinois	25,600	25,670	8.2	7.1	1,054	1,262	10	11	969	1,105
Indiana	2,100	2,300	8.9	7.6	312	518	35	40	334	519
Kansas	26,100	27,500	10.3	10.7	1,303	1,677	452	382	912	1,193
Kentucky	14,650	14,780	2.0	1.7	289	349	110	151	261	403
Louisiana	8,060	8,700	50.1	52.4	1,036	1,552	105	133	485	634
Michigan	3,520	3,540	13.2	12.6	312	355	55	30	402	435
Mississippi	790	1,120	92.5	100.2	319	250	29	16	143	161
Montana	2,750	2,890	9.0	8.5	152	191	93	69	64	85
Nebraska	60	60	12.3	10.5	--------	[2] 18	--------	[2] 3	[2] 7	[2] 35
New Mexico	4,690	5,000	22.1	23.1	423	433	60	44	79	129
New York	23,600	22,500	.6	.6	(3)	(3)	(3)	(3)	(3)	(3)
Ohio	20,480	19,500	.4	.4	(3)	(3)	(3)	(3)	(3)	(3)
Oklahoma	52,170	52,200	7.1	7.4	1,989	2,417	302	258	1,532	1,588
Pennsylvania	83,200	83,600	.4	.4	[3] 2,836	[3] 2,834	[3] 1,435	[3] 1,170	[3] 685	[3] 707
Texas	105,900	107,600	19.8	21.1	5,814	7,619	537	542	2,932	4,011
West Virginia	16,500	16,250	.5	.4	(3)	(3)	(3)	(3)	(3)	(3)
Wyoming	4,220	4,320	25.6	28.7	172	394	19	7	76	183
Other States	[4] 120	[4] 140	[4] 11.8	[4] 16.4	17	21	1	5	99	125

[1] Figures from Oil and Gas Journal. [2] Includes Missouri and Iowa.
[3] New York, Ohio, and West Virginia included in Pennsylvania.
[4] Alabama, Florida, Missouri, Tennessee, and Virginia.

Source: Department of the Interior, Bureau of Mines; Minerals Yearbook, except as noted.

No. 894.—Asphalt—Supply, Distribution, and Value: 1940 to 1947

ITEM	1940	1941	1942	1943	1944	1945	1946	1947
SUPPLY (1,000 TONS OF 2,000 LBS.)								
Total	6,525	8,022	7,999	8,172	8,483	8,609	9,832	10,947
Native asphalt and related bitumens:								
Produced	491	691	975	886	790	704	846	1,072
Imported (chiefly lake asphalt)	12	14	8	8	8	5	4	6
Petroleum asphalt (excluding road oil):								
Produced at refineries from domestic and foreign petroleum	5,347	6,558	6,297	6,757	6,996	7,127	8,166	8,961
Imported [1]	126	145	115	110	126	147	123	206
Stocks, Jan. 1	550	614	604	411	563	626	693	702
DISTRIBUTION (1,000 TONS OF 2,000 LBS.)								
Total	6,525	8,022	7,999	8,172	8,483	8,609	9,832	10,947
Native asphalt and related bitumens:								
Indicated domestic demand	479	680	966	851	752	657	819	1,048
Exports (unmanufactured)	11	11	9	35	37	47	27	24
Petroleum asphalt (excluding road oil):								
Indicated domestic demand (incl. lake asphalt)	5,161	6,502	6,527	6,637	6,949	6,999	7,888	8,588
Exports	259	225	85	86	119	213	396	556
Stocks, Dec. 31	614	604	411	563	626	693	702	731
VALUE (1,000 DOLLARS)								
Native asphalt and related bitumens:								
Sales	2,725	3,169	4,279	4,288	3,688	3,816	4,262	5,503
Imports (chiefly lake asphalt)	143	183	136	222	254	122	92	243
Exports (unmanufactured)	443	329	232	819	730	1,207	974	1,065
Petroleum asphalt (excluding road oil):								
Sales [2]	45,191	60,513	70,815	78,863	75,715	78,876	93,991	127,869
Imports [1]	566	777	680	659	726	842	771	1,692
Exports	4,004	3,690	1,585	2,147	2,606	5,172	9,708	14,208

[1] Includes cut-backs and road oil.
[2] Excludes export sales.

No. 895.—Gypsum—Supply, Sales, Imports, and Exports: 1940 to 1947

[**Quantities in thousands of short tons (2,000 pounds); values in thousands of dollars.** See also *Historical Statistics*, series G 67–68, for gypsum mined and total gypsum products sold]

ITEM	1940	1941	1942	1943	1944	1945	1946	1947
Crude gypsum: [1]								
Mined	3,699	4,789	4,698	3,878	3,761	3,812	5,629	6,208
Imported	1,405	1,348	394	231	342	509	1,457	2,157
Apparent supply	5,104	6,136	5,092	4,109	4,104	4,320	7,087	8,365
Calcined gypsum produced: [2]								
Short tons	3,308	3,981	3,045	2,558	2,363	2,485	4,170	5,011
Value	17,255	19,747	16,403	14,752	13,841	14,474	29,273	38,726
Gypsum products sold: [2]								
Uncalcined uses:								
Short tons	929	1,321	1,515	1,234	1,056	1,148	1,641	1,950
Value	2,251	3,139	3,534	3,115	2,954	3,433	5,106	7,012
Industrial uses:								
Short tons	124	152	143	164	200	158	207	207
Value	1,533	1,885	1,841	2,259	2,551	2,326	3,161	3,430
Building uses, value	49,709	64,734	57,796	53,723	50,196	54,390	88,928	117,973
Gypsum and gypsum products:								
Imported for consumption, value	1,429	1,282	508	304	395	549	1,833	2,522
Exported, value	264	530	978	284	490	1,503	1,065	1,601

[1] Excludes byproduct gypsum.
[2] Made from domestic, imported, and byproduct crude gypsum.

Source of tables 894 and 895: Department of the Interior, Bureau of Mines; Minerals Yearbook.

No. 896.—Portland Cement—Production, by States; Shipments, Imports, and Stocks: 1910 to 1947

[In thousands of barrels of 376 pounds]

STATE	1910	1920	1930	1935	1940	1945	1946	1947
Production, total	76,550	100,023	161,197	76,742	[1] 130,217	[1 2] 102,805	[1 2] 164,064	[1] 186,519
Alabama	[3] 1,481	1,132	4,821	2,493	5,122	5,542	7,897	9,514
California	[4] 6,386	7,098	10,124	7,974	14,216	15,952	19,541	22,788
Illinois	4,459	5,539	7,935	3,368	4,975	4,367	6,270	7,228
Iowa	[5] 2,010	4,849	7,088	3,520	4,606	3,194	5,513	6,336
Kansas	5,656	4,341	6,012	2,337	3,433	3,001	6,405	7,132
Michigan	3,688	4,891	11,511	4,579	8,603	5,839	9,694	10,212
Missouri	4,456	6,018	7,809	3,392	4,968	3,185	6,512	8,013
New York	3,296	5,885	10,373	4,285	8,437	[6] 5,617	[6] 11,412	[6] 12,133
Ohio	1,528	1,780	8,632	3,876	6,664	4,604	8,035	9,382
Pennsylvania	26,676	28,269	37,844	15,502	26,853	15,564	29,202	33,350
Tennessee	(7)	(7)	3,875	2,703	3,808	2,882	5,218	5,901
Texas	[8] 2,287	2,562	6,782	3,787	7,375	8,037	10,713	12,463
Other States	14,627	27,659	38,393	18,925	[1] 31,156	[1 2] 25,022	[1 2] 37,653	[1] 42,067
Shipments [9]	(10)	96,312	159,059	75,233	130,350	106,354	169,568	187,492
Imports [11]	307	525	985	619	538	(12)	4	5
Stocks at mills (Dec. 31)	(10)	8,833	25,899	23,065	23,365	16,455	10,970	[13] 9,997

[1] Includes production of Puerto Rico.
[2] Includes production of Hawaii.
[3] Includes Georgia and Tennessee.
[4] Includes Washington.
[5] Includes Kentucky and West Virginia.
[6] Includes Maine.
[7] Included in figures for Alabama for 1910; "Other States," 1920.
[8] Includes Oklahoma.
[9] Including exports made directly by manufacturers and shipments made by them to noncontiguous U. S. Territories and possessions.
[10] Not available.
[11] "Imports for consumption" of portland and other hydraulic cement.
[12] Less than 500 barrels.
[13] Subject to revision.

No. 897.—Portland Cement—Shipments, by State of Destination: 1944 to 1947

[In thousands of barrels of 376 pounds]

STATE	1944	1945	1946	1947
Shipped from cement plant	94,272	106,354	169,568	187,492
Shipments to States	87,309	96,457	163,094	179,253
New England	2,829	3,279	6,696	7,449
Maine	248	306	658	787
New Hampshire	212	254	517	519
Vermont	117	158	378	497
Massachusetts	1,084	1,299	2,527	2,942
Rhode Island	305	266	495	547
Connecticut	864	997	2,120	2,157
Middle Atlantic	11,441	13,498	25,056	28,977
New York	4,058	5,252	10,232	12,731
New Jersey	2,585	2,772	5,122	5,272
Pennsylvania	4,798	5,474	9,702	10,974
E. N. Central	18,137	21,033	35,064	36,866
Ohio	4,387	4,777	9,027	9,685
Indiana	2,934	3,629	5,256	5,217
Illinois	4,787	5,382	8,767	9,331
Michigan	3,770	4,636	7,571	8,048
Wisconsin	2,260	2,608	4,443	4,585
W. N. Central	9,341	10,468	18,529	20,291
Minnesota	1,638	2,135	3,717	3,914
Iowa	1,996	2,186	3,759	4,262
Missouri	1,970	2,579	4,885	4,893
North Dakota	287	382	672	754
South Dakota	288	383	728	925
Nebraska	1,340	1,030	1,814	1,818
Kansas	1,821	1,772	2,954	3,725
South Atlantic	12,035	11,249	21,380	22,461
Delaware	212	210	484	432
Maryland	1,596	1,656	2,752	3,146
Dist. of Col.	667	765	1,011	1,131
Virginia	2,434	2,066	3,492	3,572
Shipments to States—Con. South Atlantic—Continued.				
West Virginia	903	1,080	2,007	2,400
North Carolina	2,709	1,369	3,506	3,170
South Carolina	555	589	1,347	1,336
Georgia	1,246	1,447	3,049	3,052
Florida	1,713	2,068	3,731	4,222
E. S. Central	4,996	5,678	10,416	11,473
Kentucky	1,258	1,206	2,320	2,903
Tennessee	1,883	1,772	3,666	4,102
Alabama	1,194	1,912	2,744	2,930
Mississippi	662	788	1,687	1,538
W. S. Central	8,837	11,077	16,825	19,299
Arkansas	728	975	1,332	1,350
Louisiana	1,589	1,928	2,564	3,134
Oklahoma	1,300	1,580	3,026	3,295
Texas	5,220	6,595	9,904	11,520
Mountain	3,385	4,666	6,908	7,453
Montana	259	356	553	557
Idaho	351	432	707	838
Wyoming	248	220	343	398
Colorado	694	1,134	1,727	1,837
New Mexico	383	799	1,073	1,108
Arizona	577	740	1,171	1,491
Utah	611	675	933	955
Nevada	262	310	400	269
Pacific	16,123	15,017	22,183	24,650
Washington	3,339	2,304	3,364	3,513
Oregon	736	921	1,478	1,836
California	12,048	11,792	17,341	19,301
Unspecified	185	491	36	334
Exports direct by manufacturers [1]	6,963	9,897	6,474	8,239

[1] Includes shipments to Alaska, Hawaii, and Puerto Rico, etc., as well as shipments to foreign countries.

Source of tables 896 and 897: Dept. of Interior, Bur. of Mines; Minerals Yearbook.

No. 898.—Cement—Production, by Kind: 1890 to 1947

[Portland cement, 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. See also *Historical Statistics*, series G 65–66]

Year	Production in thousands of barrels: Total	Portland	Masonry, natural, and puzzolan	Total value in thousands of dollars [1]	Year	Production in thousands of barrels: Total	Portland	Masonry, natural, and puzzolan	Total value in thousands of dollars [1]
1890	7,777	336	7,441	4,527	1931	126,671	125,429	1,242	142,580
1895	8,731	990	7,741	5,482	1932	77,198	76,741	457	82,718
1900	17,231	8,482	8,749	13,284	1933	63,984	63,473	511	86,229
1905	40,102	35,247	4,855	35,932	1934	78,419	77,748	672	117,882
1910	77,785	76,550	1,235	68,752	1935	77,748	76,742	1,006	114,810
1915	86,708	85,915	[2] 794	74,285	1936	114,469	112,650	1,819	172,778
1920	100,791	100,023	[2] 767	203,198	1937	118,075	116,175	1,901	171,414
1921	99,381	98,842	[2] 539	187,708	1938	107,178	105,357	1,821	156,703
1922	115,679	114,790	[2] 889	203,324	1939 [3]	124,698	122,259	2,439	184,255
1923	138,732	137,460	[2] 1,272	263,122	1940 [3]	132,751	130,217	2,535	193,465
1924	150,777	149,358	[2] 1,418	272,345	1941 [3]	166,907	164,031	2,876	250,589
1925	163,388	161,659	1,729	281,076	1942 [3]	185,342	182,781	2,560	286,905
1926	166,635	164,530	2,105	280,786	1943 [3]	135,254	133,424	1,830	202,460
1927	175,330	173,207	2,124	281,736	1944 [3]	92,152	90,906	1,247	151,997
1928	178,509	176,299	2,210	278,883	1945 [4]	104,289	102,805	1,484	175,431
1929	172,856	170,646	2,209	255,105	1946 [4]	166,539	164,064	2,475	296,552
1930	162,989	161,197	1,792	231,249	1947 [4]	189,470	186,519	2,951	361,978

[1] Value of shipments beginning 1925. [2] Shipments. [3] All items except masonry, etc., include data for Puerto Rico.
[4] All items except masonry, etc., include data for Puerto Rico and Hawaii.

Source: Department of the Interior, Bureau of Mines; Minerals Yearbook.

No. 899.—Stone—Sales, by Kind and by Use: 1941 to 1947

[See also *Historical Statistics*, series G 75–76 for total]

Variety and use	Quantity sold, thousands of short tons (2,000 pounds) [1]: 1941	1942	1943	1944	1945	1946	1947	Value, 1,000 dollars: 1946	1947
Total	**183,108**	**195,884**	**171,343**	**155,580**	**153,405**	**178,852**	**207,555**	**234,339**	**289,344**
Granite	14,299	14,065	9,240	7,395	7,740	11,119	12,443	29,492	34,123
Basalt and related rocks	17,937	17,627	14,385	14,043	14,911	16,400	19,616	20,683	25,755
Sandstone	7,593	6,701	7,408	6,427	4,387	4,254	6,809	11,407	16,587
Marble	176	170	169	153	171	205	228	7,920	10,253
Limestone	133,164	142,488	128,980	115,506	112,574	134,717	150,409	155,649	186,548
All other	9,939	14,835	11,160	12,055	13,622	12,156	18,050	9,188	16,078
Building stone	816	481	319	200	382	707	739	13,768	18,610
Monumental	237	226	210	243	251	300	312	17,435	19,815
Paving blocks	[2] 21	19	7	4	2	5	5	50	56
Curbing	[2] 66	25	12	17	13	30	52	544	1,110
Flagging	77	52	32	21	21	38	41	525	586
Rubble	729	544	253	135	390	293	269	650	715
Riprap	5,153	8,764	4,950	4,011	4,801	3,848	5,733	5,010	6,514
Crushed stone	120,964	125,268	99,648	83,081	85,373	107,267	123,428	110,893	139,320
Furnace flux, limestone and marble	27,436	30,263	[3] 31,571	[3] 31,080	[3] 27,640	[3] 25,158	[3] 32,570	[3] 20,792	[3] 28,688
Refractory stone	2,254	2,718	2,708	2,314	2,527	2,088	2,704	4,157	5,537
Agricultural limestone	11,910	13,745	14,522	18,941	17,396	22,782	22,606	32,483	35,076
Other uses	13,444	13,779	17,113	15,534	14,610	16,335	19,096	28,033	33,317

[1] Quantities of stones not sold by short ton are expressed in approximate equivalents in short tons; expressed in their selling units, quantities for 1947 are as follows: Building stone (cut stone, slabs, and mill blocks), 7,203,530 cubic feet; monumental stone, 3,778,060 cubic feet; paving blocks, 683,950 (number); curbing, 634,860 cubic feet; and flagging, 520,490 cubic feet.
[2] Sandstone paving blocks included with "curbing." [3] Limestone only.

Source: Department of the Interior, Bureau of Mines; Minerals Yearbook.

No. 900.—Salt—Production, Exports, and Imports: 1880 to 1947

[**In short tons (2,000 pounds).** Production figures represent sales plus that used by producers; they include Puerto Rico. Imports are imports for consumption. See also *Historical Statistics*, series G 81–82 for production]

YEAR	Production	Exports	Imports	YEAR	Production	Exports	Imports
1880	834,548	1,642	509,703	1934	7,612,074	105,365	53,124
1885	985,411	2,108	440,290	1935	7,926,897	112,213	51,245
1890	1,242,779	2,464	257,323	1936	8,828,936	76,974	51,041
1895	1,913,751	3,602	279,576	1937	9,241,564	70,111	45,996
1900	2,921,708	7,511	199,909	1938	8,025,768	67,498	39,513
1905	3,635,257	34,238	161,159	1939	9,277,911	124,273	46,033
1910	4,242,792	49,013	137,103	1940	10,359,960	147,044	30,402
1915	5,352,409	80,474	122,326	1941	12,720,629	123,195	15,432
1920	6,840,029	139,272	137,654	1942	13,693,284	118,424	7,754
1925	7,397,500	155,079	85,788	1943	15,214,152	145,803	1,258
1930	8,054,440	70,478	54,021	1944	15,717,171	198,368	5,554
1931	7,358,070	98,710	33,216	1945	15,394,141	190,524	4,553
1932	6,407,973	63,581	28,018	1946	15,132,145	223,426	4,253
1933	7,604,972	105,178	30,132	1947	16,138,374	188,307	1,910

Source: Department of the Interior, Bureau of Mines; Minerals Yearbook.

No. 901.—Salt—Production, by States and by Kind: 1925 to 1947

[**Quantity figures in short tons (2,000 pounds).** Represents sales plus that used by producers; includes Puerto Rico]

STATE OR KIND	1925	1930	1935	1940	1945	1946	1947
Production, total	**7,397,500**	**8,054,440**	**7,926,897**	**10,359,960**	**15,394,141**	**15,132,145**	**16,138,374**
By States:							
Michigan	2,172,600	2,558,290	2,128,171	2,863,035	4,285,493	4,334,202	4,531,761
New York	2,053,970	2,009,280	1,927,822	2,117,671	2,862,224	2,813,782	2,923,023
Ohio	1,173,590	1,311,440	1,487,315	2,080,133	2,764,926	2,645,995	2,975,676
Kansas	812,540	759,800	608,204	684,053	855,806	815,018	904,398
Louisiana	500,350	535,250	702,990	1,132,594	1,867,689	1,846,522	1,955,382
California	292,480	350,370	356,222	469,354	694,609	729,092	768,397
Texas	(1)	(1)	268,809	402,165	1,100,791	1,098,589	1,191,621
Utah	88,150	85,240	57,625	71,472	122,997	121,669	113,285
West Virginia	25,870	28,670	65,968	144,312	370,260	272,841	279,300
Other States	277,950	416,100	323,771	395,171	469,346	454,435	495,531
By kinds:							
Manufactured (evaporated)	2,235,170	2,358,610	2,330,042	2,782,741	3,182,570	3,249,457	3,158,718
In brine	2,819,690	3,718,460	3,837,613	5,311,671	8,705,831	8,470,680	9,225,303
Rock salt	2,342,640	1,977,370	1,759,242	2,265,548	3,505,740	3,412,008	3,754,353
Total value [2] (dollars)	26,162,361	25,009,480	21,837,911	26,474,619	43,914,406	44,912,586	52,276,180

[1] Included in "Other States."
[2] F. o. b. mine or refinery; values exclude cost of cooperage or containers.

Source: Department of the Interior, Bureau of Mines; Minerals Yearbook.

No. 902.—Employment and Injuries in Mineral Industries: 1934 to 1947

Year	Average days active	Working		Man-days worked	Killed	Injured		Rate [1]		
		Average number	Equivalent in 300-day workers			Total	Except coal mines	Killed	Injured	
									Total	Except coal mines
1934	195	739,737	481,807	144,542,133	1,429	81,660	13,652	3.0	169.5	100.9
1935	195	783,139	507,847	152,354,170	1,495	82,220	16,645	2.9	161.9	98.3
1936	216	824,514	593,068	177,920,334	1,686	92,644	23,068	2.8	156.2	109.8
1937	217	859,951	622,634	186,790,283	1,759	96,484	28,207	2.8	155.0	117.7
1938	187	774,894	483,523	145,056,875	1,369	71,618	20,304	2.8	148.1	107.3
1939	202	788,925	531,295	159,388,490	1,334	75,495	21,480	2.5	142.1	102.5
1940	219	801,926	585,546	175,663,792	1,716	82,861	23,080	2.9	141.5	99.7
1941	234	835,095	651,417	195,425,228	1,621	90,319	26,854	2.5	138.7	102.0
1942	260	802,640	695,800	208,739,906	1,862	94,465	24,901	2.7	135.8	93.8
1943	277	747,645	691,387	207,416,144	1,799	88,449	23,855	2.6	127.93	90.5
1944	287	677,005	648,434	194,530,188	1,571	83,451	19,760	2.4	128.70	88.4
1945 [2]	273	636,475	579,343	173,803,000	1,281	75,644	16,294	2.2	130.6	82.4
1946 [2]	244	671,857	547,080	164,124,000	1,167	74,255	17,455	2.1	135.7	88.7
1947 [2]	261	705,800	613,153	183,946,000	1,406	77,935	19,735	2.3	127.1	86.7

[1] Number killed or injured per 1,000 300-day workers. [2] Preliminary.

No. 903.—Employment and Injuries in Mineral Industries, by Industry Groups, 1947 and Earlier Years

[See also *Historical Statistics* series G 131–144 and G 156]

Year	Working		Killed	Injured	
	Avg. number	Equivalent in 300-day workers		Temporary	Permanent
Metal mines: [1]					
1915	152,118	141,997	553	34,686	609
1920	136,583	134,540	425	32,205	357
1925	126,713	123,908	371	34,458	674
1930	103,233	92,900	271	15,091	503
1935	92,314	67,841	164	9,953	253
1940	120,120	96,822	223	14,343	423
1942	112,446	104,806	237	13,516	441
1943	100,752	97,579	220	12,571	433
1944	81,741	78,463	147	9,757	420
1945	71,841	69,147	112	7,757	310
1946	77,910	65,803	110	8,347	367
1947 [2]	84,000	78,307	136	9,815	------
Quarries:					
1915	100,740	82,447	148	9,148	523
1920	86,488	77,089	178	10,880	337
1925	91,872	83,487	149	13,713	452
1930	80,633	68,531	105	7,152	265
1935	73,005	48,744	51	4,023	129
1940	79,509	63,737	72	5,016	172
1942	84,270	76,025	112	6,199	150
1943	69,877	63,785	80	5,059	140
1944	58,476	52,302	73	4,322	115
1945	58,180	51,253	53	4,032	89
1946	70,265	64,207	55	4,976	161
1947 [2]	80,300	70,977	69	5,885	------
Metallurgical plants:					
1916	80,201	88,596	83	14,863	217
1920	59,232	65,587	61	8,714	149
1925	58,935	66,220	44	7,480	231
1930	40,787	44,403	25	2,570	156
1935	36,493	35,438	28	1,843	119
1940	49,068	48,278	18	2,438	144
Metallurgical plants—Con.					
1942	51,154	56,911	29	3,518	156
1943	64,735	72,542	31	4,443	223
1944	58,085	63,710	38	3,928	230
1945	46,467	50,893	19	3,106	165
1946 [2]	44,772	42,720	20	2,608	186
1947 [2]	48,800	50,820	22	3,120	------
Coke ovens:					
1916	31,603	34,119	45	5,154	83
1920	28,139	29,921	49	3,336	79
1925	23,254	24,054	28	1,652	44
1930	19,855	22,936	28	990	32
1935	16,125	17,251	10	304	21
1940	19,962	22,579	15	522	22
1942	23,909	27,006	13	891	30
1943	25,765	29,825	17	941	45
1944	24,766	28,958	15	952	36
1945	22,987	26,383	18	801	34
1946	21,410	24,017	8	775	35
1947 [2]	23,700	27,560	14	915	------
Coal mines:					
1911	728,348	532,565	2,656	(3)	(3)
1915	734,008	511,598	2,269	(3)	(3)
1920	784,621	601,283	2,272	(3)	(3)
1925	748,805	480,227	2,234	(3)	(3)
1930	644,006	412,979	2,063	101,093	2,728
1935	565,202	338,572	1,242	63,701	1,874
1940	533,267	354,130	1,388	57,630	2,151
1942	530,861	430,452	1,471	67,454	2,110
1943	486,516	427,656	1,451	63,281	1,313
1944	453,937	424,998	1,298	62,381	1,310
1945 [2]	437,000	381,667	1,079	59,350	------
1946 [2]	457,500	350,333	974	56,800	------
1947 [2]	469,000	385,490	1,165	58,200	------

[1] Includes data for mines producing nonmetallic minerals other than coal.
[2] Preliminary. [3] Not available.

Source of tables 902 and 903: Department of the Interior, Bureau of Mines; annual bulletins, Metal Mine Accidents, Quarry Accidents, Accidents at Metallurgical Plants, Coke Oven Accidents, and Coal Mine Accidents.