

E.R.V

COLONIAL GEOLOGICAL SURVEYS  
MINERAL RESOURCES DIVISION

STATISTICAL SUMMARY  
OF THE  
MINERAL INDUSTRY

PRODUCTION, IMPORTS AND EXPORTS

1945-1951

MINERAL INDUSTRY  
OVERSEAS  
COLONIAL  
IMPERIAL  
STATISTICS



LONDON: HER MAJESTY'S STATIONERY OFFICE

1953

Price £1 7s. 6d. net



# COLONIAL GEOLOGICAL SURVEYS

MINERAL RESOURCES DIVISION

4,7229

Y. 2502

## STATISTICAL SUMMARY OF THE MINERAL INDUSTRY

(PRODUCTION, IMPORTS AND EXPORTS)

1945—1951

LIBRARY

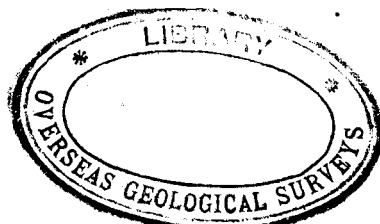
### Errata

RY

- Page 109      United Kingdom 1947—  
              *for 15,114,602 read 15,721,644*
- 170            India 1950—*for 17,407 read 17,047*
- 191            Australia 1946—*for (b) 7 read (b) 131*  
              ,,     1947—*for 41 read (b) 820*
- 219            United States—Delete (b) against Motor  
              spirit
- 335            Canada—Tellurium 1951—  
              *for 68,500 read 8,913*

TS

LONDON: HER MAJESTY'S STATIONERY OFFICE: 1953



LONDON : HER MAJESTY'S STATIONERY OFFICE  
1953

This publication continues under a slightly different title the well-known series of Statistical Summaries formerly published for the Imperial Institute under the title of "The Mineral Industry of the British Empire and Foreign Countries." It is now prepared by the Statistical Section of the Mineral Resources Division of Colonial Geological Surveys which was transferred from the Imperial Institute to the Colonial Office in April, 1949.

The format and arrangement of contents of the Summary have not been altered, and, as in the case of the previous post-war issues, the statistics cover a seven-year period.

All communications should be addressed to :—

Mineral Resources Division,  
Colonial Geological Surveys,  
Imperial Institute Building,  
London, S.W.7.

## CONTENTS

	PAGE		PAGE
<b>Explanatory Notes</b>	iv	<b>Manganese</b>	175
Abrasives	1	Mercury	181
Aluminium	11	Mica	186
Antimony	21	Molybdenum	190
Arsenic	26	Monazite	193
Asbestos	30	Nickel	195
Barium Minerals	37	Nitrogen Compounds	200
Bauxite ( <i>see</i> Aluminium).		Petroleum and Allied Products	211
Beryl	43	Phosphates	249
Bismuth	44	Platinum	258
Borates	47	Potash Minerals	264
Bromine	52	Pyrites ( <i>see also</i> Sulphur)	273
Cadmium	54	Quicksilver ( <i>see</i> Mercury).	
China Clay	56	Radium ( <i>see</i> Uranium Minerals).	
Chrome Ore and Chromium	59	Salt	277
Coal, Coke and By-Products	64	Selenium	335
Cobalt	90	Silver	285
Columbite	301	Strontium Minerals	291
Copper	93	Sulphur ( <i>see also</i> Pyrites)	293
Diamonds	105	Talc	298
Diatomaceous Earth	111	Tantalite	301
Felspar	114	Tellurium	335
Ferro-alloys	141	Tin	303
Fluorspar	116	Titanium Minerals	310
Fuller's Earth	118	Tungsten	313
Gold	119	Uranium Minerals	319
Graphite	126	Vanadium	321
Gypsum	130	Vermiculite	336
Iron and Steel	135	Zinc	323
Lead	158	Zirconium Minerals	333
Lithium Minerals	335	List of Statistical Publications	337
Magnesite	169		

## EXPLANATORY NOTES

(1) Although the statistics in this volume attempt to cover the world, it has not been possible to give complete information for some countries, especially those of eastern Europe, but in order that world totals may be arrived at, estimates for such countries have been included wherever possible.

(2) In the sections on copper, lead and zinc, tables are given showing production of both ore and metal. The ore tables give the estimated metal content of ore produced. In some cases this figure has been obtained by the use of an average assay value, in others it represents the amount of metal actually recoverable. The ore is not necessarily smelted in the country of origin. It follows, therefore, that in the metal table, the metal production for a particular country may be derived from both domestic and imported ores. Secondary metal is excluded as far as possible, but where important is shown as a footnote to the producing country.

(3) Except where otherwise stated the trade figures are intended to represent imports retained, *i.e.*, total imports less re-exports, and exports of domestic produce. In some cases, however, a certain amount of "nationalised" goods is included with domestic exports, namely goods originally imported, but which, if dutiable, have been charged with duty and subsequently re-exported. Where re-exports are not available, an indication to this effect is made by a footnote "total imports." Goods imported for "improvement" and re-exports after "improvement" are also generally included.

(4) Figures of imports and exports for certain countries are not shown. This does not necessarily mean that there is no trade in the commodity but that the item is not recorded separately in the trade returns of the country concerned. In some cases figures have been arrived at by other means, as indicated by footnotes.

(5) Fuel for bunkering, which constitutes an important part of the trade of some countries, *e.g.*, Aden, has been shown separately although in most countries where there is bunker trade the coal or oil is not produced locally. In these cases the figures given in the import tables are total imports less re-exports (not including fuel shipped in bunkers). Footnotes indicate that these imports include fuel intended for bunkering purposes and that the amount of foreign fuel shipped for this purpose can be obtained from the export tables. Thus, in order to ascertain the amount of imports retained the quantity of fuel of foreign origin exported for bunkering should be deducted from the figures shown in the import tables.

(6) Trade statistics for Malaya relate to the Colony of Singapore and the Federation of Malaya. Trade between the two colonies is not included. Production statistics relate to the Federation of Malaya.

(7) Production statistics for Swaziland and Bechuanaland are recorded separately but the foreign trade is dealt with for Customs purposes as part of the Union of South Africa.

(8) The Irish Republic is no longer included under British Countries, but for convenience is put separately between British and Foreign Countries.

(9) German statistics from 1949 onwards relate to the Federal Republic unless otherwise stated.

(10) The factors used for converting volumes of liquids into long tons are approximate only. They are shown as footnotes to the tables relating to Coal by-products and Petroleum and Allied Products.

(11) The units of quantity adopted are the cwt. of 112 lb. (avdp.); ton of 2,240 lb. (avdp.); imperial gallon and metric carat. For precious metals the troy ounce of 480 grains is used. The symbol "—" means Nil or less than half the unit shown.

# ABRASIVES\*

## PRODUCTION OF NATURAL ABRASIVES (Long tons)

Producing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Kenya—						2	—
Corundum .. .	—	—	—	—	—		
Nyasaland—							
Corundum .. .	323	379	—	—	88	184	106
Southern Rhodesia—							
Corundum .. .	—	12	—	112	—	—	—
South West Africa—							
Corundum .. .	—	—	—	—	—	10	—
Union of South Africa—							
Corundum .. .	4,310	1,828	2,278	2,497	2,425	3,151	4,491
Canada—							
Corundum (Shipments) .. .	1,176	662	—	—	—	—	(a)
Grindstones .. .	201	263	299	196	174	89	(a)
Garnet .. .	—	2	1	2	—	—	(a)
India—							
Corundum .. .	403	95	179	280	194	299	548
Garnet sand .. .	12	—	8	—	10	(a)	(a)
Malaya—							
Corundum .. .	—	—	—	—	—	—	25
Australia—							
Emery .. .	—	—	—	—	—	—	—
New Zealand—							
Pumice .. .	2,183	3,409	3,389	6,863	13,124	9,716	8,774
<b>FOREIGN COUNTRIES</b>							
Belgium—							
Grindstones .. .	(a)	142	41	(a)	32	36	63
France—							
Pumice .. .	4,921	6,889	11,220	16,800	14,800	17,300	(a)
Tripoli .. .	(a)	(a)	(a)	226	86	(a)	(a)
Millstones .. .	2,256	7,510	17,400	16,730	12,530	3,196	(a)
Sharpening stones .. .	2,533	1,673	690	344	50	394	(a)
Greece—							
Emery .. .	550	6,000	9,094	9,025	9,783	5,000	(a)
Pumice .. .	—	2,500	1,737	(a)	(a)	(a)	(a)
Italy—							
Pumice .. .	2,672	7,382	28,820	31,003	75,663	(a)	(a)
Millstones .. .	—	197	295	344	295	(a)	(a)
Sharpening stones .. .	632	541	1,413	1,912	1,845	(a)	(a)
Whetstones .. .	271	1,108	959	305	228	(a)	(a)
Norway (exports)—							
Millstones, grindstones, etc. .. .	430	983	1,460	2,416	2,371	(a)	(a)
Portugal—							
Tripoli .. .	978	596	1,576	3,506	1,216	1,224	1,034
Spain—							
Pumice .. .	(a)	(a)	(a)	209	968	(a)	(a)
Tripoli .. .	3,931	14,065	9,482	6,671	7,161	3,850	7,689
Garnet .. .	101	229	142	188	177	(a)	(a)
Sweden—							
Millstones, etc. .. .	62	—	—	—	—	(a)	(a)
Grindstones and whetstones .. .	2,059	2,714	1,099	1,512	964	(a)	(a)
Egypt—							
Pumice .. .	935	1,220	2,490	787	443	354	(a)
Garnet .. .	—	11	—	143	85	159	1

\* See also Aluminium, Diamonds and Diatomaceous earth.

(a) Information not available.

PRODUCTION OF NATURAL ABRASIVES (Cont.)

Producing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
French Equatorial Africa—							
Corundum .. ..	140	45	2	—	—	—	—
Madagascar—							
Corundum .. ..	49	21	1	4	7	—	—
Garnet .. ..	(a)	(a)	89	131	411	510	727
Mozambique—							
Corundum .. ..	150	—	—	6	—	16	—
United States (Sales)—							
Emery .. .. ..	7,014	5,525	5,177	4,826	4,383	5,312	10,387
Garnet .. .. ..	5,630	6,913	7,788	7,178	5,873	8,307	12,545
Pumice .. .. ..	140,188	285,610	395,136	542,630	639,948	642,282	669,591
Tripoli .. .. ..	16,292	25,853	30,873	23,969	22,790	39,036	33,461
Grindstones .. .. ..	8,958	10,362	9,482	7,072	3,991	3,960	4,954
Pulpetstones .. .. ..	(a)	64	68	29	25	29	20
Argentina—							
Pumice .. .. ..	(a)						
Turkey—							
Emery .. .. ..	2,134	8,318	11,903	7,737	8,771	1,399	7,247

Abrasives are also produced in other countries, statistics for which are not available.

The following crude artificial abrasives were produced in Canada (long tons) :—

	1945	1946	1947	1948	1949	1950	1951
Silicon carbide ..	40,553	44,601	46,164	47,229	41,427	39,965	62,752
Fused alumina ..	118,921	106,449	130,744	129,320	101,071	113,324	174,441

The United States Bureau of Mines reports the following artificial abrasives sold, shipped, or used, from plants in United States and Canada (long tons) :—

	1945	1946	1947	1948	1949	1950	1951
Silicon carbide ..	48,013	57,008	56,897	56,279	60,303	58,039	89,730
Aluminium oxide ..	131,264	117,932	142,877	138,368	112,327	125,314	193,151
Metallic abrasives ..	131,046	99,564	137,671	131,445	93,552	128,869	169,492

(U.S. plants only).

The figures given above include material used for refractories and other non-abrasive purposes.

(a) Information not available.

**EXPORTS OF ABRASIVES\***  
*(Domestic Produce)*  
*(Long tons)*

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Abrasives, natural ..	84	251	484	1,716	1,923	1,923	2,674
do. artificial ..	1	69	256	1,091	1,702	1,232	1,184
Grinding wheels of—							
Artificial corundum, etc.	479	606	557	742	970	944	1,515
Carborundum ..	250	571	536	693	1,375	2,034	2,208
Emery ..	31	101	457	275	341	279	415
Other hard abrasives ..	537	832	1,203	717	901	1,051	1,618
Grindstones ..	1,085	2,848	} (b) 3,401	(b) 4,001	(b) 3,000	(b) 2,196	(b) 2,049
Whetstones ..	52	674					
Other manufactured abrasives—							
Natural ..	1,093	2,870	} 2,770	742	411	667	1,136
Artificial ..	536	1,032					
Nyasaland—							
Corundum ..	355	412	17	—	79	184	99
Union of South Africa—							
Corundum ..	4,144	1,737	2,212	3,006	1,918	2,917	4,649
Canada—							
Natural abrasives, including diatomaceous earth	11	5	54	15	7	6	19
Artificial abrasives ..	158,966	155,719	175,715	178,780	140,997	167,006	241,259
Artificial abrasive wheels, etc. ..	(£34,586)	(£20,210)	(£73,753)	(£42,076)	(£25,599)	(£20,850)	(£20,770)
Grindstones ..	(£4,386)	(£8,303)	(£6,175)	(£5,365)	(£5,649)	(£18,095)	(£24,450)
Cyprus—							
Pumice ..	102	—	—	4	(a)	(a)	(a)
India—							
Garnet sand ..	(a)	(a)	4	(a)	(a)	(a)	(a)
Palestine—							
Millstones ..	(£5,149)	(£4,568)	(a)	(a)	(a)	(a)	(a)
New Zealand—							
Pumice ..	2,185	2,545	2,410	1,735	1,419	1,329	1,238
<b>FOREIGN COUNTRIES</b>							
Austria—							
Emery, etc. ..	(a)	(a)	—	105	460	1,012	881
Grindstones, natural ..	(a)	(a)	20	(a)	—	28	2
do. artificial ..	(a)	(a)	(a)		359	389	391
Millstones ..	(a)	(a)	73	362	568	413	427
Belgium-Luxemburg E.U.—							
Corundum ..	(a)	(a)	(a)	40	2	3	11
Millstones and grindstones, natural ..	(a)	(a)	(a)	(a)	485	478	396
Millstones and grindstones, artificial ..	(a)	(a)	(a)		138	175	124
Other abrasives ..	(a)	(a)	(a)		(a)	(a)	155
Bulgaria—							
Millstones, grindstones, etc. ..	235	29	(a)	(a)	(a)	(a)	(a)

\* See also Aluminium, Diamonds and Diatomaceous earth.

(a) Information not available.

(b) Including all abrasive shapes cut from natural rock.

EXPORTS OF ABRASIVES (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Czechoslovakia—							
Emery and pumice ..		1	2	(c)	1	(a)	(a)
Carborundum ..		2	1	(c)	528	(a)	(a)
Grindstones, etc., natural ..		15	12	(c)	13	(a)	(a)
do. carborundum ..		227	890	(c)	531	(a)	(a)
do. emery, etc. ..		22	28	(c)	660	(a)	(a)
Millstones ..		1	48	(c)	10	(a)	(a)
Other abrasives ..		—	1	(c)	—	(a)	(a)
Denmark—							
Emery ..	1	5	2	9	17	16	20
Millstones and grindstones, natural ..	1	3	10	72	34	253	617
do. artificial ..	1	142	315	212	166	—	—
Finland—							
Grindstones, etc. ..	25	113	242	433	629	316	352
France—							
Corundum and emery ..	12	37	228	146	222	254	271
Pumice ..	4	162	352	388	56	640	272
Tripoli ..	—	52	17	(a)	(a)	(a)	(a)
Millstones and grindstones ..	374	1,656	2,239	2,207	1,274	697	3,423
Whetstones ..	—	108	164	976	1,753	1,562	105
Artificial abrasives ..	1,010	4,348	1,737	(b) 98	(b) 26	(b) 47	(b) 33
Germany (Federal)—							
Emery ..					12	42	(d) 170
Carborundum, etc. ..					3	1,692	3,871
Other abrasives ..					1,400	1,065	3,873
Millstones, grindstones, etc. ..					447	1,162	1,464
Greece—							
Emery ..	—	4,084	3,353	5,274	5,016	8,021	9,917
Pumice ..		—	2	1,980	3,881	22,474	9,999
Italy—							
Pumice ..	(a)	(a)	(a)	17,868	16,328	20,880	26,781
Emery and corundum ..	(a)	(a)	(a)	5	7	106	8
Tripoli ..	(a)	(a)	(a)	5	113	597	100
Artificial abrasives ..	(a)	(a)	(a)	—	—	—	—
Netherlands—							
Emery ..	(a)	1,096	1,710	1,795	1,876	2,961	3,030
Norway—							
Emery, etc. ..	9	12	2	5	94	195	(a)
Millstones, grindstones, etc. ..	430	983	1,460	2,416	2,371	(a)	(a)
Whetstones ..	24	37	28	7	9	21	225
Other artificial abrasives ..	42	154	163	224	289	301	—
Sweden—							
Emery ..	17	—	2	—	1	15	4
Other natural abrasives ..	40	7	3	15	5	37	5
Carborundum, etc. ..	39	158	393	67	124	343	440
Millstones, grindstones, etc. ..	677	1,009	1,304	1,174	549	639	840
Switzerland—							
Carborundum, emery, etc., crude ..	39	—	35	52	28	52	24
do. do. ground ..	296	768	1,244	1,956	1,912	1,541	2,176
Grindstones ..	—	16	34	179	12	4	4
Millstones ..	—	2	7	—	25	4	16

(a) Information not available.

(b) Carborundum only.

(c) January to October only.

(d) January to September only.

EXPORTS OF ABRASIVES (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Madagascar—							
Corundum .. ..	35 (a)	10 40	12 40	11 125	(a) (a)	— 559	(a) (a)
Mozambique—							
Corundum .. ..	265	55	—	—	—	—	32
Costa Rica—							
Millstones .. ..	52	75	40	105	(a)	(a)	(a)
Mexico—							
Pumice .. .. ..	—	18	13	11	(a)	(a)	(a)
Emery, etc. .. ..	—	3	(a)	(a)	—	—	(a)
Millstones, whetstones, etc. .. .. ..	8	8	3	1	—	5	(a)
United States—							
Emery powder .. ..	146	236	244	124	515	508	686
Wheels of emery and corundum .. ..	111	193	201	57	—	—	—
Grindstones .. ..	2,098	2,739	2,050	1,289	628	459	600
Other natural abrasives ..	24,352	23,608	31,245	26,901	34,154	36,466	42,019
Aluminium oxide, fused					17,822	14,250	15,185
Silicon carbide .. ..					5,638	4,815	6,593
Unfused alumina .. ..					93	113	79
Other crude artificial abrasives .. ..	27,974	21,130	25,375	21,669	733	43	101
Artificial abrasive wheels ..	7,684	4,152	4,550	3,017	2,375	1,709	2,776
Artificial hones, whet- stones, etc. .. ..	463	806	749	435	839	902	1,303
Turkey—							
Emery and carborundum	4,999	10,179	11,218	9,575	8,445	8,205	10,717

(a) Information not available.

**IMPORTS OF ABRASIVES \***

(Less Re-exports)

(Long tons)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Emery .. .. ..	4,311	5,364	6,781	6,348	5,453	6,227	6,926
Garnet concentrates—							
Unground .. ..	(a)	550	559	511	525	674	1,051
Ground .. ..	(a)	—	113	230	197	465	252
Other natural abrasives ..	509	2,296	2,262	2,679	5,449	6,439	6,707
Aluminium oxide ..	3,500	11,616	18,794	18,050	20,418	23,077	30,226
Carborundum, unground ..	123	302	400	174	142	98	
do. ground .. ..	4,814	6,400	9,191	5,441	9,112	9,524	10,753
Grinding wheels of—							
Artificial corundum, etc. .. ..	29	2	27	54	24		
Carborundum .. ..	1	1	—	12	16	14	2
Emery .. ..	8	1	—	—	—		
Other hard abrasives ..	34	5	48	112	55		
Grindstones and whetstones .. .. ..	2	6	5	7	5	13	—
Other manufactured abrasives—							
Natural .. .. ..	1,062	1,738		6,286	3,028	1,625	57
Artificial .. .. ..	1,523	3,110	6,859				
Anglo-Egyptian Sudan—							
Grindstones .. .. ..	13	24	18	38	68	22	(a)
Kenya and Uganda—							
Grindstones, etc. .. ..	1	14	—	28	33	30	28
Mauritius—							
Grindstones, etc. .. ..	(£1,576)	(a)	(£1,123)	(a)	(£1,537)	(£1,115)	14
Tanganyika—							
Grindstones, wheels, etc. .. ..	107	6	9	13	20	14	13
Union of South Africa—							
Emery .. .. ..	38	39	35	36	20	20	(a)
Pumice .. .. ..	71	98	68	54	94	103	(a)
Other abrasives (£S.A.) .. .. ..	(£12,205)	(£10,038)	(£19,642)	(£21,049)	(£15,928)	(£26,715)	(a)
Emery and other wheels (£ S.A.) .. .. ..	(£127,601)	(£76,837)	(£138,867)	(£125,635)	(£147,742)	(£221,078)	(a)
Grindstones, millstones, etc. (£ S.A.) .. .. ..	(£9,496)	(£9,512)	(£8,079)	(£4,989)	(£2,385)	(d) (£99)	(a)
Canada (c)—							
Pumice, etc. .. .. ..	(£10,122)	(£16,888)	(£15,400)	(£26,969)	(£28,185)	(£42,067)	(£43,714)
Emery, ground .. .. ..	(£18,164)	(£26,894)	(£30,685)	(£35,367)	(£30,940)	(£35,161)	(£54,276)
Artificial abrasives, ground .. .. ..	(£363,061)	(£373,150)	(£396,638)	(£367,103)	(£396,744)	(£623,363)	(£686,134)
Buhrstones .. .. ..	(£175)	(£26)	(£400)	(£86)	(£460)	(£477)	(£424)
Emery and artificial abrasives manufactures .. .. ..	(£18,164)	(£24,126)	(£25,619)	(£25,148)	(£29,144)	(£41,104)	(£52,812)
Grindstones and wheels .. .. ..	(£107,243)	(£128,480)	(£159,307)	(£177,795)	(£213,555)	(£357,155)	(£554,959)
Newfoundland (b)—							
Grindstones .. .. ..	(£10,898)	(£16,992)	(£12,514)	(£3,393)	(b)	(b)	(b)
Whetstones, etc. .. .. ..	(£913)	(£1,165)	(£934)	(£344)	(b)	(b)	(b)
British West Indies—							
Jamaica—							
Natural abrasives .. .. ..	(a)	(a)	(£33)	(£10)	(£194)	(£345)	(£131)
Grindstones .. .. ..	(£650)	(£445)	(£1,145)	(£1,129)	(£1,081)	(£850)	(£941)

\* See also Aluminium, Diamonds and Diatomaceous earth.

(a) Information not available.

(b) Years ended March 31 of the year following that stated. Included with Canada from April 1, 1949.

(c) Including Newfoundland from April 1, 1949.

(d) Excess of re-exports.

**IMPORTS OF ABRASIVES (Cont.)**

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES (Cont.)</b>							
British West Indies (Cont.)							
Trinidad and Tobago—							
Grindstones and wheels	16	(c) 207	13	395	16	22	25
Ceylon—							
Grindstones .. .	(£343)	(£1,675)	(£1,328)	(£1,785)	(£1,814)	(£7,896)	(£6,774)
Cyprus—							
Grindstones and mill-stones .. .	(£338)	(£9,236)	(£4,342)	(£4,208)	(£3,809)	(£3,041)	(£2,176)
Palestine—							
Millstones .. .	(£743)	(£7,353)	(a)	(a)	(a)	(a)	(a)
Australia (d)—							
Emery, etc. .. .	149	256	372	379	349	627	{ (e) 455
Corundum .. .							26
Pumice (£ Aust.) .. .	(£11,803)	(£12,615)	(£13,368)	(£8,561)	(£12,946)	(£8,129)	(e) (£18,026)
Grindstones, etc. .. .	66	37	56	90	86	91	(a)
Artificial abrasives .. .	820	703	2,030	1,499	1,459	(e) 1,141	(e) 2,500
New Zealand—							
Pumice .. .			2	1	1	8	
Grindstones, etc. (£N.Z.)	(£13,492)	(£20,921)	(£26,423)	(a)	(£14,740)	(£15,915)	(£21,555)
Irish Republic—							
Grindstones, oilstones, etc. .. .	151	144	157	140	(a)	(a)	(a)
<b>FOREIGN COUNTRIES</b>							
Austria—							
Emery, etc. .. .			434	627	1,121	1,269	1,958
Pumice, etc. .. .			15	53	165	202	764
Grindstones, natural .. .	(a) .	(a)	240	292	116	170	169
do. artificial .. .			101	430	262	129	137
Millstones .. .			41	58	53	91	125
Belgium-Luxemburg E.U.—							
Corundum, artificial .. .	(a)	(a)	(a)	371	746	861	1,129
Millstones and grindstones, natural .. .	(a)	(a)	(a)				
do. artificial .. .	(a)	(a)	(a)	1,731	1,146	1,080	1,464
Silicon carbide .. .	(a)	(a)	(a)	646	1,040	617	1,150
Other abrasives .. .	(a)	(a)	(a)	1,378	1,477	4,460	7,892
Bulgaria—							
Emery, etc. .. .	3	2	(a)	(a)	(a)	(a)	(a)
Millstones, grindstones, etc. .. .	10	—	(a)	(a)	(a)	(a)	(a)
Czechoslovakia—							
Emery .. .		10	—	(b) 10	(a)	(a)	(a)
Pumice .. .	—	20	(b) —	(a)	(a)	(a)	(a)
Carborundum .. .	335	1,162	(b) 142	(a)	(a)	(a)	(a)
Grindstones, etc., natural .. .	25	202	(b) 296	(a)	(a)	(a)	(a)
do. carborundum .. .	—	1	(b) 22	(a)	(a)	(a)	(a)
do. emery, etc. .. .		24	(b) 55	(a)	(a)	(a)	(a)
Millstones .. .	85	140	(b) 163	(a)	(a)	(a)	(a)
Other abrasives .. .	1	2	(b) 2	(a)	(a)	(a)	(a)
Denmark—							
Emery, etc. .. .	7	332	379	419	322	448	610
Pumice .. .	—	258	339	358	667	242	581
Carborundum .. .	81	212	162	238	301	227	310
Millstones and grindstones, natural .. .	261	654	141	191	240		
do. artificial .. .	124	440	433	361	344	746	859

(a) Information not available.

(b) January to October only.

(c) Excess of re-exports.

(d) Years ended June 30 of that stated.

(e) Calendar year.

## IMPORTS OF ABRASIVES (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Finland (total imports)—							
Emery, pumice, etc. ..	59	347	579	482	446	635	706
Carborundum, etc. ..	45	60	139	92	100	78	154
Millstones, etc. ..	—	1	1	13	—	15	20
Whetstones, grindstones, etc. .. .. ..	191	634	1,015	2,075	1,787	1,050	1,676
France—							
Corundum and emery ..	576	2,072	3,232	2,761	854	1,953	2,748
Pumice .. .. ..	—	2,046	4,978	2,322	1,414	5,928	8,720
Tripoli .. .. ..	(a)	(a)	550	(a)	(a)	(a)	(a)
Millstones and grindstones	42	75	358	184	176	151	846
Whetstones .. .. ..	—	38	104	305	329	556	172
Carborundum .. .. ..	484	1,817	2,185	946	2,105	2,016	3,002
Other artificial abrasives	1,211	1,502	2,233	(a)	(a)	(a)	(a)
Germany (Federal)—							
Emery .. .. ..	(a)	(a)	(a)	{	80	722	2,025
Pumice, etc. .. .. ..					(a)	4,256	6,740
Carborundum, etc. .. .. ..					196	590	686
Other abrasives .. .. ..					—	125	80
Millstones, grindstones, etc. .. .. ..					131	234	62
Iceland—							
Millstones, etc. .. .. ..	37	16	(a)	(a)	18	19	38
Italy—							
Emery and corundum ..	(a)	(a)	298	1,012	1,110	1,740	910
Carborundum .. .. ..	(a)	(a)	(a)	(a)	(a)	324	1,194
Artificial abrasives .. .. ..	(a)	(a)	891	1,474	2,042	(b)	(a)
Netherlands—							
Emery .. .. ..	(a)	2,273	2,602	3,686	1,821	4,261	4,141
Other natural abrasives .. .. ..	(a)	(a)	(a)	614	989	888	998
Millstones and grindstones							
Natural .. .. ..	(a)	—	—	602	328	337	432
Artificial .. .. ..	(a)	—	—	724	769	767	1,091
Other artificial abrasives	(a)	—	—	251	436	589	(a)
Norway—							
Emery, etc. .. .. ..	248	399	385	599	782	662	(a)
Millstones, grindstones, etc. .. .. ..	518	912	1,685	1,254	754	(a)	(a)
Whetstones .. .. ..	9	19	10	15	—	12	(a)
Other artificial abrasives	2	35	22	38	45	58	(a)
Portugal—							
Emery, etc. .. .. ..	182	177	347	168	223	221	339
Pumice .. .. ..	—	46	—	10	40	43	
Millstones .. .. ..	40	114	186	182	89	136	
Spain—							
Emery powder .. .. ..	162	72	53	31	161	186	15
Carborundum .. .. ..	290	49	123	66	96	135	109
Sweden—							
Emery .. .. ..	390	769	403	713	520	730	5,029
Pumice .. .. ..	56	651	97	209	532	178	
Other natural abrasives .. .. ..	581	2,433	2,556	2,862	2,426	2,556	
Carborundum, etc. .. .. ..	73	713	1,081	1,165	1,565	1,784	
Grindstones, etc. .. .. ..	329	1,138	1,385	1,329	1,065	1,482	2,021
Millstones .. .. ..	345	619	904	1,267	923	782	(a)
Switzerland—							
Emery, crude .. .. ..	334	989	904	755	690	458	816
Carborundum, emery, etc., ground .. .. ..	430	782	1,201	1,478	777	915	1,339
Millstones .. .. ..	12	10	31	47	70	54	47
Grindstones .. .. ..	66	432	593	450	326	248	285
Whetstones .. .. ..	4	1	36	25	25	16	22

(a) Information not available.

(b) July to December only.

(c) January to June only.

## IMPORTS OF ABRASIVES (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Yugoslavia—							
Corundum, etc. ..	(a)	(a)	(a)	(a)	(a)	668	314
Grindstones, artificial ..	(a)	(a)	(a)	(a)	(a)	291	163
Algeria—							
Emery, corundum, etc.	3	5	50	59	8	67	93
Pumice .. ..	3	157	189	138	210	454	68
Millstones and grindstones	236	363	386	424	469	378	387
Egypt—							
Emery, pumice, etc. ..	17	(b) 844	(b) 266	(b) 1,978	(b) 5,746	5,912	(a)
Millstones .. ..	—	—	(b) 67	(b) 104	(b) 64	(a)	(a)
Grindstones .. ..	214	135	(b) 150	(b) 235	(b) 174	(a)	(a)
Whetstones .. ..	8	6	(b) 13	(b) 44	(b) 11	(a)	(a)
Madagascar—							
Millstones, grindstones, and whetstones ..	(a)	7	11	27	(a)	(a)	(a)
Morocco (French)—							
Millstones and grindstones	96	284	139	(a)	(a)	(a)	(a)
Tunis—							
Emery and pumice .. ..	33	169	55	49	(a)	(a)	(a)
Millstones and grindstones .. ..	9	19	13	50	(a)	(a)	(a)
Cuba (total imports)—							
Grindstones .. ..	964	(a)	(a)	615	326	(a)	(a)
Mexico—							
Emery and carborundum	1,254	1,038	1,041	1,418	(a)	(a)	(a)
Pumice .. ..	5	6	5	47	(a)	(a)	(a)
Millstones and grindstones .. ..	359	498	506	286	(a)	(a)	(a)
United States—							
Corundum, crude ..	5,575	3,756	2,144	3,225	1,797	3,163	4,369
Emery, crude .. ..	—	2,287	2,772	984	1,350	1,541	2,509
Corundum and emery, ground .. ..	33	52	51	56	2	9	9
Pumice, crude .. ..	—	{ 4,916	6,973	7,567	7,896	17,203	14,064
do, manufactured .. ..	—	878	710	696	675	877	670
Tripoli, etc. .. ..	33	83	74	(a)	(a)	(a)	10
Grindstones .. ..	223	207	224	274	128	265	190
Buhrstones, hones, etc.. ..	31	24	42	39	23	20	26
Crude artificial abrasives	149,990	138,578	150,817	155,930	115,604	141,204	208,406
Argentina—							
Emery .. .. ..	872	1,805	689	344	62	231	(a)
Pumice .. .. ..	—	8	(a)	(a)	(a)	(a)	(a)
Grindstones .. .. ..	214	239	(a)	(a)	(a)	(a)	(a)
Oil stones .. .. ..	—	16	(a)	(a)	(a)	(a)	(a)
Brazil—							
Millstones, grindstones, etc. .. ..	659	721	708	299	480	(a)	(a)
Other abrasives .. ..	246	395	297	157	166	(a)	(a)
Chile—							
Emery .. .. ..	57	25	{ (a)	(a)	(a)	(a)	(a)
Pumice .. .. ..	3	—	29	(a)	(a)	(a)	(a)
Tripoli .. .. ..	4	—	56	(a)	(a)	(a)	(a)
Other abrasives .. ..	98	—	—	—	—	—	—
Colombia—							
Emery and pumice .. ..	(a)	82	(a)	(a)	66	51	(a)
Millstones and grindstones .. ..	(a)	20	(a)	(a)	(a)	(a)	(a)
Peru—							
Emery and pumice .. ..	30	34	(a)	(a)	(a)	10	(a)
Grindstones .. ..	70	52	(a)	(a)	(a)	150	(a)
Venezuela—							
Emery and pumice .. ..	19	23	32	35	(a)	(a)	(a)

(a) Information not available.

(b) Total imports.

## IMPORTS OF ABRASIVES (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Iraq—							
Grindstones, whetstones, etc. . . . .	56	(a)	(a)	(a)	(a)	(a)	(a)
Syria and Lebanon—							
Emery . . . . .	50	101	(a)	(a)	(a)	(a)	(a)
Millstones and grind- stones . . . . .	150	186	(a)	(a)	(a)	(a)	(a)
Turkey—							
Emery and carborundum, crude . . . . .	1	9	9	9	9	14	—
Millstones and grind- stones . . . . .	204	170	214	483	345	344	1,025
Whetstones, etc. . . . .	—	—	19	6	4	12	42
Grinding powder . . . . .	10	45	33	45	68	72	17

(a) Information not available.

**ALUMINIUM**  
**(Including Bauxite and Cryolite)**

PRODUCTION OF BAUXITE

(Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Northern Ireland .. ..	36,397	—	—	—	—	—	—
Gold Coast (b) .. ..	146,330	114,246	95,898	130,953	145,013	114,948	129,328
British Guiana (c) .. ..	669,164	1,115,966	1,358,929	1,944,966	1,796,409	1,642,036	2,087,079
India .. ..	13,893	16,405	18,537	20,663	42,541	64,399	67,047
Australia .. ..	3,437	3,729	4,878	5,645	5,292	3,467	5,084
<b>TOTAL .. ..</b>	<b>969,000</b>	<b>1,244,000</b>	<b>1,472,000</b>	<b>2,102,000</b>	<b>1,989,000</b>	<b>1,825,000</b>	<b>2,288,500</b>
<b>FOREIGN COUNTRIES</b>							
Austria .. ..	8,618	—	—	5,240	6,452	2,960	8,877
France .. ..	303,261	442,027	669,381	790,844	753,756	791,300	1,105,400
Germany (Federal) .. ..	(a)	(a)	(a)	(a)	2,400	4,100	(a)
Greece .. ..	—	1,294	22,066	43,539	44,813	76,225	161,072
Hungary .. ..	34,843	99,169	279,100	(e) 340,000	(e) 340,000	(d) 350,000	(d) 400,000
Italy .. ..	25,000	64,413	165,070	150,728	103,196	151,010	171,522
Roumania .. ..	(a)						
Spain .. ..	5,020	4,820	5,370	6,698	11,773	12,098	10,346
U.S.S.R. (estimated) .. ..	(e) 400,000	450,000	450,000	500,000	500,000	500,000	500,000
Yugoslavia .. ..	(a)	54,300	86,200	131,400	362,000	197,719	446,197
French West Africa .. ..	—	—	—	—	—	9,965	—
Mozambique .. ..	4,305	1,596	2,913	1,340	2,247	4,268	4,187
United States (f) .. ..	981,009	1,104,054	1,202,055	1,457,148	1,148,792	1,334,527	1,864,076
Brazil .. ..	19,238	4,388	6,629	13,822	15,957	18,277	(a)
Dutch Guiana .. ..	753,503	1,004,080	1,711,670	2,165,481	2,095,205	2,013,058	2,672,312
Indonesia .. ..	(g)	100,000	24,171	430,907	667,428	522,754	632,172
<b>TOTAL (d) .. ..</b>	<b>2,950,000</b>	<b>3,400,000</b>	<b>4,700,000</b>	<b>6,101,000</b>	<b>6,200,000</b>	<b>6,300,000</b>	<b>7,980,000</b>
<b>WORLD'S TOTAL (d)</b>	<b>3,920,000</b>	<b>4,650,000</b>	<b>6,170,000</b>	<b>8,110,000</b>	<b>8,190,000</b>	<b>8,130,000</b>	<b>10,270,000</b>

(a) Information not available.

(b) Exports.

(c) The shipments from mines of dried and calcined ore were as follows (long tons):—

	1945	1946	1947	1948	1949	1950	1951
Metallurgical ..	690,675	1,047,220	1,210,016	1,764,387	1,598,350	1,432,369	1,829,828
Chemical ..	33,176	37,597	24,572	31,754	38,906	68,385	71,151
Refractory ..	1,333	2,635	2,793	—	17,748	17,362	31,068
Abrasive ..	12,229	33,893	51,632	69,152	101,189	64,513	70,687

Exports of calcined ore are shown in footnote (c) on page 13.

(d) Estimated.

(e) U.S. Bureau of Mines estimate.

(f) Dried bauxite equivalent.

(g) Total production during Japanese occupation amounted to 1,363,000 tons.

PRODUCTION (EXPORTS) OF CRYOLITE IN GREENLAND

Year	Long tons					
1945	..	..	..	..	18,403	
1946	..	..	..	..	30,660	
1947	..	..	..	..	39,910	
1948	..	..	..	..	26,062	
1949	..	..	..	..	44,623	
1950	..	..	..	..	44,046	
1951	..	..	..	..	65,196	

PRODUCTION OF ALUMINIUM

(Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom (b)	31,900	31,500	28,940	30,028	30,345	29,468	27,725
Canada ..	192,600	172,679	267,019	327,749	329,880	354,359	397,090
India ..	2,254	3,244	3,223	3,368	3,492	3,596	3,848
<b>TOTAL</b> ..	<b>226,800</b>	<b>207,400</b>	<b>299,182</b>	<b>361,145</b>	<b>363,717</b>	<b>385,525</b>	<b>428,663</b>
<b>FOREIGN COUNTRIES</b>							
Austria ..	5,131	1,016	4,476	12,814	14,563	17,706	25,965
France ..	36,637	47,195	52,557	62,695	53,289	59,761	89,665
Germany (c)	—	—	—	7,421	28,593	27,398	72,963
Hungary (d)	2,314	1,939	5,121	9,300	14,000	(a)	(f) 30,000
Italy ..	4,278	10,461	24,668	32,560	25,242	36,485	48,964
Norway ..	4,535	16,428	21,382	30,551	35,113	46,313	51,283
Spain ..	531	991	984	515	1,193	2,301	3,779
Sweden ..	3,185	3,510	2,846	3,227	3,867	3,974	6,643
Switzerland ..	5,000	13,000	18,167	18,660	20,668	18,900	23,600
U.S.S.R. ..	(d) 84,947	(f) 80,000	(f) 120,000	(f) 140,000	(f) 160,000	(f) 190,000	(f) 210,000
Yugoslavia ..	(a)	550	1,300	1,900	2,400	1,901	2,783
United States (e)	442,018	365,741	510,491	556,657	538,805	641,627	747,215
Formosa ..	583	—	15	2,469	1,291	1,793	2,557
Japan ..	16,192	3,142	2,657	6,855	20,883	24,377	36,329
Korea ..	1,223	(a)	(a)	(a)	(a)	(a)	(a)
Manchuria ..	3,200	(a)	(a)	(a)	(a)	(a)	(a)
<b>TOTAL</b> ..	<b>640,000</b>	<b>550,000</b>	<b>770,000</b>	<b>880,000</b>	<b>920,000</b>	<b>1,080,000</b>	<b>1,350,000</b>
<b>WORLD'S TOTAL</b>	<b>860,000</b>	<b>760,000</b>	<b>1,070,000</b>	<b>1,240,000</b>	<b>1,284,000</b>	<b>1,466,000</b>	<b>1,779,000</b>

(a) Information not available.

(b) In addition secondary metal was recovered as follows :—

1945	..	..	..	..	81,000 long tons
1946	..	..	..	..	74,900 " "
1947	..	..	..	..	97,600 " "
1948	..	..	..	..	80,165 " "
1949	..	..	..	..	75,228 " "
1950	..	..	..	..	86,372 " "
1951	..	..	..	..	87,029 " "

(c) Bizonal only. Federal Republic in 1951. In addition secondary metal was recovered as follows :—

1946	..	..	..	..	17,500 long tons
1947	..	..	..	..	18,531 " "
1948	..	..	..	..	34,318 " "
1949	..	..	..	..	35,656 " "
1950	..	..	..	..	48,721 " "
1951	..	..	..	..	47,966 " "

(d) U.S. Bureau of Mines except 1951 estimate for Hungary.

(e) In addition secondary metal was recovered as follows :—

1945	..	..	..	..	266,417 long tons
1946	..	..	..	..	248,279 " "
1947	..	..	..	..	307,890 " "
1948	..	..	..	..	256,051 " "
1949	..	..	..	..	161,395 " "
1950	..	..	..	..	217,559 " "
1951	..	..	..	..	261,257 " "

(f) Estimated.

**EXPORTS OF ALUMINIUM, ETC.**

(Domestic Produce)

(Long tons)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Alumina .. . . .	901	8,926	6,473	3,841	4,087	13,479	17,924
Ingots, etc., including alloyed.. . . .	3,292	5,231	6,016	6,543	5,689	5,429	2,053
Sheets, tubes and wire do. alloyed.. . . .	3,030	17,465	22,242	47,067	31,817	22,170	16,807
Foil and alloyed.. . . .	104	1,787	2,311	3,046	21,334	17,749	20,751
Scrap, including alloyed	258	8,286	507	10	2,941	3,605	3,848
Aluminium sulphates ..	20,415	34,298	29,648	38,695	37,568	38,350	33,025
Gold Coast—							
Bauxite .. . . .	146,330	114,246	95,898	130,953	145,013	114,948	129,328
Southern Rhodesia—							
Ingots, blocks and rods.. . . .	40	67	52	9	45	49	25
Union of South Africa—							
Aluminium sulphates ..	—	509	1,044	705	574	(a)	(a)
Canada—							
Blocks, bars, and ingots.. . . .	341,327	167,264	190,818	292,060	265,095	299,755	316,441
Sheets, rods, etc. .. . .	1,688	2,186	3,481	5,507	9,443	10,219	13,218
Scrap .. . . .	5,819	5,766	9,644	20,393	3,914	4,146	3,528
Wire .. . . .	(\$235,909)	(\$287,598)	(\$627,773)	(\$1,370,092)	(a)	(a)	(a)
Foil .. . . .	(a)	(a)	(a)	(a)	795	636	1,440
Jamaica—							
Bauxite .. . . .	(50 lbs.)	—	—	—	2	—	—
British Guiana—							
Bauxite (c) .. . .	738,544	1,120,015	1,290,367	1,873,166	1,757,650	1,583,417	2,002,744
India—							
Bauxite .. . . .	470	1,040	281	448	948	344	808
Malaya (including re-exports)—							
Bauxite .. . . .	(a)	—	—	—	—	15,891	20,660
Bars, sheets and strips .. . . .	(a)	4	57	253	266	187	413
Aluminium sulphates ..	(a)	911	1,334	1,706	1,386	2,164	3,137
Australia—							
Bauxite .. . . .	(a)	36	151	134	176	102	—
Pigs, ingots, etc. .. . .	—	242	157	194	6	—	—
Scrap .. . . .	—	—	1,536	4,360	3	102	—
Aluminium sulphates ..	234	385	281	134	74	106	53
<b>FOREIGN COUNTRIES</b>							
Austria—							
Bauxite .. . . .	(a)	(a)	(a)	(a)	(a)	—	2,963
Alumina .. . . .	—	1,362	903	149	253	391	—
Crude, including alloys.. . . .	(a)	3,097	14,839	9,389	13,400	6,968	—
Scrap .. . . .	—	—	1,159	1,212	648	853	—
Sheets, rods, wire, foil, etc. .. . .	—	35	—	7	49	3,152	—
Belgium-Luxemburg E.U.—							
Bauxite, etc. .. . .	(a)	(a)	(a)	—	—	—	—
Alumina and hydrates .. . .	(a)	(a)	(a)	4	59	—	—
Crude .. . . .	(a)	(a)	(a)	1,900	3,640	3,287	356
Scrap .. . . .	(a)	(a)	(a)	666	370	733	166
Sheets, wire, etc. .. . .	(a)	(a)	(a)	630	516	1,475	4,338
Aluminium sulphates ..	(a)	(a)	(a)	6,593	7,473	7,262	25,042
Czechoslovakia—							
Crude and scrap .. . . .	(a)	—	137	(b) 1,255	(a)	(a)	(a)
Bars, sheets, rods and wire	(a)	6	70	(b) 2	(a)	(a)	(a)
Denmark—							
Refined cryolite .. . .	96	8,490	12,503	18,639	18,697	23,965	28,064
Crude .. . . .	15	52	71	41	272	235	22
Scrap .. . . .	—	317	686	309	306	49	10
Sheets, wire and foil .. . .	—	3	1	1	37	232	383

(a) Information not available.  
(b) January to October only.

(c) Including the following amounts of calcined ore :—  
1945-12,229 ; 1946-33,203 ; 1947-51,72 ; 1948-  
69,152 ; 1949-75,261 ; 1950-81,275 ; 1951-97,053.

EXPORTS OF ALUMINIUM, ETC. (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
France—							
Bauxite .. .. ..	1,038	47,741	83,109	114,645	187,751	257,726	359,976
Alumina .. .. ..	9,551	30,765	67,267	71,821	56,407	67,320	70,034
Aluminium hydrates .. .. ..	1,077	3,217	6,987	3,271	5,950	5,405	8,336
Cryolite .. .. ..	—	(b) 34	(b) 44	—	10	—	—
Ingots .. .. ..	492	1,719	{ 1,277	1,204	8,693	16,549	8,788
Scrap .. .. ..				9	(a)	(a)	(a)
Sheets, wire, etc. .. .. ..	170	1,927	3,527	2,396	3,144	3,018	3,650
Aluminium sulphates .. .. ..	1,295	2,727	3,089	4,521	4,754	7,476	11,859
Germany—							
Bauxite and cryolite .. .. ..	—	—	—	3,938	—	1,059	20
Alumina .. .. ..					(a)	(a)	(a)
Crude and alloys .. .. ..	—	—	—	{ —	15,743	33,797	} 6,025
Scrap .. .. ..	(a)	(a)	(a)				
Sheets, wire, castings, etc. .. .. ..			—	2,097	712	—	
Foil .. .. ..	—	—	—	19	554	8,840	10,064
Aluminium sulphates, etc. .. .. ..	—	—	—	58	185	2,024	4,887
including refined bauxite .. .. ..	—	—	—	133	4,315	29,335	(c) 16,258
Greece—							
Bauxite .. .. ..	—	—	5,905	39,762	39,772	64,117	177,312
Hungary—							
Bauxite .. .. ..	704	8,914	52,551	(a)	(a)	(a)	(a)
Italy—							
Bauxite .. .. ..	—	—	492	—	—	—	—
Alumina .. .. ..	—	—	5,315	10,637	21,671	13,591	10,999
Aluminium hydrates .. .. ..	(a)	(a)	—	125	—	2	35
Crude, scrap and alloyed .. .. ..	—	—	679	1,625	18,810	5,005	3,090
Aluminium sulphates .. .. ..	(a)	(a)	—	796	209	583	624
Netherlands—							
Crude and alloys .. .. ..	(a)	—	5	126	149	587	169
Scrap .. .. ..	(a)	—	190	1,093	3,497	1,371	2,836
Foil .. .. ..	(a)	—	3	10	23	28	42
Norway—							
Alumina .. .. ..	8	37	157	41	354	6	(a)
Crude .. .. ..	2,796	9,469	16,337	21,541	21,585	39,714	41,220
Scrap .. .. ..	282	746	599	521	292	562	405
Bars, sheets, tubes and wire .. .. ..	81	556	891	1,193	995	1,390	2,213
Sweden—							
Alumina .. .. ..	(a)	(a)	(a)	(a)	893	98	—
Crude, sheets and strips .. .. ..	68	23	27	47	7	852	534
Scrap .. .. ..	84	98	158	84	100	292	230
Aluminium sulphates .. .. ..	6,359	11,473	8,140	6,915	7,976	11,254	9,037
Switzerland—							
Blocks, ingots, etc., and scrap .. .. ..	25	396	964	10,617	6,360	9,412	2,208
do. (alloys) .. .. ..	103	395	155	1,282	1,108	2,436	1,316
Bars, sheets, tubes and wire .. .. ..	157	3,038	4,632	3,684	3,053	1,547	4,002
do. (alloys) .. .. ..	37	610	1,381	1,094	1,313	1,561	1,859
Yugoslavia—							
Bauxite .. .. ..	(a)	(a)	(a)	(a)	(a)	150,576	441,421
Algeria—							
Ingots .. .. ..	4	—	—	401	337	11	72
Scrap .. .. ..	—	—	—	584	240	249	619
Mozambique—							
Bauxite .. .. ..	9,666	1,032	2,412	748	846	3,705	3,021
Greenland—							
Cryolite .. .. ..	18,403	30,660	39,910	26,062	44,623	44,046	(d) 65,196

(a) Information not available.

(b) Artificial only.

(c) January to September only.

(d) Imports from Greenland into Denmark and United States.

EXPORTS OF ALUMINIUM, ETC. (*Cont.*)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (<i>Cont.</i>)</b>							
Haiti—							
Bauxite .. . . .	—	300	—	(a)	(a)	(a)	(a)
United States—							
Bauxite, etc. .. . .	126,067	97,788	94,369	54,113	34,902	45,209	85,565
Cryolite, natural.. . .	1,299	1,159	836	637	323	1,850	1,426
do. artificial .. . .	398	414	295	72			
Ingots and alloys .. .	2,026	988	10,802	1,107	7,159	591	857
Scrap .. . . .	716	572	703	390	354	713	5,607
Plates, sheets, bars, etc... .	3,242	13,917	44,852	62,674	25,682	17,698	9,816
Foil .. . . .	1,167	1,602	4,339	1,765	1,305	743	142
Aluminium sulphates .. .	33,904	33,890	20,883	12,805	13,131	11,615	17,737
Brazil—							
Bauxite .. . . .	6,949	1,143	702	11,808	9,891	11,850	8,709
Dutch Guiana—							
Bauxite .. . . .	679,149	839,146	1,769,433	2,131,305	2,095,205	2,013,058	2,629,140
China—							
Aluminium sulphates .. .	(a)	1,544	1,123	605	(a)	(a)	(a)
Indonesia—							
Bauxite .. . . .	(a)	—	88,166	443,105	670,339	540,853	601,746

(a) Information not available.

IMPORTS OF ALUMINIUM, ETC.

(Less Re-exports)

(Long tons)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Bauxite .. .. ..	162,561	156,972	163,726	308,328	326,603	198,607	345,447
Cryolite .. .. ..	844	1,444	1,587	2,280	2,590	3,403	3,630
Alumina .. .. ..	(b) 1	101	5	—	—	27	146
Ingots, etc. .. ..	21,148	80,646	95,862	139,084	165,397	{ 141,205	175,626
do. alloyed .. ..						4	1,641
Bars, sheets, tubes, etc., including alloyed .. ..	(b) 5,310	(b) 611	95	138	30	150	1,513
Foil and alloyed .. ..	1,745	28	422	222	146	185	921
Scrap, including alloyed .. ..	3	23	1,943	3,516	1,810	836	990
Kenya (e)—							
Sheets and wire .. ..	10	115	655	2,754	1,669	672	1,239
Southern Rhodesia—							
Ingots, bars, and sheets .. ..	35	95	836	1,505	372	198	233
Foil .. .. ..	1	17	56	21	13	28	31
South West Africa—							
Ingots, bars, sheets, etc. .. ..	—	13	185	132	138	30	(a)
Tanganyika—							
Sheets, strips, wire etc. .. ..	2	3	542	691	962	634	553
Uganda—							
Sheets and wire .. ..	(g)	(g)	(g)	(g)	574	433	1,222
Union of South Africa—							
Ingots, blocks, and pigs .. ..	74	259	473	434	387	1,184	1,940
Sheet, wire, foil, etc. .. ..	54	994	5,270	5,629	1,883	806	(a)
Aluminium sulphates .. ..	68	650	908	799	457	52	(a)
Canada (d)—							
Bauxite .. .. ..	839,029	1,145,693	1,243,476	1,793,298	1,600,572	1,662,167	2,144,428
Cryolite .. .. ..	3,556	2,532	6,481	5,974	1,364	3,334	5,818
Alumina .. .. ..	285	162	165	132	182	214	245
Ingots, rods, sheets, etc. .. ..	1,030	4,149	4,264	2,880	3,189	1,965	4,859
Scrap .. .. ..	286	521	113	185	51	379	40
Leaf and foil .. .. ..	(£15,604)	(£23,080)	(£126,725)	(£41,056)	(£36,311)	(£43,122)	(£61,509)
Aluminium sulphates .. ..	31,607	24,752	4,667	2,347	3,744	3,518	7,989
Newfoundland (c)—							
Sheets, plates, foil, etc. .. ..	4	8	28	36	(c)	(c)	(c)
Aluminium sulphates .. ..	982	1,098	227	1,589	(c)	(c)	(c)
Trinidad and Tobago—							
Aluminium sulphates .. ..	(a)	(a)	(a)	95	1,128	460	833
Aden—							
Aluminium sulphates .. ..	4	9	11	2	—	—	—
India—							
Ingots, blocks, bars, etc. .. ..	3,014	7,345	3,368	830	—	1,836	3,189
Sheets and circles .. ..	1,799	2,685	6,692	6,023	7,873	3,691	3,349
Aluminium sulphates .. ..	1,710	857	2,743	810	573	1,433	1,522
Malaya (total imports)—							
Bars, sheets and strips .. ..	(a)	245	1,286	2,363	2,547	3,195	6,475
Aluminium sulphates .. ..	(a)	2,062	1,734	2,228	1,628	3,451	5,383
Ceylon—							
Foil .. .. ..	—	336	472	421	433	593	475
Palestine—							
Ingots and sheets .. .. ..	13	312	(a)	(a)	(f)	(f)	(f)
Foil .. .. ..	4	84	(a)	(a)	(f)	(f)	(f)

(a) Information not available.

(b) Excess of re-exports.

(c) Years ended March 31 of year following that stated. Included with Canada from April 1, 1949.

(d) Including Newfoundland from April 1, 1949.

(e) Including Uganda up to 1948 inclusive.

(f) See "Israel" under Foreign Countries.

(g) Included with Kenya.

## IMPORTS OF ALUMINIUM, ETC. (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES (Cont.)</b>							
Australia—							
Bauxite .. .. ..	(a)	—	—	10	—	6	113
Cryolite .. .. ..	29	26	74	23	17	(c) 34	62
Pigs, ingots and blocks .. .. ..	7	1,811	4,219	4,726	7,185	5,916	11,389
Scrap .. .. ..	96	156	308	1,438	3	—	140
Sheets, wire, rods, etc. .. .. ..	(£63,970)	(£201,389)	(£235,878)	(£18,314)	3,847	3,230	3,815
Pipes and tubes (£ Aust.) .. .. ..					69	422	423
Foil (c) .. .. ..	80	214	298	440	450	653	(a)
Aluminium sulphates .. .. ..	—	28	(d) 21	93	36	464	452
New Zealand—							
Bars, sheets, tubes, wire, etc. .. .. ..	50	135	523	2,277	2,891	3,505	2,513
Irish Republic—							
Ingots and sheets .. .. ..	277	699	1,374	672	1,101	933	624
Foil .. .. ..	7	33	38	—	123	186	207
Aluminium sulphates .. .. ..	932	1,744	1,766	1,500	1,614	2,175	3,137
<b>FOREIGN COUNTRIES</b>							
Austria—							
Bauxite .. .. ..	(a)	(a)	(a)	(a)	2,933	4,972	7,719
Cryolite .. .. ..	21	475	1,434	—	2,005	1,800	—
Alumina .. .. ..	13,385	23,309	71,855	—	77,934	86,767	—
Aluminium hydrates .. .. ..	13,917	28,610	33	—	1,067	1,585	—
Crude, scrap and alloys.. .. ..	27	50	66	—	13	45	—
Sheets, rods, wire, etc. .. .. ..	134	518	889	—	1,178	1,272	—
Foil .. .. ..	7	—	—	—	—	—	—
Aluminium sulphates .. .. ..	2,295	2,662	4,656	—	2,339	133	—
Belgium-Luxemburg E.U.—							
Bauxite .. .. ..	(a)	(a)	(a)	(a)	1,922	574	890
Alumina .. .. ..	(a)	(a)	(a)	—	4,519	522	321
Aluminium hydrates .. .. ..	(a)	(a)	(a)	—	—	4,220	12,702
Crude .. .. ..	(a)	(a)	(a)	—	5,392	7,448	8,545
Scrap .. .. ..	(a)	(a)	(a)	—	1,215	847	2,028
Sheets, etc. .. .. ..	(a)	(a)	(a)	—	1,350	1,463	1,646
Aluminium sulphates .. .. ..	(a)	(a)	(a)	—	240	755	1,174
Bulgaria—							
Crude, bars and sheets .. .. ..	220	222	(a)	(a)	(a)	(a)	(a)
Aluminium sulphates .. .. ..	158	372	(a)	(a)	(a)	(a)	(a)
Czechoslovakia—							
Bauxite .. .. ..	(a)	1,353	2,353	(b) 5,586	(a)	(a)	(a)
Cryolite .. .. ..	(a)	256	449	(b) 138	(a)	(a)	(a)
Alumina .. .. ..	—	—	1,835	(b) 1,403	(a)	(a)	(a)
Crude and scrap .. .. ..	(a)	973	7,446	(b) 10,876	(a)	(a)	(a)
Aluminium sulphates .. .. ..	(a)	107	325	(b) 165	(a)	(a)	(a)
Denmark—							
Crude cryolite .. .. ..	3,113	20,827	21,211	24,013	27,153	25,484	30,665
Crude .. .. ..	1,246	2,235	3,061	2,527	2,975	3,063	3,138
Scrap .. .. ..	251	65	107	208	27	155	62
Bars, sheets, plates and wire .. .. ..	205	1,654	2,108	1,383	1,412	1,914	3,042
Leaf .. .. ..	34	307	300	256	145	305	405
Aluminium sulphates .. .. ..	1,036	1,760	2,447	2,992	2,596	3,304	3,494
Finland (total imports)—							
Alumina .. .. ..	1	47	12	28	24	25	17
Crude .. .. ..	12	440	478	508	522	630	1,579
Bars and sheets .. .. ..	103	352	681	1,700	1,446	1,358	2,110
Aluminium sulphates .. .. ..	3,310	6,906	9,362	6,662	7 193	8,154	16,003

(a) Information not available.

(b) January to October.

(c) Years ended June 30 of that stated.

(d) Excess of re-exports.

## IMPORTS OF ALUMINIUM, ETC. (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
France—							
Bauxite .. .. ..	16	11	611	—	94	69	89
Cryolite .. .. ..	—	2,376	59	3,008	787	1,243	1,679
Alumina .. .. ..	428	893	5	213	—	50	96
Aluminium hydrates .. .. ..	246	360	—	—	63	1	77
Cryolite, artificial .. .. ..	—	354	—	(a)	(a)	(a)	(a)
Ingots .. .. ..	1,077	11,078	{ 25,831	25,389	5,268	786	2,372
Scrap .. .. ..	{	{	3,890	(a)	(a)	(a)	(a)
Sheets, wire, etc. .. .. ..	300	1,776	931	176	149	333	1,023
Aluminium sulphates .. .. ..	3	1	—	10	10	1	12
Germany (Federal)—							
Bauxite and cryolite .. .. ..	{	{	87,812	96,375	210,779	610,212	
Crude and alloys .. .. ..	{	{	15,891	15,500	4,973	11,364	
Scrap .. .. ..	{	{	1,109	2,099	1,074	308	
Sheets, wire, castings, etc. .. .. ..	(a)	(a)	(a)	696	12	39	
Aluminium sulphates, etc. including refined bauxite .. .. ..	{	{	—	—	29	13	(a)
Greece—							
Aluminium .. .. ..	10	295	579	798	962	2,581	1,268
Foil .. .. ..	—	35	185	288	410	515	147
Aluminium sulphates .. .. ..	—	545	84	1,218	329	166	55
Iceland—							
Aluminium sulphates .. .. ..	8	11	(a)	(a)	5	3	1
Italy—							
Bauxite .. .. ..	—	7,670	27,042	118,234	83,212	81,246	86,776
Cryolite .. .. ..	(a)	(a)	(a)	(a)	(a)	614	2,070
Alumina .. .. ..	—	1,476	504	—	%	21	27
Crude, scrap and alloys .. .. ..	—	20	6,269	8,880	7,241	19,487	6,497
Aluminium sulphates .. .. ..	(a)	(a)	23	—	39	490	59
Netherlands—							
Bauxite .. .. ..	{	98	577	295	297	298	266
Crude and alloys .. .. ..	(a)	{ 5,489	9,579	9,522	3,925	4,331	5,781
Foil .. .. ..	—	141	395	497	378	1,203	1,139
Aluminium sulphates .. .. ..	{	5,844	4,187	6,182	7,191	8,376	9,355
Norway—							
Bauxite .. .. ..	—	6,991	28,310	39,238	24,087	36,570	19,833
Cryolite .. .. ..	12	644	1,891	2,605	2,578	3,177	2,928
Alumina .. .. ..	—	17,217	35,159	45,184	64,216	79,732	74,462
Crude .. .. ..	—	—	492	238	472	998	1,667
Bars, sheets, etc. .. .. ..	1	145	1,324	611	692	434	1,235
Aluminium sulphates .. .. ..	2,502	5,273	7,821	5,981	6,942	7,707	8,367
Poland—							
Bauxite .. .. ..	757	8,027	14,021	(a)	(a)	(a)	(a)
Crude, scrap, sheets and wire .. .. ..	—	2,266	4,082	(a)	(a)	(a)	(a)
Portugal—							
Cryolite .. .. ..	73	34	26	33	19	28	(a)
Powder .. .. ..	36	37	54	74	96	74	(a)
Ingots, sheets and wire .. .. ..	295	964	1,495	807	1,204	1,620	1,256
Aluminium sulphates .. .. ..	700	1,098	991	673	501	835	993
Spain—							
Alumina .. .. ..	1,133	2,182	2,063	2,370	1,931	4,854	8,693
Ingots and scrap .. .. ..	1,922	2,028	2,802	2,106	2,786	1,634	1,449
Sheets, tubes and wire .. .. ..	610	28	43	14	26	18	257
Sweden—							
Bauxite .. .. ..	—	16,634	27,642	19,785	17,357	9,299	7,240
Cryolite (incl. artificial) .. .. ..	64	688	496	313	713	901	(a)

(a) Information not available.

(b) July to December only.

## IMPORTS OF ALUMINIUM, ETC. (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Sweden—(Cont.)							
Alumina .. .. ..	3,010	1,782	2,797	6,925	7,506	12,454	21,014
Crude .. .. ..	2,274	7,916	9,612	13,350	13,149	8,227	11,504
Scrap .. .. ..	382	2,381	1,502	1,315	720	428	(a)
Sheets, tubes and wire ..	104	2,561	3,923	4,768	3,067	1,582	(a)
Aluminium sulphates ..	7	227	852	167	637	113	(a)
Switzerland—							
Alumina, etc. .. .. ..	14,286	25,948	44,750	45,327	46,844	40,118	54,679
Blocks, ingots, etc., and scrap .. .. ..	7,486	7,866	7,048	6,921	8,918	2,702	5,039
do. (alloyed) .. .. ..	64	13	173	235	39	87	159
Bars, sheets, tubes and wire .. .. ..	21	432	1,124	276	6	116	344
do. (alloyed) .. .. ..	223	55	122	164	9	45	61
Aluminium sulphates .. .. ..	220	351	322	243	134	401	273
Yugoslavia—							
Crude .. .. ..	(a)	(a)	(a)	(a)	(a)	64	—
Sheets, tubes, wire, etc.	(a)	(a)	(a)	(a)	(a)	1,071	598
Algeria—							
Bauxite .. .. ..	—	28	1,598	424	199	22	521
Ingots, sheets, wire, etc.	583	533	758	170	284	824	856
Aluminium sulphates .. .. ..	185	212	223	401	148	368	330
Egypt—							
Bars, sheets, tubes and wire .. .. ..	43	239	117	340	411	694	(a)
Foil .. .. ..	—	130	104	334	264	(a)	(a)
Aluminium sulphates .. .. ..	4,565	7,865	3,567	8,142	5,609	(a)	(a)
Madagascar—							
Aluminium sulphates .. .. ..	(a)	44	36	27	(a)	(a)	(a)
Mozambique—							
Bars, sheets, wire .. .. ..	3	13	103	210	222	155	52
Tunis—							
Ingots and scrap .. .. ..	101	147	393	9	(a)	(a)	(a)
Aluminium sulphates .. .. ..	168	100	105	60	(a)	(a)	(a)
Costa Rica—							
Bars, sheets, foil, etc. .. .. ..	—	305	740	207	89	(a)	(a)
Cuba (total imports)—							
Ingots and bars .. .. ..	(a)	(a)	(a)	420	238	(a)	(a)
Aluminium sulphates .. .. ..	2,559	(a)	(a)	1,509	1,522	1,600	1,100
Guatemala—							
Aluminium sulphates .. .. ..	(a)	(a)	(a)	(a)	(a)	1,472	856
Mexico—							
Alumina .. .. ..	470	489	607	635	(a)	(a)	(a)
Ingots	354	198	1,841	1,031	(a)	(a)	3,308
Bars, sheets and wire .. .. ..	413	1,585	3,859	3,178	(a)	(a)	1,410
Foil .. .. ..	434	1,286	670	133	(a)	(a)	(a)
Aluminium sulphates .. .. ..	867	924	(a)	(a)	(a)	(a)	(a)
United States—							
Bauxite, crude .. .. ..	739,581	852,005	1,821,580	2,488,915	2,688,164	2,476,686	2,829,929
Refined bauxite .. .. ..	180	5	(a)	6	157	194	18,642
Cryolite .. .. ..	17,952	10,200	19,650	2,101	18,309	15,298	34,688
Crude and alloys .. .. ..	296,819	37,042	13,910	74,254	69,056	157,838	109,289
Scrap .. .. ..	4,615	12,983	14,034	64,055	35,822	60,678	17,865
Sheets, bars, etc. .. .. ..	1,500	971	28	5,344	7,021	9,781	17,324
Foil (b) .. .. ..	90	51	36	16	176	265	724
Aluminium sulphates .. .. ..	—	—	72	4,962	1,313	2,763	4,627

(a) Information not available.

(b) Excluding leaves 5½ in. by 5½ in. recorded by number only.

**IMPORTS OF ALUMINIUM, ETC. (Cont.)**

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
<b>Argentina—</b>							
Bauxite .. ..	1,680	2,065	(a)	(a)	(a)	(a)	(a)
Ingots, sheets and wire ..	1,384	2,591	7,079	12,430	7,064	12,717	5,541
Aluminium sulphates ..	1,581	3,910	(a)	(a)	(a)	(a)	(a)
<b>Brazil (total imports)—</b>							
Cryolite .. ..	111	132	77	148	107	(a)	(a)
Bars, sheets and wire ..	2,965	2,968	5,664	6,667	9,001	9,655	(a)
Scrap .. ..	544	1,053	527	677	328	(a)	(a)
Aluminium sulphates ..	1,524	3,127	3,488	1,514	1,968	(a)	(a)
<b>Chile—</b>							
Bars and sheets .. ..	160	458	110	185	(a)	(a)	(a)
Aluminium sulphates ..	849	358	(a)	(a)	(a)	(a)	(a)
<b>Colombia—</b>							
Ingots, bars, sheets, etc.	(a)	1,119	(a)	(a)	(a)	(a)	(a)
Aluminium sulphates ..	(a)	2,074	(a)	(a)	2,775	4,647	(a)
<b>Peru—</b>							
Ingots .. ..	26	30	(a)	(a)	(a)	(a)	(a)
Aluminium sulphates ..	463	1,142	(a)	82	(a)	(a)	(a)
<b>Uruguay—</b>							
Bauxite .. ..	589	—	295	—	1,998	—	(a)
Ingots, sheets, etc. ..	—	360	1,038	810	320	1,669	(a)
Aluminium sulphates ..	1,929	2,959	2,617	3,517	2,418	2,997	(a)
<b>Venezuela—</b>							
Crude .. ..	47	224	143	42	(a)	(a)	(a)
Aluminium sulphates ..	227	528	676	1,233	(a)	(a)	(a)
<b>China—</b>							
Sheets and wire .. ..	(a)	{ 3,559	4,484	2,153	(a)	(a)	(a)
Foil, including interleaved with paper .. ..	(a)	{ 673	1,190	1,565	(a)	(a)	(a)
<b>Iran (b)—</b>							
Ingots, sheets, scrap, etc. ..	(a)	311	214	(a)	(a)	(a)	(a)
Aluminium sulphates ..	(a)	103	68	(a)	(a)	(a)	(a)
<b>Iraq—</b>							
Bars, sheets, wire, etc. ..	—	(a)	(a)	(a)	(a)	(a)	(a)
Aluminium sulphates ..	76	(a)	(a)	(a)	(a)	(a)	(a)
<b>Israel—</b>							
Ingots and sheets .. ..	(d)	(d)	(d)	(d)	2,777	6,832	(a)
Foil .. ..	(d)	(d)	(d)	(d)	69	81	(a)
<b>Japan (c)—</b>							
Bauxite .. ..	1,775	2,830	—	94,200	(a)	128,018	329,095
Ingots, blocks, etc. ..	(a)	(a)	(a)	(a)	(a)	1,321	—
<b>Syria and Lebanon—</b>							
Aluminium sulphates ..	97	234	—	7	156	(a)	(a)
<b>Turkey—</b>							
Bars, sheets, wire and alloys .. ..	73	133	454	243	173	275	1,490
Aluminium sulphates ..	1,525	764	1,562	1,188	1,215	1,052	1,981

(a) Information not available.

(b) Total imports for years ended March 20 of the year following that stated.

(c) Including Formosa for the year 1945.

(d) See "Palestine" under British Countries.

# ANTIMONY

## PRODUCTION OF ANTIMONY ORE

*(In terms of metal)*

(Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Southern Rhodesia ..	34	17	87	10	42	25	78
Union of South Africa ..	2,408	2,485	3,250	4,040	4,290	8,179	15,607
Canada (b) .. ..	—	—	—	—	—	—	—
Pakistan .. ..	290	200	—	—	—	—	—
Sarawak .. ..	—	—	—	3	1	2	—
Australia (d) .. ..	184	530	170	187	195	226	409
New Zealand .. ..	—	—	—	(e) 5	(c) 2	—	—
<b>FOREIGN COUNTRIES</b>							
Austria .. .. ..	272	35	99	265	371	402	490
Czechoslovakia (f) .. ..	1,097	2,122	1,411	1,568	(a) 333	(a) 401	(a) 601
France .. .. ..	163	217	198	271	90	600	(e) 680
Greece .. .. ..	—	—	—	—	(e) 90	(e) 742	781
Italy .. .. ..	370	440	500	550	617	21	15
Portugal .. .. ..	3	3	25	40	270	250	351
Spain .. .. ..	225	275	143	235	1,376	1,230	1,440
Algeria .. .. ..	453	—	118	840	611	695	942
Morocco (French) .. ..	378	250	413	443	118	284	201
do. (Spanish) .. ..	48	111	16	—	153	—	—
Honduras .. .. ..	—	—	—	10	(a) 728	(a) 955	(a) 11,629
Mexico .. .. ..	8,614	6,468	6,816	7,264	5,662	5,776	6,717
United States (g) .. ..	1,723	2,237	4,746	5,794	1,461	2,229	3,136
Bolivia (exports) .. ..	5,448	6,854	10,686	12,066	10,113	8,630	—
Peru .. .. ..	2,265	1,194	1,272	1,610	728	955	(a) 193
Burma (e) .. .. ..	(c) 830	—	40	(a) 70	38	—	—
China .. .. ..	—	956	(a) 40	(a) 70	(a) 38	(a) 193	—
Japan .. .. ..	419	61	94	133	184	158	218
Siam .. .. ..	44	—	112	105	229	85	64
Turkey .. .. ..	40	80	130	650	570	1,585	2,664
<b>TOTAL*</b> .. ..	<b>25,300</b>	<b>24,500</b>	<b>32,500</b>	<b>39,400</b>	<b>32,700</b>	<b>37,300</b>	<b>49,700</b>

\*Excluding antimony ore produced in the U.S.S.R., Yugoslavia and Argentina.

(a) Information not available.

(b) The following figures represent the antimony content of antimonial lead (long tons): 1945—745; 1946—287; 1947—513; 1948—138; 1949—71; 1950—287; 1951—536.

(c) Average annual production during Japanese occupation (1942 to 1945).

(d) In addition the antimony content of antimonial slag obtained as a by-product of lead refining, was as follows: (long tons): 1945—191; 1946—394; 1947—309; 1948—338; 1949—265; 1950—288; 1951—333.

(e) Estimated.

(f) United States Bureau of Mines.

(g) Secondary metal was recovered as follows (long tons): 1945—15,311; 1946—17,067; 1947—20,522; 1948—19,279; 1949—16,126; 1950—19,520; 1951—21,378.

EXPORTS OF ANTIMONY, ETC.

(Domestic Produce)

(Long tons)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Regulus and refined ..	774	489	357	660	807	1,595	1,220
Southern Rhodesia—							
Ore .. .. ..	52	26	105	5	76	87	164
Union of South Africa—							
Ore .. .. ..	4,255	4,156	3,629	6,475	6,975	12,099	21,388
Hong Kong (re-exports)—							
Crude and regulus ..	(a)	1,159	4,988	1,435	1,491	1,816	7
Sarawak—							
Ore .. .. ..	(a)	—	—	2	2	5	(a)
Australia—							
Ore and concentrates (b)	15	723	113	464	59	(c) 208	(a)
<b>FOREIGN COUNTRIES</b>							
Austria—							
Ore .. .. ..	(a)	(a)	148	365	496	558	307
Belgium-Luxemburg E.U.—							
Regulus .. .. ..	(a)	(a)	(a)	1,714	1,419	2,394	2,321
Czecho-Slovakia—							
Regulus .. .. ..	(a)	738	269	(c) 989	(a)	(a)	(a)
Denmark—							
Regulus .. .. ..	—	—	49	13	10	10	—
France—							
Crude and regulus ..	8	17	14	(a) 3	(a) 3	(a) 18	(a) 53
Oxide .. .. ..	—	(d) 4	(d) 3	(d) 3	(d) 3	(d) 18	(d) 214
Germany (Federal)—							
Ore, including arsenical ores .. .. ..	(a)	(a)	(a)	{ 15 — —	—	20 10 14	(a)
Regulus and scrap .. .. ..							
Oxide, etc. .. .. ..							
Italy—							
Regulus .. .. ..	—	46	13	152	99	—	173
Netherlands—							
Regulus and scrap .. .. ..	(a)	—	8	24	6	6	3
Portugal—							
Ore .. .. ..	136	2	18	69	59	21	24
Spain—							
Regulus .. .. ..	15	20	5	—	—	46	59
Sweden—							
Crude .. .. ..	3	13	44	16	28	29	33
Regulus .. .. ..	—	5	11	3	2	6	—
Yugoslavia—							
Regulus .. .. ..	(a)	(a)	(a)	(a)	(a)	1,630	1,097
Waste .. .. ..	(a)	(a)	(a)	(a)	(a)	—	1,798

(a) Information not available.

(b) Years ended June 30 of that stated.

(c) January to October only.

(d) Including sulphide and other compounds.

(e) Sb content of all ores and concentrates.

EXPORTS OF ANTIMONY, ETC. (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Algeria—							
Ore .. ..	443	147	—	1,445	3,116	2,965	3,030
Morocco (French)—							
Ore .. ..	841	606	1,150	(a)	981	1,102	1,831
Morocco (Spanish)—							
Ore .. ..	100	231	—	(a)	(a)	(a)	(a)
Honduras—							
Ore ( <i>Sb content</i> ) ..	(a)	(a)	(a)	10	(a)	(a)	(a)
Mexico—							
Ore .. ..	21,423	16,936	19,763	26,865	9,308	9,371	13,985
Concentrates .. ..	543	137	151	245	47	—	96
Regulus .. ..	31	73	107	79	739	1,274	1,067
<i>Sb content (b)</i> .. ..	7,878	5,906	5,965	6,462	4,041	3,439	4,733
United States—							
Ore .. ..	222	2	691	61	31	6	5
Metal and alloys ..	74	410	249	230	402	132	145
Oxide and sulphide ..	107	—	(a)	(a)	199	(c)	164
Bolivia—							
Ore ( <i>Sb content</i> ) ..	5,448	6,854	10,686	12,066	10,113	8,630	11,629
Peru—							
Ore and metal ( <i>Sb content</i> )	2,231	1,079	1,029	1,336	676	992	(a)
China—							
Crude .. ..	—	—	49	376	(a)	(a)	(a)
Regulus .. ..	—	4,658	8,390	4,249	(a)	(a)	(a)
Oxide .. ..	—	—	3	(a)	(a)	(a)	(a)
Japan—							
Regulus ( <i>Sb content</i> ) ..	—	(a)	236	(a)	(a)	2	(a)
Turkey—							
Ore .. ..	—	120	295	1,497	268	1,434	1,589
Regulus .. ..	(a)	(a)	(a)	(a)	171	95	248

(a) Information not available.

(b) Total metal content of above items and *not* additional.

(c) Total compounds.

IMPORTS OF ANTIMONY, ETC.

(Less Re-exports)

(Long tons)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Ore and concentrates (d) ..	9,470	10,470	12,200	(b)	11,694	14,172	25,744
Refined and regulus ..	—	477	105	1	5	(a)	(a)
Southern Rhodesia—							
Refined and regulus ..	4	1	16	5	6	14	11
Union of South Africa—							
Refined and regulus ..	196	55	108	116	101	276	(a)
Canada—							
Regulus .. ..	462	831	1,286	488	1,153	1,434	608
Oxide .. ..	(a)	(a)	(a)	(a)	(a)	(a)	45
Hong Kong (total imports)—							
Ore .. ..	{ (a)	{ —	19	2,142	1,954	168	—
Crude and regulus ..		{ 3,713	4,470	}			
Australia—							
Concentrates .. ..	40	411	1,127	1,062	551	709	1,054
Crude and regulus ..	—	—	3	1	11	339	61
Sulphide .. ..	—	—	1	—	—	—	—
New Zealand—							
Antimony .. ..	—	—	66	163	86	109	135
<b>FOREIGN COUNTRIES</b>							
Austria—							
Regulus .. ..	(a)	(a)	81	70	204	129	44
Belgium-Luxemburg E.U.—							
Regulus .. ..	(a)	(a)	(a)	35	16	27	80
Denmark—							
Regulus .. ..	39	192	254	231	132	406	174
France—							
Ore .. ..	1,267	1,411	2,354	(a)	(a)	(a)	(a)
Crude and regulus ..	418	716	2,095	(a)	(a)	(a)	(a)
Oxide and sulphide ..	—	16	20	—	(c)	25	30
Germany (Federal)—							
Ore and matte .. ..	{ (a)	{ (a)	{ (a)	{ 654	490	1,197	(e)
Regulus and scrap ..				{ 949	679	458	1,048
Oxide, etc. .. ..				{ 16	19	236	1,236
Italy—							184
Ore .. ..	(a)	(a)	(a)	(a)	(a)	45	89
Regulus .. ..	—	96	75	38	51	246	24
Oxide .. ..	—	10	36	12	51	339	57
Netherlands—							
Regulus and scrap ..	(a)	370	663	332	(f)	448	313
Oxide .. ..	(a)	(a)	(a)	(a)	(a)	494	500
Norway—							
Regulus .. ..	23	115	50	136	22	139	(a)
Portugal—							
Crude and alloys ..	9	17	31	25	8	23	16
Oxide .. ..	31	6	28	29	15	12	6
Sulphide .. ..	10	14	2	1	—	4	(a)
Spain—							
Sulphide .. ..	3	15	2	7	2	6	1
Sweden—							
Crude .. ..	14	119	75	63	50	95	(a)
Regulus .. ..	20	321	300	366	184	327	(a)

(a) Information not available.

(b) Excess of re-exports.

(c) Oxide only.

(d) Including crude.

(e) January to September only.

(f) Scrap only.

IMPORTS OF ANTIMONY, ETC. (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Switzerland—							
Regulus .. ..	46	290	368	249	169	263	290
Algeria—							
Regulus .. ..	12	36	13	74	6	3	6
Tunis—							
Regulus and sulphide ..	9	8	4	13	(a)	(a)	(a)
Mexico—							
Oxide and sulphide ..	46	50	28	3	(a)	(a)	(a)
United States—							
Ore (Sb content) ..	20,217	5,271	8,288	12,083	6,673	8,717	10,629
Regulus, crude, etc. ..	560	2,315	5,264	3,312	1,727	4,153	1,992
Oxide .. ..	—	—	—	—	50	1,035	1,821
Argentina—							
Ore .. ..	527	761	(a)	(a)	(a)	(a)	(a)
Regulus and crude ..	—	3	(a)	(a)	(a)	(a)	(a)
Brazil—							
Regulus .. ..	65	223	386	43	124	(a)	(a)
Oxide .. ..	13	56	62	51	112	(a)	(a)
Sulphide .. ..	42	209	98	76	68	(a)	(a)
Chile—							
Regulus .. ..	41	115	35	53	(a)	(a)	(a)
Oxide and sulphide ..	13	1	(a)	(a)	(a)	(a)	(a)
Peru—							
Regulus and sulphides ..	9	7	(a)	(a)	(a)	(a)	(a)
Uruguay—							
Regulus .. ..	(a)	(a)	(a)	1	12	10	(a)
Oxide .. ..	(a)	(a)	(a)	21	4	10	(a)
Japan—							
Ore and metal (Sb content)	—	(a)	(a)	(a)	(a)	91	(a)
Turkey—							
Regulus .. ..	3	11	4	10	4	—	—

(a) Information not available.

**ARSENIC**  
**PRODUCTION OF ARSENIC**  
 (Long tons)

Producing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Great Britain—							
White arsenic and arsenic soot .. ..	115	145	90	(a)	(a)	(a)	(a)
Southern Rhodesia—							
White arsenic .. ..	436	212	409	279	146	112	75
Union of South Africa—							
White arsenic .. ..	45	8	2	9	—	—	—
Canada—							
White arsenic .. ..	913	333	352	519	235	355	1,073
India—							
Orpiment .. ..	8	—	—	—	—	—	—
Pakistan—							
Orpiment .. ..	(b)	36	—	—	—	—	—
Australia—							
White arsenic .. ..	1,989	1,624	1,191	512	(c) 253	(c) 200	(c) 120
New Zealand—							
White arsenic .. ..	17	18	8	8	19	10	—
<b>FOREIGN COUNTRIES</b>							
Belgium (exports)—							
White arsenic .. ..	(a)	(a)	(a)	149	519	1,879	320
Finland—							
Concentrates ( <i>As content</i> )	—	—	—	—	30	67	162
France—							
White arsenic .. ..	1,856	4,079	3,261	2,931	2,552	(d)	(a)
Germany (exports)—							
White arsenic, etc. .. ..	(a)	(a)	(a)	36	1,064	1,106	3,449
Greece—							
White arsenic .. ..	—	8	14	19	20	32	(a)
Italy—							
Mispickel ( <i>As content</i> ) ..	90	840	1,654	(d) 710	(d) 915	(d) 990	(a)
White arsenic .. ..	100	1,400	1,600	1,700	1,420	715	(a)
Portugal—							
White arsenic (f) .. ..	239	500	989	1,590	960	598	735
Spain—							
White arsenic .. ..	(a)	(a)	477	564	122	472	421
Sweden—							
Ore ( <i>As content</i> ) (e) ..	3,757	3,010	2,663	2,682	2,437	1,871	(a)
Mexico—							
White arsenic .. ..	14,776	9,496	9,533	7,452	3,520	8,845	12,561
United States—							
White arsenic .. ..	21,740	9,117	16,746	17,292	11,424	11,851	14,455
Brazil—							
White arsenic .. ..	947	816	985	1,003	943	1,050	1,300
Peru—							
White arsenic .. ..	3,149	741	598	995	—	—	(a)
Iran—							
Ore .. ..	(a)	(a)	500	(a)	(a)	750	(a)
Japan—							
White arsenic .. ..	(a)	1,075	1,385	2,052	2,762	1,601	(a)

White arsenic is also produced in U.S.S.R., China and Korea.

(a) Information not available.

(b) Included with India.

(c) Estimated.

(d) Revised.

(e) Directly usable ore only. Figures for concentrates are not available.

(f) Content of pyrites mined.

EXPORTS OF ARSENIC, ETC.

*(Domestic Produce)*

(Long tons)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
White arsenic .. ..	6						
Other compounds of arsenic .. ..	2	532	327	146	146	4,554	3,583
Southern Rhodesia—							
White arsenic .. ..	3	—	10	—	—	—	—
Canada—							
White arsenic, etc. ..	2,710	767	1,951	1,809	1,732	1,593	2,166
Hong Kong (re-exports)—							
Arsenic .. .. ..	(a)	—	1	(a)	(a)	—	—
Australia—							
White arsenic .. ..	{ (b) 63	{ (b) 12	{ (b) 12	{ (b) 14	{ (b) 24	{ (b) 16	{ (b) 9
Other compounds .. ..		20	—	35	68	64	25
<b>FOREIGN COUNTRIES</b>							
Belgium-Luxemburg E.U.—							
Sulphide .. .. ..	(a)	(a)	(a)	109	50	124	142
White arsenic .. .. ..	(a)	(a)	(a)	149	519	1,879	320
Arsenates .. .. ..	(a)	(a)	(a)	940	223	877	615
France—							
White arsenic .. .. ..	1	3	83	27	64	834	4,941
Arsenate of lead .. .. ..	14	940	3,240	132	19	44	49
Other arsenates .. .. ..	(c) 28	(c) 10	(c) 139	1,533	439	497	240
Germany (Federal)—							
Ore, including antimony ore .. .. ..	(a)	(a)	(a)	15	20	232	(a) 3,449
White arsenic, etc. .. .. ..	(a)	(a)	(a)	36	1,064	1,106	
Italy—							
White arsenic .. .. ..	(a)	(a)	—	964	345	35	12
Portugal—							
Ore .. .. ..	—	170	39	299	—	50	(a) (a)
White arsenic .. .. ..	138	299	719	1,104	732	1,225	
Sweden—							
White arsenic .. .. ..	(a)	(a)	(a)	(a)	(a)	9,922	16,511
Mexico—							
White arsenic, pure .. ..	7,833	6,517	6,848	6,104	4,610	7,628	} 8,449
do. crude .. ..	7,472	3,493	3,040	1,657	106	—	
Ores and concentrates .. ..	233	152	—	83	—	—	
As <sub>2</sub> O <sub>3</sub> content (d) .. ..	14,251	9,211	8,981	7,152	3,368	8,429	(a) (a)
United States—							
White arsenic .. .. ..	766	(a)	(a)	(a)	(a)	(a)	(a) (a) 280
Arsenate of lead .. .. ..	2,830	1,248	1,386	910	384	464	
Arsenate of lime .. .. ..	1,562	3,070	2,218	2,040	1,807	1,722	
Peru—							
White arsenic .. .. ..	4,207	2,846	441	570	366	7	(a)
Turkey—							
Ore .. .. ..	1	—	3	1	2	5	2

(a) Information not available.

(b) Years ended June 30 of that stated.

(c) Arsenate of soda only.

(d) Total content of above items and *not* additional.

IMPORTS OF ARSENIC, ETC.

(Less Re-exports)

(Long tons)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
White arsenic .. ..	2,476	4,269	5,706	7,387	(d) 2,965	5,803	6,780
Other compounds .. ..	—	(d) 262	1	—	1	—	8
Union of South Africa—							
Arsenate of soda (b) ..	52	33	11	—	—	—	(a)
Canada—							
Sulphide .. ..	—	—	110	38	115	7	16
White arsenic .. ..	—	—	2	—	—	—	2
Arsenate of lead .. ..	—	—	—	—	—	—	26
Arsenate of lime .. ..	14	27	—	—	—	—	—
Hong Kong (total imports)—							
Arsenic .. ..	(a)	—	5	(a)	(a)	(a)	(a)
India—							
Arsenic and its oxides ..	125	131	990	135	64	73	185
Australia—							
White arsenic .. ..	10,113	1,645	1,586	1,227	1,271	2,149	1,974
Other compounds .. ..	16	66	56	156	147	122	190
New Zealand—							
White arsenic, etc. ..	130	31	56	16	70	29	76
<b>FOREIGN COUNTRIES</b>							
Belgium-Luxemburg E.U.—							
White arsenic .. ..	(a)	(a)	(a)	394	104	97	15
Bulgaria—							
White arsenic .. ..	—	12	(a)	(a)	(a)	(a)	(a)
Czechoslovakia—							
Sulphide .. ..	(a)	20	102	(c) 33	(a)	(a)	(a)
Metallic arsenic .. ..	(a)	1	16	(c) 13	(a)	(a)	(a)
White arsenic .. ..	(a)	68	88	(c) 138	(a)	(a)	(a)
France—							
Sulphide .. ..	—	2	6	(a) 4	(a)	(a)	(a)
Metallic arsenic .. ..	—	—	4	(a)	(a)	(a)	(a)
White arsenic .. ..	—	258	394	1,057	434	65	12
Arsenate of lead .. ..	—	2	41	—	—	—	—
Germany (Federal)—							
White arsenic, etc. ..	(a)	(a)	(a)	3,004	51	1,696	2,459
Italy—							
White arsenic .. ..	(a)	(a)	(a)	249	456	381	213
Metallic arsenic .. ..	—	—	2	1	—	(a)	(a)
Netherlands—							
White arsenic .. ..	(a)	(a)	(a)	10	19	76	144
Arsenates .. ..	(a)	(a)	(a)	300	207	400	265
Portugal—							
Metallic arsenic .. ..	1	—	1	1	—	—	(a)
White arsenic .. ..	—	49	1	1	—	1	(a)
Arsenate of soda .. ..	6	8	3	—	2	3	(a)
Spain—							
Arsenic .. ..	..	2	—	—	—	—	—
Algeria—							
White arsenic .. ..	2	—	11	3	49	17	17
Sulphide .. ..	—	—	2	—	2	5	1
Arsenates .. ..	279	107	177	27	18	25	30
Madagascar—							
Arsenates .. ..	20	22	36	10	(a)	(a)	(a)

(a) Information not available.

(b) Includes arsenite of soda.

(c) January to October only.

(d) Excess of re-exports.

## IMPORTS OF ARSENIC, ETC. (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Tunis—							
Sulphide .. ..	—	—	—	1	(a) (a)	(a) (a)	(a) (a)
Arsenates .. ..	5	5	—	1	(a) (a)	(a) (a)	(a) (a)
United States—							
Metallic arsenic .. ..	23	41	8	16	20	62	99
White arsenic .. ..	11,282	12,340	12,446	8,336	4,193	13,191	12,963
Sulphide .. ..	994	39	20	40	20	66	66
Arsenates of lime and soda	—	—	—	—	—	151	774
Argentina—							
Sulphide .. ..	—	2	(a)	(a)	(a)	(a)	(a)
White arsenic .. ..	1,012	708	(a)	(a)	(a)	(a)	(a)
Compounds .. ..	—	5	(a)	(a)	(a)	(a)	(a)
Brazil—							
White arsenic .. ..	2,024	654	791	360	367	(a)	(a)
Arsenate of lead .. ..	1,718	425	275	177	1,271	(a)	(a)
Chile—							
Metallic arsenic .. ..	—	25					
White arsenic .. ..	15	21					
Arsenate of lead .. ..	97	13					
Other arsenic compounds	3	6					
Colombia—							
White arsenic, etc. ..	155	28	(a)	(a)	(a)	(a)	(a)
Uruguay—							
White arsenic .. ..	(a)	(a)	(a)	179	266	311	(a)
Arsenate of lead .. ..	(a)	(a)	(a)	56	36	135	(a)
Venezuela—							
White arsenic .. ..	—	32	109	16	(a)	(a)	(a)
Turkey—							
Arsenic compounds ..	50	24	44	15	22	11	36

(a) Information not available.

# ASBESTOS

## PRODUCTION OF ASBESTOS

(Long tons)

Producing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Bechuanaland .. ..	—	—	—	—	—	—	36
Kenya .. ..	385	162	573	502	705	225	373
Southern Rhodesia .. ..	50,312	49,886	48,298	61,355	71,105	63,863	69,342
Swaziland .. ..	20,907	28,695	24,959	28,956	30,328	29,167	31,218
Union of South Africa—							
Amosite .. ..	14,944	8,782	16,791	27,127	37,615	37,851	48,262
Blue .. ..	8,635	7,760	8,106	9,735	18,695	27,320	30,053
Chrysotile .. ..	1,576	1,487	2,012	3,962	6,796	12,798	17,419
Anthophyllite .. ..	38	27	27	12	137	79	131
Canada (b)—							
Chrysotile .. ..	416,871	498,376	590,911	639,972	513,309	781,557	888,927
Crude .. ..	876	663	855	872	581	807	668
Fibre .. ..	196,221	203,780	198,389	216,029	173,735	272,495	297,322
Shorts and waste .. ..	219,774	293,933	391,667	423,071	338,992	508,255	570,937
Stone and gravel (waste rock only) (c) .. ..	4,562	5,658	8,580	39,433	31,510	42,863	30,145
Cyprus .. ..	3,132	4,077	6,687	7,978	12,358	14,752	16,909
India .. ..	820	293	160	28	146	208	43
Australia .. ..	1,629	620	1,377	1,327	1,645	1,617	2,558
New Zealand .. ..	2	—	—	—	—	41	813
Total .. ..	519,000	600,000	700,000	781,000	693,000	969,400	1,086,700
<b>FOREIGN COUNTRIES</b>							
Finland .. ..	4,131	5,690	6,252	10,647	10,320	10,776	(a)
France .. ..	394	566	919	1,288	1,073	7,338	(a)
Greece .. ..	—	4	39	9	9	30	(a)
Italy .. ..	5,068	8,675	10,303	12,838	15,122	21,094	22,293
Portugal .. ..	20	12	90	407	99	253	307
Spain .. ..	—	—	—	34	40	(a)	(a)
Yugoslavia .. ..	—	—	350	740	1,120	94	1,499
Egypt .. ..	84	64	999	1,599	115	256	1,227
Madagascar .. ..	1	1	—	—	2	—	17
Morocco (French) .. ..	472	439	778	394	396	503	591
United States—							
Chrysotile .. ..	10,702	12,489	21,841	33,247	38,320	36,927	46,187
Amphibole .. ..	214	390	605	—	—	—	—
Argentina .. ..	151	(a)	(a)	(a)	(a)	(a)	(a)
Bolivia (exports) .. ..	60	—	139	145	180	163	311
Brazil .. ..	2,680	1,195	2,589	1,283	1,393	831	(a)
Chile .. ..	(a)	(a)	(a)	148	582	169	(a)
Venezuela .. ..	—	64	236	189	194	187	256
Japan—							
Chrysotile .. ..	4,915	3,891	3,640	4,517	5,126	5,575	6,047
Amphibole .. ..	3,002	43	542	216	244	—	—
Korea (Southern) .. ..	1,282	(a)	(a)	(a)	(a)	(a)	(a)
Turkey .. ..	136	54	241	200	246	241	79
Total* .. ..	31,000	32,000	49,000	68,000	74,000	80,000	98,000
<b>WORLD'S TOTAL*</b> ..	<b>550,000</b>	<b>632,000</b>	<b>749,000</b>	<b>849,000</b>	<b>767,000</b>	<b>1,049,000</b>	<b>1,185,000</b>

\*Excluding asbestos produced in Czechoslovakia, Roumania, U.S.S.R. and China.

(a) Information not available.

(b) Sales and shipments.

(c) Not included in total.

**EXPORTS OF ASBESTOS**  
*(Domestic Produce)*  
 (Long tons)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Unmanufactured—							
Crude and fibre ..	156	632	830	1,136	1,923	2,434	2,665
Waste, incl. asbestos ..	251	296	1,221	638	920	1,163	1,021
Packing, etc. ..	5,628	10,335	10,816	12,624	11,388	10,683	13,581
Cement products ..	23,815	39,443	80,181	107,790	116,393	107,978	123,078
Yarn and cloth ..	1,052	1,708	1,696	1,887	2,002	1,995	2,290
Other manufactures ..	3,158	7,243	6,780	8,908	8,593	7,851	12,818
Kenya and Uganda (c)—							
Manufactured .. ..	(£110)	37	202	5	(a)	3	—
Southern Rhodesia—							
Unmanufactured .. ..	44,867	55,129	50,290	60,503	65,007	65,874	61,012
Cement sheets .. ..	(£19,008)	(£23,631)	(£17,961)	(£29,734)	(£122,052)	(£134,635)	(£136,234)
Other manufactures .. ..	(£5,099)	(£5,426)	(£15,448)	(£10,446)	(£26,581)	(£40,487)	(£52,560)
Union of South Africa—							
Unmanufactured .. ..	35,983	42,762	57,827	57,127	82,244	90,695	112,620
Sheets .. ..	} (£81,086)	} (£34,057)	} (£40,700)	} (£42,876)	} (£61,032)	} (a)	} (a)
Other manufactures .. ..	} (£36,014)	} (£63,496)	} (£80,968)	} (£109,976)	} (a)	} (a)	} (a)
(S.A.)							
Canada—							
Crude .. .. ..	771	571	851	779	563	754	589
Fibre .. .. ..	187,290	192,172	199,726	211,676	162,179	258,748	289,816
Soots and waste .. ..	205,294	271,707	368,080	404,012	314,927	481,550	550,946
Manufactured .. ..	(£76,775)	(£149,583)	(£168,232)	(£143,960)	(£96,969)	(£237,958)	(£507,794)
Malaya (incl. re-exports)—							
Sheets .. .. ..	(a)	2	174	854	1,966	3,061	3,963
Other manufactures .. ..	(a)	9	5	25	93	59	104
Cyprus—							
Unmanufactured .. ..	3,445	6,606	7,021	7,980	11,098	15,471	15,088
Hong Kong (re-exports)—							
Manufactures .. ..	(a)	(£5,082)	(£11,608)	(£12,984)	(£44,188)	(£114,977)	(£326,041)
Australia—							
Unmanufactured .. ..	32	496	652	278	346	385	588
Packing (S. Australian) (d)	(£1,242)	(£2,846)	(£16,380)	(£4,493)	(£8,112)	(£15,636)	(a)
New Zealand—							
Unmanufactured .. ..	—	—	(a)	21	—	—	4
<b>FOREIGN COUNTRIES</b>							
Austria—							
Unmanufactured .. ..	(a)	(a)	283	29	61	21	29
Manufactured .. ..	(a)	(a)	2	44	50	65	69
Belgium-Luxemburg E.U.—							
Unmanufactured .. ..	(a)	(a)	(a)	36	685	626	692
Spun and woven .. ..	}	}	}	200	205	291	203
Paper and board .. ..	(a)	(a)	(a)	540	386	340	838
Cement sheets and tiles .. ..	}	}	}	25,275	35,614	58,229	82,011
Other manufactures .. ..	}	}	}	63	25	32	221
Czechoslovakia—							
Unmanufactured .. ..	}	}	10	(b) —	(a)	(a)	(a)
Spun and woven .. ..	}	}	4	(b) 33	(a) 44	(a)	(a)
Paper and board .. ..	}	}	197	(b) 108	(a) 51	(a)	(a)
Other manufactures .. ..	}	}	17	(b) 64	(a) 21	(a)	(a)
Finland—							
Unmanufactured .. ..	945	995	1,583	2,472	1,798	2,264	2,880
Manufactured .. ..	409	614	820	1,054	980	800	860
France—							
Unmanufactured .. ..	1	76	137	264	445	2,062	2,504
Spun and woven .. ..	25	199	329	498	510	539	727
Paper and board .. ..	40	226	360	346	306	287	433
Brake linings .. ..	3	21	66	(a)	(a)	(a)	(a)

(a) Information not available.

(b) January to October only.

(c) Crude asbestos is also exported but actual amounts are not available.

(d) Years ended 30 June of that stated.

EXPORTS OF ASBESTOS (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Germany—							
Unmanufactured ..				—	—	15	40
Spun and woven ..		(a)	(a)	—	9	48	
Paper and board ..				—	2	360	
Other manufactures ..				8	54	261	2,045
Italy—							
Unmanufactured ..	(a)	(a)	1,313	3,283	3,962	2,840	1,384
Manufactured ..	(a)	(a)	5,631	7,269	15,369	31,779	27,189
Netherlands—							
Unmanufactured ..	(a)	—	17	8	41	8	27
Cement sheets, tiles, etc.	(a)	—	1,098	262	450	862	1,811
Portugal—							
Unmanufactured ..	2	—	14	172	35	166	78
Spain—							
Unmanufactured ..	10	3	7	9	1	2	10
Manufactured ..	66	77	75	35	35	252	499
Sweden—							
Unmanufactured ..	—	—	109	—	1	240	43
Manufactured ..	7	33	55	20	14	19	31
Switzerland (including mica)—							
Unmanufactured ..	—	1	1	49	61	91	38
Manufactured ..	13	243	372	399	262	281	397
Yugoslavia—							
Unmanufactured ..	(a)	(a)	(a)	(a)	(a)	34	204
Morocco (French)—							
Unmanufactured ..	(a)	(a)	(a)	—	8	104	177
United States—							
Unmanufactured ..	7,634	9,831	1,863	5,830	15,733	16,876	12,766
Spun, woven and packing	1,486	2,078	1,876	1,406	1,079	1,085	1,051
Paper and board ..	673	583	963	1,463	—		
Brake linings ..	(£451,367)	(£627,251)	(£858,551)	(£655,638)	(£954,219)	(£1,223,801)	(£2,628,549)
Clutch facings ..	(£138,135)	(£124,081)	(£197,193)	(£136,709)	(£141,575)	(£206,083)	(£334,255)
Pipe covering and cement	1,629	985	2,469	1,428	3,872	1,021	1,809
Other manufactures ..	5,398	7,602	5,004	3,319	19,073	11,540	13,176
Argentina—							
Manufactured ..	..	19	4	(a)	(a)	(a)	(a)
Bolivia—							
Unmanufactured ..	..	60	—	139	145	180	163
Brazil—							
Unmanufactured ..	..	—	—	50	—	(a)	(a)
Peru—							
Manufactured ..	..	123	620	(a)	(a)	(a)	(a)
Turkey—							
Unmanufactured ..	..	(a)	(a)	295	171	372	28
							15

(a) Information not available.

IMPORTS OF ASBESTOS

(Less Re-exports)

(Long tons)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Unmanufactured—							
Crude and fibre	64,280	53,505	66,788	86,827	92,277	109,498	121,894
Waste, including							
asbestic .. ..	1,446	1,217	4,397	5,526	3,231	10,208	10,490
Packing, etc. .. ..	7	15	—	9	7	(a)	(a)
Cement products .. ..	—	932	2,050	1,030	3,328	6,521	265
Other manufactures .. ..	10	4	37	145	103	150	2
Anglo-Egyptian Sudan—							
Sheets, pipes, etc. .. ..	517	701	877	3,097	3,485	2,249	3,861
Kenya (—) —							
Manufactured .. ..	120	551	1,149	3,149	3,399	3,020	3,797
Mauritius—							
Manufactured .. ..	(£1,746)	(a)	(£5,317)	(£1,748)	26	16	178
Northern Rhodesia—							
Cement sheets, etc. .. ..	(a)	(a)	(a)	(a)	(£165,022)	(£224,620)	(£293,559)
Nyasaland—							
Cement sheets, etc. .. ..	(a)	494	1,033	1,231	1,199	1,817	726
Seychelles—							
Cement sheets .. ..	—	22	83	269	272	131	415
Southern Rhodesia (total imports)—	.	.	.	.	.	.	.
Cement sheets .. ..	(£7,693)	(£4,764)	(£3,645)	(£8,524)	(£26,307)	(£20,274)	(£49,753)
Other manufactures .. ..	(£29,195)	(£18,544)	1,150	2,583	3,667	4,083	3,400
South West Africa—							
Packing (£. S.A.) .. ..	(a)	(£835)	(£2,584)	(£2,293)	(£4,467)	(a)	(a)
Cement sheets (£. S.A.) .. ..	(£8,541)	(£7,710)	(£19,494)	(£18,286)	(£14,882)	(a)	(a)
Other manufactures (£. S.A.) .. ..	(£2,686)	(£4,680)	(£7,659)	(£16,777)	(£18,276)	(a)	(a)
Tanganyika—							
Manufactured .. ..	132	122	915	1,389	2,765	3,575	3,316
Uganda—							
Manufactured .. ..	(f)	(f)	(f)	(f)	1,284	1,220	1,315
Union of South Africa—							
Packing (£. S.A.) .. ..	(£68,864)	(£95,175)	(£119,372)	(£98,720)	(£93,059)	(d) (£3,891)	(a)
Cement products (£. S.A.) .. ..	(£300)	(£53)	(£26,185)	(£21,690)	(£9,266)	(£9,124)	(a)
Other manufactures (£. S.A.) .. ..	(£5,039)	(£8,987)	(£55,110)	(£140,419)	(£200,162)	(£54,338)	(a)
Zanzibar—							
Manufactured .. ..	(a)	(a)	(a)	198	64	422	121
Canada (c)—							
Packing .. ..	96	100	109	77	114	149	184
Other manufactures .. ..	(£474,770)	(£494,032)	(£876,764)	(£896,673)	(£643,344)	(£797,705)	(£1,056,859)
Newfoundland (b)—							
Asbestos and manufac-tures .. ..	(£12,082)	(£13,387)	(£23,233)	(£21,103)	(b)	(b)	(b)
British West Indies—							
Barbados—							
Cement sheets .. ..	(£3,988)	(£10,638)	(£18,818)	(£13,040)	(£14,268)	(£17,238)	(£24,155)
Bermuda—							
Sheets, etc. .. ..	(a)	(a)	(a)	(£8,228)	(£7,114)	(£2,400)	(£12,527)
Grenada—							
Manufactured .. ..	(£8)	(£4,072)	(£1,278)	(£4,446)	(d) (£264)	(£829)	(£1,357)
Jamaica—							
Manufactured .. ..	(a)	(a)	(£15,279)	(£47,525)	(£35,150)	(£55,789)	(£108,549)
Trinidad and Tobago—							
Cement products .. ..	1,274	964	8,797	2,176	1,730	856	2,051
Other manufactures .. ..	145	143	104	254	174	215	258

(a) Information not available.

(b) Years ended March 31 of year following that stated. Included with Canada from April 1, 1949.

(c) Including Newfoundland from April 1, 1949.

(d) Excess of re-exports.

(e) Including Uganda up to 1948 inclusive.

(f) Included with Kenya up to 1948 inclusive.

IMPORTS OF ASBESTOS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES (Cont.)</b>							
British Guiana—							
Cement sheets, etc. ..	(a)	414	385	704	(a)	(a)	542
Other manufactures ..	(a)	47	32	11	(a)	(a)	255
Aden—							
Cement sheets ..	21	29	38	—	—	—	—
Other manufactures ..	(£83)	(£897)	(£1,227)	—	—	—	—
Burma—							
Packing .. ..	(a)	(b)	(£663)	(a)	(a)	(a)	(a)
Cement products ..	(a)	(b)	(£22)	(a)	(a)	(a)	(a)
Other manufactures ..	(a)	(b)	(£185)	(a)	(a)	(a)	(a)
India—							
Unmanufactured ..	5,527	8,355	3,794	3,644	7,645	10,783	10,925
Cement products ..	453	258	1,225	1,041	9,958	6,213	4,391
Packing .. ..	(£35,788)	(£51,372)	(£57,226)	(£74,421)	(£91,540)	(£24,652)	(£32,91)
Other manufactures ..	(£112,701)	(£129,929)	(£138,997)	(£60,146)	(£202,061)	(£88,121)	(£217,788)
Malaya (c)—							
Sheets .. ..	(a)	1,780	6,396	12,042	6,429	8,267	12,536
Other manufactures ..	(a)	645	1,412	1,156	1,341	2,402	4,921
Cyprus—							
Sheets, pipes, etc. ..	(a)	89	754	998	711	540	3,680
Other manufactures ..	(£746)	(£3,838)	(£3,452)	(£2,313)	(£813)	(£1,691)	(£411)
Hong Kong (total imports)—							
Manufactures .. ..	(a)	(£9,185)	(£29,799)	(£17,261)	(£71,024)	(£155,009)	(£477,201)
Palestine—							
Manufactured .. ..	(£9,531)	(£46,558)	(a)	(a)	(f)	(f)	(f)
Sarawak—							
Sheets .. .. ..	(a)	(a)	(a)	138	124	233	224
Australia—							
Crude .. ..	9,131	18,697	14,246	14,857	14,767	29,536	25,289
Packing (£ Australian) (g)	(£198,958)	(£198,699)	(£165,140)	(£343,230)	(£363,820)	(£244,018)	(a)
New Zealand—							
Unmanufactured .. ..	3,471	1,651	2,295	1,784	1,790	3,785	2,348
Sheets .. .. ..	(d)	89	(d) 610	(d) 47,491	(d) 467,878	(d) 310,094	(d) 947,426
Lining and packing (£ N.Z.) .. ..	(£66,932)	(£70,256)	(£96,919)	(a)	(£92,816)	(£90,231)	(£112,264)
Irish Republic—							
Manufactured .. ..	800	1,717	2,036	2,184	6,426	5,763	8,764
<b>FOREIGN COUNTRIES</b>							
Austria—							
Unmanufactured .. ..	(a)	(a)	833	1,563	1,989	3,441	8,458
Manufactured .. ..	(a)	(a)	7	65	75	39	42
Belgium-Luxemburg E.U.—							
Unmanufactured .. ..					17,111	14,563	21,510
Spun and woven .. ..					175	160	148
Paper and board .. ..					{ (a) 535	749	466
Cement sheets and tiles .. ..					624	25	128
Other manufactures .. ..					173	188	389
Bulgaria—							
Unmanufactured .. ..	—	—	(a)	(a)	(a)	(a)	(a)
Manufactured .. ..	1	34	(a)	(a)	(a)	(a)	(a)
Czechoslovakia—							
Unmanufactured .. ..					886	2,146	(a)
Spun and woven .. ..					2	11 (e) 4	(a)
Paper and board .. ..					6	45 (e) 304	(a)
Other manufactures .. ..					30	77 (e) 75	(a)
Denmark—							
Unmanufactured .. ..	1,152	3,405	6,865	6,083	4,930	9,828	8,257
Spun and woven .. ..	5	120	106	128	114	107	113
Paper and board .. ..	121	193	235	335	454	326	502
Packing, etc. .. ..	25	367	267	219	174	270	58
Cement sheets .. ..	—	36	30	19	20	5,338	52

(a) Information not available.

(b) February to September only.

(c) Total imports.

(d) Square yards.

(e) January to October only.

(f) See "Israel" under Foreign Countries.

(g) Years ended June 30 of that stated.

## IMPORTS OF ASBESTOS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Finland (b)—							
Unmanufactured ..	2	190	222	517	548	972	1,132
Manufactured ..	13	251	416	287	218	209	587
France—							
Unmanufactured ..	9,628	36,735	18,722	20,369	24,923	33,028	39,815
Spun and woven ..	1	672	84	155	88	88	103
Paper and board ..	25	31	468	122	48	142	136
Brake linings, etc. ..	5	86	34	(a)	(a)	(a)	(a)
Germany (Federal)—							
Unmanufactured ..				3,233	7,527	13,638	24,928
Spun and woven ..				{ 12	153	405	
Paper and board ..				133	623	348	
Other manufactures ..				2	10	28	
Greece .. ..	—	49	62	102	191	175	89
Iceland—							
Unmanufactured ..	12	—	(a)	(a)	34	31	34
Manufactured ..	230	230	(a)	(a)	69	124	27
Italy—							
Unmanufactured ..	(a)	(a)	1,916	2,065	2,755	6,166	9,285
Manufactured ..	(a)	(a)	263	366	340	612	1,107
Netherlands—							
Unmanufactured ..	(a)	2,353	3,492	4,118	2,608	6,825	6,140
Cement sheets, tiles, etc. ..	(a)	4,358	4,910	4,890	13,618	26,343	32,142
Other manufactures ..	(a)	(a)	(a)	1,209	1,336	1,283	1,342
Norway—							
Unmanufactured ..	740	1,397	1,908	1,312	2,023	2,634	3,302
Manufactured ..	319	679	836	1,048	1,065	745	1,406
Portugal—							
Unmanufactured ..	1,128	2,531	1,268	1,510	2,548	2,286	1,453
Manufactured ..	33	62	72	122	48	50	(a)
Spain—							
Unmanufactured ..	1,317	4,497	2,467	315	1,168	4,315	4,615
Manufactured ..	334	582	237	96	324	253	296
Sweden—							
Unmanufactured ..	7,665	5,161	8,259	3,563	8,957	10,084	5,198
Manufactured ..	585	1,923	1,951	1,923	1,496	1,811	2,124
Switzerland (including mica)—							
Unmanufactured ..	988	2,633	2,065	2,062	3,454	4,230	5,908
Manufactured ..	105	1,279	1,255	1,473	1,002	1,491	2,157
Yugoslavia—							
Unmanufactured ..	(a)	(a)	(a)	(a)	(a)	3,893	295
Manufactured ..	(a)	(a)	(a)	(a)	(a)	195	142
Algeria—							
Unmanufactured ..	—	21	58	448	488	1,527	1,652
Manufactured ..	55	300	166	188	141	153	173
Belgian Congo—							
Unmanufactured ..	—	—	—	(a)	(a)	1,323	(a)
Egypt—							
Unmanufactured ..	295	(b) 154	(b) 155	(b) 470	(b) 316	854	(a)
Paper and board ..	203	(b) 186	(b) 70	(b) 93	(b) 188	(a)	(a)
Other manufactures ..	126	182	(b) 137	(b) 179	(b) 205	(a)	(a)
Costa Rica—							
Unmanufactured ..	60	76	73	14	20	(a)	(a)
Honduras—							
Manufactured ..	940	434	(a)	(a)	(a)	(a)	(a)
Mexico—							
Unmanufactured ..	3,230	3,334	4,315	3,853	3,485	5,343	(a)
Manufactured ..	788	840	750	1,001	(a)	(a)	(a)
Netherlands West Indies—							
Manufactured ..	2,691	3,140	3,974	5,113	4,497	(a)	(a)

(a) Information not available.

(b) Total imports.

IMPORTS OF ASBESTOS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
United States—							
Unmanufactured—							
Crude .. ..	17,264	12,391	32,100	34,008	41,035	25,919	31,518
Mill fibre .. ..	122,726	136,817	145,004	157,954	113,172	157,571	201,137
Other .. ..	193,977	257,634	354,003	386,504	305,884	446,128	447,589
Manufactured .. ..	138	388	771	545	375	3,310	851
Argentina—							
Spun and woven .. ..	220	898	902	1,100	305	341	1,019
Paper and board .. ..	9,655	4,803	7,119	7,577	5,825	9,152	18,043
Brazil (total imports)—							
Unmanufactured .. ..	1,992	3,046	3,130	4,893	4,208	8,301	(a)
Manufactured .. ..	930	2,054	2,088	1,586	1,587	(a)	(a)
Chile—							
Manufactured .. ..	1,676	1,970	2,462	2,412	2,444	2,624	2,759
Colombia—							
Unmanufactured .. ..	(a)	1,745	(a)	(a)	(a)	(a)	(a)
Manufactured .. ..	(a)	446	(a)	(a)	(a)	(a)	(a)
Peru—							
Unmanufactured .. ..	(a)	(a)	(a)	475	725	798	(a)
Manufactured .. ..	(a)	(a)	(a)	321	145	192	(a)
Uruguay .. ..	487	634	666	979	1,518	1,708	(a)
Venezuela—							
Unmanufactured .. ..	57	175	771	905	(a)	(a)	(a)
Manufactured .. ..	5,409	20,455	24,251	(a)	(a)	(a)	(a)
China .. ..	(a)	562	764	712	(a)	(a)	(a)
Israel—							
Manufactured .. ..	(b)	(b)	(b)	(b)	(\$38,048)	(\$35,670)	(a)
Japan—							
Unmanufactured .. ..	(a)	(a)	(a)	(a)	1,181	(a)	(c) 19,711
Syria and Lebanon—							
Cement sheets, etc. .. ..	—	284	(a)	(a)	(a)	(a)	(a)
Other manufactures .. ..	7	46	(a)	(a)	(a)	(a)	(a)
Turkey—							
Manufactured .. ..	112	92	169	216	487	1,541	2,119

(a) Information not available.

(b) See "Palestine" under British Countries.

(c) Including crude mica.

# BARIUM MINERALS

## PRODUCTION OF BARIUM MINERALS\*

(Long tons)

Producing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Great Britain—							
Barytes, unground ..	53,874	68,101	46,327	}	88,228	92,389	73,813
Witherite, unground ..	10,766	14,376	14,727				59,375
Barytes—							
Ground, bleached ..	3,062	2,672	3,370	3,655	19	—	—
do. unbleached ..	25,513	25,776	30,222	29,881	24,925	22,796	29,185
Antigua (Leeward Islands) ..	357	51	14	—	—	—	—
Canada .. ..	124,633	107,517	114,888	85,488	42,088	68,908	75,463
Southern Rhodesia .. ..	—	171	18	50	480	257	83
South West Africa .. ..	—	—	—	—	47	—	—
Swaziland .. ..	(b) 78	(b) 220	(c) 169	(c) 97	(c) 102	(c) 434	469
Union of South Africa .. ..	2,174	2,289	2,629	1,706	2,209	2,232	2,006
India .. ..	24,655	29,091	24,310	23,143	21,118	11,963	8,224
Palestine .. ..	23	3	(a)	(a)	(a)	(a)	(a)
Australia .. ..	3,447	7,589	5,413	3,770	5,464	5,933	6,178
Irish Republic—							
Barytes, refined .. ..	6,690	6,130	6,298	3,197	3,597	25,179	(a)
do. unrefined .. ..	9,760	7,213	6,425	3,727	2,277	5,831	(a)
<b>FOREIGN COUNTRIES</b>							
Austria .. .. ..	—	803	1,912	3,781	8,130	9,959	9,493
France .. .. ..	13,577	34,024	53,118	55,826	29,817	32,822	26,100
Germany .. .. ..	(a)	(f) 1,968	(f) 10,388	(f) 18,767	(h) 178,600	(h) 305,985	(h) 410,884
Greece .. .. ..	—	—	(i) 12,783	18,411	15,359	20,471	29,365
Italy .. .. ..	11,747	31,624	67,650	61,251	45,880	47,382	73,920
Portugal .. .. ..	337	283	1,192	400	420	126	708
Spain .. .. ..	9,717	12,052	19,504	13,929	7,544	10,653	10,665
Sweden (Sales) .. ..	1,230	497	1,298	1,884	908	49	(a)
Yugoslavia (exports) .. ..	(a)	(a)	(a)	(a)	(a)	11,880	9,695
Algeria .. .. ..	2,734	7,320	23,590	13,885	18,570	19,580	20,690
Egypt .. .. ..	53	—	164	—	30	—	40
Morocco (French) .. .. ..	—	—	—	—	—	4,834	3,210
Tunis .. .. ..	69	404	1,466	224	619	25	10
Cuba (i) .. .. ..	228	(a)	(a)	322	(a)	(a)	(a)
United States .. .. ..	618,152	647,521	789,481	694,501	652,954	620,905	768,454
Argentina .. .. ..	8,449	(a)	(a)	(a)	(a)	(a)	(a)
Brazil .. .. ..	607	10,163	13,750	(a)	(a)	(a)	(a)
Chile .. .. ..	3,110	3,693	(a)	2,107	1,437	1,246	1,053
Peru .. .. ..	4,173	7,073	6,456	1,759	6,250	2,983	(a)
Japan .. .. ..	7,421	709	929	3,281	9,126	14,232	16,440
<b>TOTAL † .. ..</b>	<b>1,000,000</b>	<b>1,040,000</b>	<b>1,300,000</b>	<b>1,180,000</b>	<b>1,220,000</b>	<b>1,350,000</b>	<b>1,630,000</b>

\* Barytes unless otherwise stated.

† Excluding barytes produced in Czechoslovakia, Norway, U.S.S.R., China and Korea.

(a) Information not available.

(b) Unground.

(c) Ground.

(d) Bavaria and Saxony only.

(e) April to December only.

(f) French Zone only.

(g) Bizonal area only.

(h) Federal Republic.

(i) Exports.

EXPORTS OF BARIUM MINERALS, ETC.\*

(Domestic Produce)

(Long tons)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Unground barytes ..	30	160	93	185	—	(a) 466	(a) 191
Ground barytes ..	941	629	1,539	4,718	6,727		
Dioxide ..	68	183	10	31	44		
Barium, compounds, excluding blanc fixe ..	2,778	3,704	3,140	3,653	2,381		
Southern Rhodesia—							
Barytes .. .. ..	34	81	143	135	570	177	222
South West Africa—							
Barytes .. .. ..	—	—	—	—	36	—	—
Antigua (Leeward Is.)—							
Barytes .. .. ..	357	51	14	—	—	—	—
Canada—							
Unground .. .. ..	41,000	75,965	67,300	34,461	35,470	(a) (a)	(a) (a)
Ground .. .. ..	54,000	29,542	55,900	51,063	8,688		
Hong Kong (re-exports)—							
Barytes .. .. ..	(a)	(a)	(a)	(a)	9	13	—
India—							
Unground barytes ..	—	—	14,629	14,231	14,535	8,268	5,085
Australia—							
Unground barytes ..	..	1,217	{ 1,143	629	326	952	190
Ground barytes ..	..		{ 482	1,889	1,280	1,046	2,334
Sulphate (b) ..	..		{ 1	68	22	1	3
Irish Republic—							
Unground barytes ..	2,330	732	80	594	(a) 2,277	(a) 2,241	(a) 766
Ground barytes ..	4,226	6,473	3,205	2,504			
<b>FOREIGN COUNTRIES</b>							
Belgium-Luxemburg E.U.—							
Barytes and witherite ..	(a)	(a)	(a)	114	252	127	5
Carbonate .. .. ..	(a)	(a)	(a)	(a)	(a)	(a)	523
Chloride .. .. ..	(a)	(a)	(a)	717	512	140	1,338
Sulphate .. .. ..	(a)	(a)	(a)	(a)	(a)	1,166	1,545
Sulphide .. .. ..	(a)	(a)	(a)	17	71	15	10
Czechoslovakia—							
Barytes .. .. ..	(a)	—	35	(d) 52	(a)	(a)	(a)
Sulphate .. .. ..	(a)	35	50	(d) 77	(a)	(a)	(a)
France—							
Barytes (c) .. .. ..	—	139	1,665	1,306	646	933	2,616
Precipitated carbonate ..	—	21	1,459	1,667	1,561	2,286	1,965
Barium compounds ..	64	381	345	847	1,722	1,235	1,276
Germany (Federal)—							
Barytes and celestite ..				{ 18,156	23,527	109,748	
Witherite and strontianite ..				{ 185	20	18	{ 130,752
Carbonate .. .. ..				{ 205	645	3,934	7,694
Chloride .. .. ..				{ 225	1,405	2,668	3,642
Nitrate .. .. ..				{ 45	28	37	(e) 199
Sulphate .. .. ..				{ 234	2,174	7,480	(e) 6,924
Greece—							
Barytes .. .. ..	(a)	—	12,783	18,349	23,396	19,793	25,728
Italy—							
Barytes .. .. ..	(a)	(a)	607	1,296	3,158	11,145	36,824
Sulphate .. .. ..	(a)	(a)	10,243	8,886	11,651	1,097	823
Netherlands—							
Barytes .. .. ..	(a)	—	16	132	148	—	—
Sweden—							
Barytes and witherite ..	15	—	689	10	5	—	—

\* For Lithopone, see "Zinc," pages 326-328.

(a) Information not available.

(b) Years ended June 30 of that stated.

(c) Including precipitated sulphate.

(d) January to October only.

(e) January to September only.

(f) Calendar year.

EXPORTS OF BARIUM MINERALS, ETC.\* (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Yugoslavia—							
Unground barytes ..	..	(a) (a)	(a) (a)	(a) (a)	(a) (a)	11,865 15	6,860 2,835
Ground barytes ..	..						
Algeria—							
Barytes .. .. ..	..	561	4,480	17,245	13,956	11,037	18,099
Morocco (French)—							
Barytes .. .. ..	..	—	—	—	—	—	591
Tunis—							
Barytes .. .. ..	..	(a)	(a)	(a)	37	(a)	(a)
Cuba—							
Barytes .. .. ..	..	228	(a)	(a)	322	—	(a)
United States—							
Witherite.. .. ..	..	—	—	(a)	(a)	(a)	(a)

\* For Lithopone, see "Zinc," pages 326-328.

(a) Information not available.

**IMPORTS OF BARIUM MINERALS, ETC.\***

(Less Re-exports)

(Long tons)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Unground barytes ..	1,693	19,619	13,224	10,131	14,973	17,390	38,673
Ground barytes ..	3,968	15,054	17,673	9,934	14,385	17,493	19,616
Barium compounds, excluding blanc fixe ..	—	1	6	1,340	573	279	1,179
Union of South Africa—							
Barytes ..	207	604	664	601	868	254	(a)
Carbonate and dioxide ..	105	311	251	95	195	126	(a)
Canada—							
Barytes .. ..	1,027	1,381	1,551	1,128	838	1,865	954
Blanc fixe .. ..	311	355	274	624	747	644	331
British West Indies—							
Trinidad and Tobago—							
Barytes .. ..	19,327	9,421	16,642	22,898	21,573	20,167	24,687
Hong Kong (total imports)—							
Barytes .. ..	(a)	(a)	(a)	(a)	176	167	147
India—							
Barytes .. ..	11	9	70	11	—	6	101
Australia (b)—							
Barytes .. ..	14	—	—	—	3	57	43
Carbonate .. ..	(a)	180	51	299	55	326	328
Chloride .. ..	146	49	100	104	84	128	115
Sulphate .. ..	(a)	154	169	68	27	213	747
Other compounds ..	(a)	3	25	19	12	21	50
New Zealand—							
Barytes .. ..	1,156	1,551	505	1,474	668	1,147	999
Irish Republic—							
Ground barytes, including blanc fixe .. ..	—	4	6	26	20	235	675
<b>FOREIGN COUNTRIES</b>							
Austria—							
Barytes .. ..	(a)	(a)	1,316	1,769	5,490	6,725	9,817
Carbonate .. ..	(a)	(a)	25	90	180	373	400
Chloride .. ..	(a)	(a)	(a)	(a)	122	64	131
Belgium-Luxemburg E.U.—							
Barytes and witherite ..	(a)	(a)	(a)	33,836	3,663	21,314	29,444
Carbonate .. ..	(a)	(a)	(a)	1,458	738	2,334	3,188
Chloride .. ..	(a)	(a)	(a)	186	347	842	560
Sulphate .. ..	(a)	(a)	(a)	(a)	(a)	6,796	(a)
Sulphide .. ..	(a)	(a)	(a)	(a)	(a)	—	5
Czechoslovakia—							
Unground barytes ..	(a)	{	—	1,823	(c)	(a)	(a)
Ground barytes ..			—	10	(c)	(a)	(a)
Carbonate .. ..			2	357	(c)	(a)	(a)
Chloride .. ..			—	416	(c)	(a)	(a)
Sulphate .. ..			(a)	235	(c)	246	(a)
Denmark—							
Witherite and carbonate ..	100	135	53	172	73	125	299
Chloride .. ..	1	190	73	54	113	105	190
Sulphate .. ..	47	466	1,050	1,318	716	915	1,937
Finland (total imports)—							
Barytes .. ..	10	396	2	181	191	233	642
Chloride .. ..	1	63	128	20	—	5	25
Carbonate .. ..	10	76	25	23	—	15	59
Sulphate .. ..	7	43	35	79	230	135	247

\* For Lithopone, see "Zinc," pages 329-332.

(a) Information not available.

(b) Years ended June 30 of that stated up to 1948 inclusive.

(c) January to October only.

## IMPORTS OF BARIUM MINERALS, ETC. (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
FOREIGN COUNTRIES (Cont.)							
France—							
Barytes .. .. .	175	1,197	8,015	12,272	21,099	41,567	37,399
Witherite .. .. .	242	349	93	(a)	(a)	(a)	(a)
Chloride .. .. .	63	434	45	—	—	5	109
Hydrate .. .. .	—	2	11	(a)	15	27	10
Nitrate .. .. .	—	4	—	(a)	(a)	(a)	(a)
Precipitated carbonate ..	25	806	850	104	—	2	—
Sulphate .. .. .	30	328	552	238	210	339	340
Sulphide .. .. .	14	46	50	(a)	(a)	(a)	(a)
Germany (Federal)—							
Barytes and celestite ..	(a)	(a)	(a)	—	—	220	—
Witherite and strontianite ..	(a)	(a)	(a)	—	2	—	1,254
Italy—							
Barytes .. .. .	(a)	(a)	—	2	—	13	27
Witherite .. .. .	(a)	(a)	(a)	(a)	(a)	(a)	501
Carbonate, precipitated ..	(a)	(a)	(a)	10	21	1	197
Sulphate, precipitated ..	(a)	(a)	10	21	1	33	234
Netherlands—							
Barytes .. .. .	(a)	1,610	14,024	9,202	10,500	26,236	20,384
Carbonate .. .. .	(a)	(a)	(a)	592	568	700	1,044
Sulphate .. .. .	(a)	(a)	(a)	2,711	2,230	3,752	5,388
Blanc fixe .. .. .	(a)	746	1,117	653	596	615	660
Poland—							
Carbonate .. .. .	—	5	(a)	(a)	(a)	(a)	(a)
Portugal—							
Barytes .. .. .	—	—	—	—	—	—	(a)
Carbonate .. .. .	—	5	11	3	—	—	2
Chloride .. .. .	130	75	46	27	30	77	67
Sulphate .. .. .	31	83	79	32	49	30	76
Sweden—							
Barytes and witherite ..	3	968	2,557	1,883	812	1,966	(a)
Sulphate .. .. .	(a)	(a)	(a)	(a)	927	903	(a)
Algeria—							
Barytes (incl. precipitate) ..	48	139	69	86	1	357	75
Witherite (incl. precipitate) ..	—	—	—	15	25	45	35
Mexico—							
Barytes .. .. .	218	31	473	123	(a)	(a)	(a)
Witherite .. .. .	67	111	(a)	(a)	(a)	(a)	(a)
Chloride .. .. .	7	24	(a)	(a)	(a)	(a)	(a)
United States—							
Unground barytes ..	50,798	39,877	47,520	47,504	23,373	52,126	47,103
Ground barytes ..	1	—	—	—	188	605	143
Witherite .. .. .	800	1,008	10	2,205	1,886	1,865	1,800
Sulphate .. .. .	—	—	(a)	(a)	1	47	11
Barium compounds ..	90	—	64	135	85	419	2,079
Argentina—							
Barytes .. .. .	—	1,099	(a)	(a)	(a)	(a)	(a)
Sulphate .. .. .	63	623	(a)	(a)	(a)	(a)	(a)
Barium compounds ..	651	829	(a)	(a)	(a)	(a)	(a)
Brazil—							
Chloride .. .. .	83	121	52	26	110	(a)	(a)
Sulphate .. .. .	171	579	442	250	488	(a)	(a)
Chile—							
Sulphate .. .. .	10	3	(a)	(a)	(a)	(a)	(a)
Carbonate .. .. .	15	29	(a)	(a)	(a)	(a)	(a)
Chloride .. .. .	101	103	(a)	(a)	(a)	(a)	(a)
Oxides .. .. .	32	16	(a)	(a)	(a)	(a)	(a)
Colombia—							
Chloride .. .. .	1	4	(a)	(a)	(a)	(a)	(a)
Sulphate .. .. .	795	1,613	(a)	(a)	594	103	(a)

(a) Information not available.

IMPORTS OF BARIUM MINERALS, ETC. (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Peru— Barium compounds ..	65	33	(a)	(a)	(a)	(a)	(a)
Uruguay— Oxides .. ..	(a)	(a)	(a)	23	50	44	(a)
Sulphate .. ..	(a)	(a)	(a)	432	250	681	(a)
Venezuela— Barytes .. ..	35,219	23,919	43,987	25,218	(a)	(a)	(a)
Sulphate .. ..	34	3	5	488	(a)	(a)	(a)
Japan— Barytes .. ..	5,575	—	—	—	—	3	(a)
Turkey— Barytes .. ..	4	98	37	20	32	28	50
Sulphate .. ..	—	—	—	25	8	(a)	
Barium compounds ..	107	8	36	70	48	72	71

(a) Information not available.

**BERYL**  
**PRODUCTION OF BERYL**  
 (Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Northern Rhodesia ..	—	—	—	—	—	5	4
Southern Rhodesia ..	—	—	5	51	88	832	991
South West Africa ..	5	5	—	2	235	648	741
Tanganyika .. ..	—	—	—	44	1	—	(a)
Uganda .. ..	(b) 3	—	23	—	16	70	2
Union of South Africa ..	—	—	—	—	220	830	583
India .. ..	(a)	(a)	(a)	(a)	(a)	(a)	211
Australia .. ..	46	23	53	55	35	23	112
<b>FOREIGN COUNTRIES</b>							
Portugal .. ..	(a)	(a)	(a)	(a)	3	51	100
Morocco (French) .. ..	—	—	—	50	157	55	83
Mozambique .. ..	2	22	80	16	133	260	226
United States (Shipments)	34	90	130	89	309	499	432
Argentina .. ..	187	(a)	(a)	(a)	(a)	(a)	(a)
Brazil .. ..	502	1,274	1,011	1,422	2,239	2,166	(a)

(a) Information not available.

(b) Exports.

**EXPORTS OF BERYL**  
*(Domestic Produce)*  
 (Long tons)

Exporting Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Southern Rhodesia ..	—	—	—	—	22	743	1,244
South West Africa ..	—	—	53	57	165	360	395
Uganda .. ..	3	—	12	39	33	16	—
Union of South Africa ..	—	—	—	—	279	808	801
India .. ..	(a)	(a)	(a)	(a)	(a)	(a)	351
<b>FOREIGN COUNTRIES</b>							
Portugal .. ..	(a)	(a)	(a)	(a)	(a)	25	115
Morocco (French) .. ..	—	—	—	—	(a)	118	87
Brazil .. ..	502	1,273	1,011	1,755	3,030	2,584	(a)

(a) Information not available.

**IMPORTS OF BERYL**  
*(Less Re-exports)*  
 (Long tons)

Importing Country	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES</b>							
United States .. ..	1,073	889	685	1,194	3,403	4,181	3,854

# BISMUTH

## PRODUCTION OF BISMUTH ORE, ETC.\*

(Cwt.)

Producing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Southern Rhodesia— Bismuth .. ..	—	—	—	2	—	—	—
South West Africa— Ore .. ..	—	—	—	—	19	286	4
Uganda— Ore ( <i>Bi content</i> ) ..	—	—	—	78	148	57	57
Union of South Africa— Ore ( <i>Bi content</i> ) ..	12	14	—	9	119	142	60
Canada— Metal and content of bullion exported ..	1,695	2,147	2,539	2,145	919	1,711	2,089
Australia— Concentrates ( <i>Bi content</i> )	64	22	86	80	13	18	26
<b>FOREIGN COUNTRIES</b>							
France— Mispickel ( <i>Bi content</i> ) ..	—	—	1,080	1,100	1,161	1,535	(a)
Spain— Ore ( <i>Bi content</i> ) (b) ..	188	421	214	153	294	185	211
Sweden— Metal .. ..	—	245	216	—	—	—	—
Yugoslavia— Bismuth .. ..	(a)	(a)	(a)	(a)	(a)	1,091	1,728
Belgian Congo— Ore ( <i>Bi content</i> ) ..	(a)	(a)	16	9	11	13	4
Mozambique— Ore ( <i>Bi content</i> ) ..	—	—	—	—	8	23	14
Mexico— Ore ( <i>Bi content</i> ) ..	3,170	498	5,021	3,161	6,089	5,192	6,656
Bolivia (exports)— Ore, etc. ( <i>Bi content</i> ) ..	302	549	1,751	692	160	480	1,358
Peru— Lead-tin-antimony bars ( <i>Bi content</i> ) .. ..	—	1,765	60	930	—	—	(a)
Metal .. ..	6,052	4,366	4,602	4,052	4,246	4,465	(a)
Korea (South)— Bismuth .. ..	(a)	(a)	(a)	2,047	3,405	(a)	(a)

\* Bismuth ore is also produced in Germany, Roumania, Argentina, Burma and China and the metal recovered as a by-product in the United Kingdom, U.S.S.R., United States and Japan.

(a) Information not available.

(b) Revised.

EXPORTS OF BISMUTH, ETC.

(Domestic Produce)

(Cwt.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Bismuth .. ..	(a) 11	(a) 413	(a) 841	(a) 2,208	(a) 3,553	3,830	3,572
Bismuth salts .. ..						3,064	2,326
South West Africa—							
Ore .. ..	—	—	—	—	—	230	4
Uganda—							
Ore ( <i>Bi content</i> ) ..	—	—	—	53	97	72	33
Union of South Africa—							
Bismuth .. .. ..	(a)	15	—	9	166	290	110
Canada—							
Metal .. .. ..	732	1,714	1,089	1,411	1,589	(a)	(a)
Hong Kong (re-exports)—							
Ore .. .. ..	(a)	40	215	(a)	—	—	—
Australia—							
Concentrates .. ..	(a)	(a)	(a)	80	80	20	—
<b>FOREIGN COUNTRIES</b>							
Belgium-Luxemburg E.U.—							
Bismuth .. .. ..	(a)	(a)	(a)	571	472	216	79
Salts .. .. ..	(a)	(a)	(a)	—	708	—	40
France—							
Bismuth salts .. ..	—	45	63	(a)	(a)	(a)	(a)
Germany (Federal)—							
Bismuth salts .. ..	(a)	(a)	(a)	2	4	756	(b) 681
Yugoslavia—							
Bismuth .. .. ..	(a)	(a)	(a)	(a)	(a)	740	1,352
Mexico—							
Bars, etc. ( <i>Bi content</i> ) ..	3,176	1,499	3,871	(a)	(c) 2,332	(c) 3,618	(a)
United States—							
Matte, residues, etc. ..	—	839	(a) 2,150	(a) 3,143	(a) 1,704	70	106
Metal and alloys ..	1,032	1,367	(a)	(a)	(a)	1,779	1,312
Salts .. .. ..	1,102	(a)	(a)	(a)	(a)	(a)	(a)
Bolivia—							
Ore, etc. ( <i>Bi content</i> ) ..	302	549	1,751	692	160	480	(a)
Chile—							
Bismuth .. .. ..	—	—	(a) 87	(a) 29	(a)	(a)	(a)
Peru—							
Bars, etc. ( <i>Bi content</i> ) ..	6,277	6,334	4,311	5,334	4,376	4,495	(a)

(a) Information not available.

(b) January to September only.

(c) Revised.

IMPORTS OF BISMUTH, ETC.

(Less Re-exports)

(Cwt.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Bismuth .. ..	1,990	3,171	2,407	3,938	3,227	3,383	4,977
Canada—							
Bismuth .. ..	—	(£2,531)	(£3,001)	36	(c) 1,489	(c) 2,435	5
Bismuth salts .. ..				(£1,730)	(£3,497)	(£6,411)	(£7,623)
Hong Kong (total imports)—							
Ore .. .. ..	(a)	40	215	(a)	(a)	(a)	(a)
Australia—							
Bismuth .. .. ..	(a)	8	314	463	263	125	188
Bismuth salts .. ..	373	174	32	120	124	43	48
New Zealand—							
Bismuth and its salts ..	(NZ 4,439)	(NZ 2,785)	(NZ 1,386)	—	92	120	66
<b>FOREIGN COUNTRIES</b>							
Belgium-Luxemburg E.U.—							
Bismuth .. ..	(a)	(a)	(a)	20	—	20	39
Bismuth salts .. ..	(a)	(a)	(a)	511	157	276	128
France—							
Bismuth .. .. ..	1,181	2,057	1,728	(a)	(a)	(a)	(a)
Bismuth salts .. ..	—	463	30	(a)	(a)	(a)	(a)
Germany (Federal)—							
Bismuth salts .. ..	(a)	(a)	(a)	(a)	(a)	4	(b) 2
Spain—							
Bismuth .. .. ..	—	30	—	—	—	—	79
Bismuth salts .. ..	87	186	16	59	—	—	2
Algeria—							
Bismuth salts .. ..	—	28	14	14	8	—	2
Mexico—							
Bismuth .. .. ..	6	5	(a)	(a)	(a)	(a)	(a)
Bismuth salts .. ..	124	71	9	1	(a)	(a)	(a)
United States—							
Bismuth .. .. ..	2,979	3,771	2,773	2,677	4,838	6,979	4,589
Argentina—							
Bismuth .. .. ..	126	57	(a)	(a)	(a)	(a)	(a)
Bismuth salts .. ..	126	57	(a)	(a)	(a)	(a)	(a)
Chile—							
Ore .. .. ..	—	—	(a)	(a)	(a)	(a)	(a)
Bismuth .. .. ..	—	41	19	18	(a)	(a)	(a)
Bismuth salts .. ..	46	52	(a)	(a)	(a)	(a)	(a)
Colombia—							
Bismuth salts .. ..	42	25	(a)	(a)	(a)	(a)	(a)
Peru—							
Bismuth salts .. ..	30	27	(a)	(a)	(a)	(a)	(a)
Venezuela—							
Bismuth salts .. ..	(a)	99	(a)	(a)	(a)	(a)	(a)
Turkey—							
Bismuth .. .. ..	—	1	4	7	1	1	2
Bismuth salts .. ..	49	22	18	154	77	148	124

(a) Information not available.

(b) January to September only.

(c) Bismuth-bearing ores according to the Department of Mines.

## BORATES

### PRODUCTION OF CRUDE BORATES

(Long tons)

Producing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES</b>							
Italy— Boric acid .. ..	3,050	4,255	4,907	4,796	4,792	4,713	4,526
United States— Borates .. .. ..	291,013	384,544	448,156	402,618	417,493	578,335	770,354
Argentina— Borate of calcium ..	—	5,167	7,000	(a)	(a)	(a)	(a)
Chile— Borate of calcium ..	1,169	1,454	469	(a)	(a)	(a)	(a)
Iran— Borate of calcium ..	(a)	(a)	(a)	(a)	(d) 300	(d) 300	(a)
Tibet (b)— Borax .. .. ..	(c) 266	(c) 340	(c) 23	(c) 39	(c) 88	(a)	(a)
Turkey— Borates .. .. ..	4,965	2,180	3,556	5,238	6,982	9,628	11,825

Borates are also produced in the U.S.S.R. and Germany.

(a) Information not available.

(b) Imports into India from Tibet.

(c) Years ended March 31 following that stated.

(d) Estimated.

EXPORTS OF BORATES

*(Domestic Produce)*

(Long tons)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Borax .. ..	349	1,606	172	797	919	1,742	1,455
Boric acid .. ..	85	574	118	90	246	491	236
Hong Kong (re-exports)—							
Borax .. ..	(a)	483	383	513	873	3,315	476
India—							
Borax	—	—	—	—	—	—	9
<b>FOREIGN COUNTRIES</b>							
Austria—							
Boric acid .. ..	(a)	(a)	(a)	(a)	(a)	59	12
Perborate of sodium ..	(a)	(a)	(a)	(a)	131	414	628
Belgium-Luxemburg E.U.—							
Borates and perborates	(a)	(a)	(a)	94	—	30	3
Borax .. ..	(a)	(a)	(a)	298	66	478	1,047
France—							
Borax, borates and boric acid .. ..	6	683	1,070	589	1,424	1,427	1,002
Germany (Federal)—							
Borax, borates and boric acid .. ..	(a)	(a)	(a)	15	12	326	959
Italy—							
Boric acid, crude ..	(a)	(a)	585	361	471	117	27
do. refined ..	(a)	(a)	961	418	803	427	324
Borates .. ..	(a)	(a)	199	381	847	145	181
Perborates .. ..	(a)	(a)	7	—	151	665	1,030
Netherlands—							
Borax .. ..	(a)	49	63	91	20	18	41
Sweden—							
Borax and boric acid ..	140	10	8	8	—	1	1
Switzerland—							
Borax .. ..	—	41	220	21	1	—	338
United States—							
Borates and borax ..	38,817	47,592	76,550	63,339	97,760	127,304	190,576
Boric acid .. ..	5,504	6,468	8,540	6,988	(a)	(a)	(a)
Perborate of sodium ..	65	(a)	(a)	(a)	(a)	(a)	(a)
Argentina—							
Borates of calcium and sodium .. ..	218	478	(a)	(a)	(a)	(a)	(a)
Tibet (b)—							
Borax .. ..	(c) 266	(c) 340	(c) 23	(c) 39	(c) 88	(a)	(a)
Turkey—							
Borates .. ..	2,000	3,000	6,265	5,967	8,377	9,991	12,354

(a) Information not available.

(b) Imports into India from Tibet.

(c) Years ended March 31 following that stated.

IMPORTS OF BORATES

(Less Re-exports)

(Long tons)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Borates .. . . .	10,937	9,431	14,919	15,224	12,846	14,981	18,739
Borax .. . . .	3,520	4,007	9,646	12,414	10,890	14,028	22,005
Boric acid .. . . .	1,491	224	2,716	3,133	3,141	4,722	5,804
Anglo-Egyptian Sudan—							
Borax .. . . .	(a)	(a)	1	32	3	—	(a)
Kenya—							
Borax, refined .. . . .	(a)	(a)	(a)	(a)	13	11	15
Southern Rhodesia—							
Borax .. . . .	37	32	93	89	113	86	18
Boric acid .. . . .	(a)	2	3	—	7	4	4
Tanganyika—							
Borax, refined .. . . .	(a)	(a)	(a)	15	13	12	8
Uganda—							
Borax, refined .. . . .	(a)	(a)	(a)	(a)	3	3	2
Union of South Africa—							
Borax .. . . .	391	638	915	634	590	559	(a)
Boric acid .. . . .	126	173	366	134	259	162	(a)
Canada—							
Borax .. . . .	4,778	6,479	8,442	6,161	6,666	7,966	8,132
Boric acid .. . . .	1,364	1,093	1,394	1,429	1,832	1,616	2,242
Aden—							
Borax .. . . .	1	6	6	—	—	—	—
Hong Kong (total imports)—							
Borax .. . . .	(a)	1,104	965	770	2,509	5,530	971
India—							
Borax (b) .. . . .	1,987	2,168	(c) 7,384	(c) 3,114	(c) 836	(c) 2,284	(c) 7,422
Australia—							
Borates, crude (e) .. . .	(a)	42	306	120	33	—	(a)
Boron salts .. . . .	922	1,227	2,427	1,388	1,456	1,834	3,447
Boric acid (e) .. . . .	264	470	588	1,228	800	675	(a)
New Zealand—							
Borax .. . . .	4	29	93	49	50	15	10
Boric acid .. . . .	1	11	36	38	103	80	147
Irish Republic—							
Borax .. . . .	151	206	136	300	553	989	553
Boric acid .. . . .	63	108	112	92	116	136	118
<b>FOREIGN COUNTRIES</b>							
Austria—							
Borax, crude .. . . .	(a)	(a)	197	544	1,276	1,603	2,686
do. refined .. . . .	(a)	(a)	1	3	2	1	3
Boric acid .. . . .	(a)	(a)	1	—	1	—	—
Perborate of sodium .. . . .	(a)	(a)	(a)	(a)	40	3	80
Belgium-Luxemburg E.U.—							
Borates and perborates ..	(a)	(a)	(a)	(a)	920	1,194	1,886
Borax .. . . .	(a)	(a)	(a)	1,100	923	2,462	2,171
Boric acid .. . . .	(a)	(a)	(a)	190	239	289	252
Bulgaria—							
Borax and boric acid .. . . .	9	77	(a)	(a)	(a)	(a)	(a)
Czechoslovakia—							
Borax .. . . .	{ (a)	{ 352	227	(d) 1,303	(a)	(a)	(a)
Boric acid .. . . .	{ (a)	{ 107	315	(d) 188	(a)	(a)	(a)
Denmark—							
Borax .. . . .	21	152	70	94	109	11	78
Borates and perborates ..	—	305	478	386	876	864	1,418
Boric acid .. . . .	22	259	145	20	67	185	84

(a) Information not available.

(b) Includes trade by land as recorded.

(c) Years ended June 30 of that stated.

(c) Sea-borne trade only.

(d) January to October only.

**IMPORTS OF BORATES (Cont.)**

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Finland (total imports)—							
Borax .. .	39	344	293	302	85	566	415
Boric acid .. .	24	57	16	28	33	60	60
France—							
Borates .. .	3,380	3,878	7,232	—	—	1,368	333
Borax .. .	531	3,279	984	15	2,460	2,705	2,094
Borate of manganese .. .	—	6	—	—	—	—	—
Boric acid .. .	75	840	285	49	109	289	226
Germany (Federal)—							
Borates .. .	(a)	(a)	(a)	890	8,369	22,302	23,013
Borax and boric acid .. .	(a)	(a)	(a)	120	2,135	2,337	11,141
Greece—							
Borax .. .	(a)	148	33	114	162	71	44
Italy—							
Boron mineral .. .	(a)	(a)	(a)	(a)	(a)	147	1,962
Borates .. .	(a)	(a)	(a)	—	16	1,277	3,322
Netherlands—							
Borax .. .	(a)	2,164	4,519	2,447	5,047	6,461	8,270
Boric acid .. .	(a)	(a)	(a)	237	504	236	554
Perborates .. .	(a)	(a)	(a)	—	128	310	(a)
Norway—							
Borax .. .	284	128	165	243	385	449	(a)
Boric acid .. .	19	83	84	127	49	154	(a)
Portugal—							
Borates .. .	232	438	846	317	574	287	295
Boric acid .. .	43	141	170	40	143	63	90
Spain—							
Borates .. .	84	11	5	59	99	307	238
Boric acid .. .	400	307	83	25	12	6	—
Sweden—							
Borax .. .	828	1,172	2,024	1,164	1,267	2,148	(a)
Boric acid .. .	150	474	412	72	311	472	(a)
Switzerland—							
Borax .. .	1,863	4,243	1,834	1,583	1,144	3,453	6,380
Yugoslavia—							
Borax .. .	(a)	(a)	(a)	(a)	(a)	278	333
Algeria—							
Borax and boric acid .. .	21	54	19	14	19	39	37
Egypt—							
Borax .. .	368	111	21	284	167	208	(a)
Boric acid .. .	121	24	5	44	23	(a)	(a)
Mozambique—							
Borax .. .	4	2	4	4	3	1	2
Boric acid .. .	1	6	5	1	—	1	1
Tunis—							
Borax .. .	18	9	1	16	(a)	(a)	(a)
Boric acid .. .	5	2	28	2	(a)	(a)	(a)
Mexico—							
Borax .. .	1,490	2,095	(a)	(a)	(a)	(a)	(a)
Boric acid .. .	134	256	(a)	(a)	(a)	(a)	(a)
Argentina—							
Borax .. .	51	5	(a)	(a)	(a)	(a)	(a)
Boric acid .. .	1	2	(a)	(a)	(a)	(a)	(a)
Brazil (total imports)—							
Borates .. .	48	58	92	10	91	(a)	(a)
Borax .. .	1,043	1,160	2,125	1,403	1,569	(a)	(a)
Boric acid .. .	217	91	286	114	222	(a)	(a)
Chile—							
Borates .. .	34	28	(a)	(a)	(a)	(a)	(a)
Boric acid .. .	1	3	(a)	(a)	(a)	(a)	(a)
Colombia—							
Borates .. .	146	99	(a)	(a)	(a)	(a)	(a)
Perborate of sodium .. .	—	8	(a)	(a)	551	350	(a)
Boric acid .. .	85	25	(a)	(a)	(a)	(a)	(a)

(a) Information not available.

(b) July 15 to December 31 only.

IMPORTS OF BORATES (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Cuba—							
Borax .. .	(a)	(a)	(a)	94	96	(a)	(a)
Boric acid .. .	(a)	(a)	(a)	763	220	(a)	(a)
Peru—							
Borax .. .	76	142	(a)	123	(a)	(a)	(a)
Boric acid .. .	8	28	(a)	32	(a)	(a)	(a)
Uruguay—							
Borate of calcium .. .	(a)	(a)	(a)	273	79	163	(a)
Venezuela—							
Borax .. .	40	8	(a)	23	(a)	(a)	(a)
Boric acid .. .	10	22	32	46	(a)	(a)	(a)
Japan (total imports)—							
Borax .. .	(a)	—	2,917	3,636	(a)	2,154	(a)
Syria and Lebanon—							
Borax .. .	1	—	(a)	(a)	(a)	(a)	(a)
Boric acid .. .	7	—	(a)	(a)	(a)	(a)	(a)
Turkey—							
Borax .. .	253	12	393	143	118	144	
Boric acid .. .	107	9	1	5	—	—	173 29

(a) Information not available.

**BROMINE**  
**PRODUCTION OF BROMINE**  
(b. avdp.)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Palestine (c) .. ..	835,100	108,000	585,000	—	—	—	—
<b>FOREIGN COUNTRIES</b>							
France .. .. ..	(a)	(b) 1,475,000	(b) 3,014,000	(b) 2,200,000	(b) 1,940,000	2,337,000	2,293,000
Italy .. .. ..	9,040	(a)	(a)	(a)	(a)	(a)	(a)
United States (c) .. ..	79,709,857	42,780,925	78,177,650	76,047,551	88,725,709	98,502,300	129,563,073

(a) Information not available.

(b) Sales.

(c) Includes bromine content of compounds.

**EXPORTS OF BROMINE, ETC.**

(Domestic Produce)

(lb. avdp.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Bromine .. .. ..	220	31,400	8,700	6,500	7,700	9,400	15,700
Bromides .. .. ..	101,900	352,500	276,300	179,900	75,700	131,200	699,200
Palestine—							
Bromine .. .. ..	143,300	127,200	397,714	122,797	—	—	—
Bromides .. .. ..	1,032,000	92,000	20,503	5,512	—	—	—
<b>FOREIGN COUNTRIES</b>							
Belgium-Luxemburg E.U.—							
Bromine .. .. ..	(a)	(a)	(a)	(a)	(a)	6,614	—
Bromides .. .. ..	(a)	(a)	(a)	165,347	2,205	660	—
France—							
Bromine .. .. ..	23,600	380,500	722,900	(a)	(a)	(a)	(a)
Bromides .. .. ..	47,200	177,300	851,000	300,490	542,337	346,346	655,214
Germany (Federal)—							
Bromine .. .. ..	(a)	(a)	(a)	233,470	57,541	459,223	(b) 459,443
Bromides .. .. ..	(a)	(a)	(a)	11,244	127,868	1,030,661	789,255
Italy—							
Bromides .. .. ..	—	—	—	419	4,674	198	61,289
United States—							
Bromine .. .. ..	178,041						
Bromide of potash .. ..	551,736						
do. soda .. ..	177,768						
Ethyl dibromide .. ..	296,952	2,060,286	1,792,269	1,054,523	925,639	869,816	2,587,421
Other bromides and bromates .. ..	328,934						

(a) Information not available.

(b) January to September only.

IMPORTS OF BROMINE, ETC.

(Less Re-exports)

(lb. avdp.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
BRITISH COUNTRIES							
United Kingdom—							
Bromine .. . . .	94,000	181,000	746,800	312,600	244,300	(b) 400	1,120,300
Bromides .. . . .	1,263,000	214,400	(b) 6,000	(b) 20,700	(b) 12,800	11,100	897,100
Union of South Africa—							
Bromine .. . . .	288	215	344	454	425	288	(a)
Canada—							
Bromine .. . . .	3,332	16,786	8,742	20,720	16,594	18,231	26,302
Bromides .. . . .	29,000	57,100	54,250	41,884	58,055	72,961	45,560
Australia (years ended June 30)—							
Bromine (£ Aust.) .. . . .	240,125	{ (£134)	(£931)	(£450)	(£6,548)	(£269)	(a)
Bromates and bromides .. . . .		{ 93,556	136,052	225,578	151,762	(d) 312,553	(d) 780,807
FOREIGN COUNTRIES							
Belgium-Luxemburg E.U.—							
Bromine .. . . .	(a)	(a)	(a)	(a)	17,637	4,409	41,888
Bromides .. . . .	(a)	(a)	(a)	(a)	(a)	238,099	282,240
Czechoslovakia—							
Bromine .. . . .	(a)	—	20,503	(c) 25,133	(a)	(a)	(a)
France—							
Bromides .. . . .	—	—	220	—	1,102	—	2,646
Ethyl bromide, etc. .. . .	—	14,771	—	(a)	(a)	(a)	(a)
Italy—							
Bromine .. . . .	(a)	(a)	—	2	7	271,633	325,182
Bromides .. . . .	(a)	(a)	117	2,269	24,317	61,555	166,890
Netherlands—							
Bromine .. . . .	(a)	(a)	(a)	(a)	(a)	4,409	55,116
Norway—							
Bromine .. . . .	1,091	531	174	1,274	1,060	1,041	(a)
Portugal—							
Bromine .. . . .	7	408	328	644	1,382	922	974
Bromide of soda .. . . .	836	1,462	1,863	448	1,861	448	919
Bromide of potash .. . . .	465	1,127	1,887	1,803	2,738	3,175	2,857
Bromide of ammonium .. . . .	278	344	157	375	952	154	476
Spain—							
Bromine .. . . .	772	3,948	4,969	—	—	—	—
Bromides .. . . .	1,797	13,135	13,803	22,406	35,111	50,023	6,504
Sweden—							
Bromine .. . . .	(a)	(a)	(a)	(a)	3,042	6,614	(a)
Algeria—							
Bromine .. . . .	220	—	—	661	220	—	220
Bromides .. . . .	31,967	21,605	25,133	441	1,102	1,323	1,764
Cuba—							
Bromine .. . . .	(a)	(a)	(a)	25,481	190	(a)	(a)
Mexico—							
Bromine .. . . .	1,177	1,188	(a)	(a)	(a)	(a)	(a)
Bromides of potash and soda .. . . .	14,707	12,548	9,224	17,952	(a)	(a)	(a)
United States—							
Bromine and compounds	76	236	131	102	87	96	2,624
Argentina—							
Bromine and bromides .. . . .	4,733	23,395	(a)	(a)	(a)	(a)	(a)
Chile—							
Bromine .. . . .	646	666	(a)	(a)	(a)	(a)	(a)
Bromide of strontium .. . . .	64	15	(a)	(a)	(a)	(a)	(a)
Colombia—							
Bromine .. . . .	159	176	(a)	(a)	(a)	(a)	(a)
Bromides .. . . .	4,299	6,942	(a)	(a)	(a)	(a)	(a)
Peru—							
Bromine .. . . .	150	216	243	489	(a)	(a)	(a)
Iran—							
Bromine .. . . .	(a)	—	90	26	2	(a)	(a)
Bromides .. . . .	(a)	5,569	2,545	(a)	(a)	(a)	(a)
Philippine Republic—							
Bromides .. . . .	670	9,040	(a)	(a)	(a)	(a)	(a)
Turkey—							
Bromine .. . . .	203	84	730	423	639	225	567
Bromides .. . . .	2,121	1,217	6,108	6,944	13,436	9,061	19,293

(a) Information not available. (b) Excess of re-exports. (c) January to October only. (d) Calendar year.

# CADMIUM

## PRODUCTION OF CADMIUM (lb. avdp.)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom .. ..	491,100	268,800	234,662	255,226	226,240	262,125	306,502
South West Africa (b) ..	(a)	(a)	(a)	1,140,000	1,662,000	1,344,000	1,434,000
Canada .. .. ..	646,064	802,648	718,534	766,090	846,541	848,406	1,210,759
Australia .. .. ..	542,237	511,280	460,835	646,733	581,280	659,500	535,400
<b>FOREIGN COUNTRIES</b>							
Belgium .. .. ..	(a)	157,000	322,000	661,000	794,000	805,000	805,000
France .. .. ..	15,400	103,600	94,800	103,600	128,000	154,300	187,386
Germany .. .. ..	(a)	(c) 2,200	(c) 2,700	(c) 7,700	(c) 11,000	(a)	(a)
Italy .. .. ..	64,000	55,000	84,000	104,000	161,616	166,151	450,519
Norway .. .. ..	28,700	61,700	110,200	136,700	157,400	173,500	221,035
Poland .. .. ..	108,000	256,000	(d) 157,000	(a)	(a)	(a)	(a)
Spain .. .. ..	(a)	(a)	(a)	11,834	11,279	9,586	8,600
Belgian Congo .. .. ..	40,153	36,533	57,408	39,700	55,100	65,407	52,900
Mexico (e) .. .. ..	2,321,467	1,581,129	1,717,125	1,997,280	1,808,824	1,474,251	1,970,476
United States (f)—							
Metal .. .. ..	7,932,579	6,200,398	8,007,287	7,582,961	8,023,616	8,849,690	8,114,238
Compounds(metal content)	451,050	270,789	500,859	192,696	203,001	340,704	197,099
Peru .. .. ..	20,547	1,874	3,102	3,510	—	3,005	(a)
Japan .. .. ..	(a)	(a)	(g) 15,997	41,610	115,707	(a)	271,000
<b>TOTAL .. ..</b>	<b>10,400,000</b>	<b>8,750,000</b>	<b>10,800,000</b>	<b>10,800,000</b>	<b>11,600,000</b>	<b>12,800,000</b>	<b>12,600,000</b>

Cadmium is produced also in Netherlands, Sweden and U.S.S.R. In the case of South West Africa and Mexico the metal is extracted in other countries and, to avoid duplication, is excluded from the total.

(a) Information not available.

(b) Estimated cadmium content of copper-lead-zinc concentrates produced and exported for treatment.

(c) Bizonal area only.

(d) January to July only.

(e) Including cadmium content of flue dust, etc., exported for treatment.

(f) In addition Secondary (metal and cadmium content of compounds) produced was as follows:

1945 .. ..	72,473	lb.
1946 .. ..	355,104	"
1947 .. ..	104,764	"
1948 .. ..	121,159	"
1949 .. ..	384,398	"
1950 .. ..	427,052	"
1951 .. ..	167,957	"

(g) Year ended March 31 following that stated.

**EXPORTS OF CADMIUM, ETC.**

*(Domestic Produce)*

(lb. avdp.)

Exporting Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Metal .. .	112,100	82,706	4,717	5,141	5,520	(a)	(a)
Compounds .. .	(a)	301,600	93,300	66,100	60,700	77,000	57,200
South West Africa (b) .. .	(a)	(a)	(a)	896,000	1,670,000	1,734,000	1,382,000
Canada .. .	350,744	573,368	622,891	596,098	633,607	676,005	824,850
Australia .. .	507,472	297,920	215,040	194,880	389,760	383,040	297,920
<b>FOREIGN COUNTRIES</b>							
Belgium-Luxemburg E.U. .. .	(a)	(a)	(a)	(a)	(a)	1,003	324,079
France .. .	2	220	102	(a)	(a)	(a)	(a)
Italy (incl. scrap) .. .	(a)	(a)	(a)	(a)	(a)	16,314	31,967
Poland .. .	88,184	220,462	(a)	(a)	(a)	(a)	(a)
Belgian Congo .. .	(c) 25,798	(c) 6,700	(a)	(a)	(a)	70,303	54,793
Mexico (d) .. .	2,320,951	1,581,128	1,660,729	1,997,280	1,732,776	1,518,359	2,695,561
United States—							
Metal .. .	102,199	140,385	303,401	955,701	566,135	352,927	606,233
Alloys .. .	3	75	(a)	1,506	3,000	9,106	5,639
Cadmium salts .. .	10,895	(a)	(a)	(a)	(a)	(a)	(a)
Dross, flue dust, etc. .. .	2,333,720	459,775	18,251	92,847	500	(a)	200,579
Peru .. .	2,247	5,428	3,124	3,510	1,711	3,003	(a)

(a) Information not available.

(b) Cadmium content of concentrates exported for treatment.

(c) Imports into the United States from the Belgian Congo.

(d) Including cadmium content of flue dust, etc., exported for treatment.

(e) July to December only.

**IMPORTS OF CADMIUM, ETC.**

*(Less Re-exports)*

(lb. avdp.)

Importing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Metal .. .	699,636	767,993	781,282	1,043,665	685,511	1,073,454	1,485,056
Compounds .. .	—	—	—	300	1,000	(a)	(a)
Australia—							
Cadmium salts .. .	(a)	(b)	5,310	(b)	3,469	(b)	930
<b>FOREIGN COUNTRIES</b>							
Belgium-Luxemburg E.U. .. .	(a)	(a)	(a)	(a)	26,455	39,683	33,069
France—							
Cadmium .. .	120,152	925,941	490,528	(a)	(a)	(a)	(a)
Cadmium salts .. .	—	10,362	17,637	(a)	(a)	(a)	(a)
Sweden .. .	43,286	142,679	127,288	192,693	290,516	235,895	(a)
Yugoslavia .. .	(a)	(a)	(a)	(a)	(a)	4,630	1,323
United States—							
Cadmium .. .	28,724	17,415	20,292	9,809	157,204	724,334	90,065
Flue dust (cadmium content) .. .	2,192,685	1,652,905	2,355,588	1,828,139	1,789,667	1,507,417	1,606,775
Argentina (cadmium and salts) .. .	60	7,348	1	—	(a)	(a)	(a)
Chile (cadmium and salts) .. .	18	77	(a)	(a)	(a)	(a)	(a)
Peru (cadmium salts) .. .	13	1,100	(a)	(a)	(a)	(a)	(a)
Turkey—							
Cadmium .. .	—	15	108	37	86	68	26
Cadmium salts .. .	115	170	659	271	49	128	157

(a) Information not available.

(b) Years ended June 30 of that stated.

**CHINA CLAY**  
**PRODUCTION OF CHINA CLAY**  
 (Long tons)

Producing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Great Britain .. ..	234,999	406,379	513,792	660,246	634,205	734,648	907,660
Kenya .. ..	1,622	1,372	306	764	1,319	1,286	1,908
Southern Rhodesia .. ..	9	—	—	—	23,341	13,696	9,569
Tanganyika .. ..	292	178	231	134	162	59	156
Union of South Africa .. ..	4,429	5,379	4,390	4,752	5,679	8,323	10,526
Canada (sales) .. ..	398	733	—	—	—	(a)	(a)
Hong Kong (b) .. ..	(a)	(c) 294	(c) 8,430	(d) 3,874	—	—	(a)
India .. ..	67,285	74,701	66,561	41,243	42,396	53,583	54,987
Malaya .. ..	—	241	1,003	923	1,173	1,435	1,719
Australia (e) .. ..	9,380	12,205	9,902	30,021	23,261	(j) 41,415	44,088
<b>FOREIGN COUNTRIES</b>							
Austria (crude) .. ..	(k) 14,763	(k) 46,457	(k) 74,590	(k) 127,955	(k) 159,349	182,814	208,204
Belgium .. ..	(k) 1,319	(k) 7,608	(k) 17,578	(k) 18,237	(k) 8,962	17,471	(a)
Czechoslovakia (estimated) .. ..	(a)	(a)	120,000	150,000	(a)	(a)	(a)
Denmark—							
Crude .. ..	6,900	4,400	4,875	3,633	7,683	12,495	(a)
Washed and pressed .. ..	6,600	5,200	3,943	6,966	6,485	2,881	(a)
Washed and unpressed .. ..	—	800	307	578	—	3,615	(a)
Washed waste .. ..	3,300	3,700	6,666	9,085	9,572	8,456	(a)
France .. ..	29,779	95,655	98,588	127,092	121,530	96,590	(a)
Germany (Federal) .. ..	(a)	(a)	(a)	(f) 135,674	(f) 180,618	288,825	292,569
Greece .. ..	—	—	—	2,603	4,972	6,240	(a)
Italy—							
Crude and kaolinic earth .. ..	(g) 28,015	(g) 50,676	(g) 116,127	(g) 98,473	(g) 87,784	(a)	(a)
Portugal—							
Crude .. ..	14,423	19,254	13,101	{ 12,154	12,500	16,602	11,025
Washed .. ..	—	—	—	{ 13,287	7,426	10,364	26,168
Kaolinic sand (h) .. ..	237	232	374	318	242	301	243
Spain—							
Crude .. ..	25,840	29,881	22,939	35,104	31,202	37,935	42,565
Sweden (washed) (i) .. ..	6,516	8,183	12,522	7,955	6,910	2,225	(a)
Algeria .. ..	1,210	14	282	1,178	2,903	750	1,450
Egypt .. ..	504	215	150	168	199	69	236
Eritrea .. ..	(a)	(a)	(a)	2,985	2,850	1,000	(a)
Madagascar .. ..	65	47	158	40	82	126	75
Morocco (Spanish) .. ..	(a)	(a)	(a)	(a)	(a)	(a)	44
Mozambique .. ..	—	18	—	—	—	53	(a)
United States (i) .. ..	839,275	1,180,628	1,272,416	1,400,757	1,263,872	1,563,266	1,666,338
Argentina .. ..	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Brazil .. ..	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Chile .. ..	3,545	6,362	8,440	12,769	11,516	8,586	8,798
Peru (i) .. ..	614	870	1,479	1,395	767	460	(a)
Japan .. ..	(a)	(a)	(a)	6,410	7,178	(a)	(a)
Jordan (exports) .. ..	—	—	51	(a)	(a)	(a)	(a)
Portuguese India (exports)	367	227	—	(a)	(a)	(a)	(a)

China clay is also produced in Bulgaria, Roumania, U.S.S.R., China, Indonesia, Korea and Manchuria.

(a) Information not available.

(b) Including other clays.

(c) Years ended October 31 of that stated.

(d) November, 1947 to December, 1948.

(e) Excluding South Australia.

(f) Bizonal area.

(g) Including bentonite.

(h) Kaolin content.

(i) Sales.

(j) Including Pottery clay produced in Victoria.

(k) Including "Eurite".

**EXPORTS OF CHINA CLAY**

(Domestic Produce)

(Long tons)

Exporting Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom .. ..	115,954	210,896	248,825	335,506	295,233	405,225	471,666
Tanganyika .. ..	267	88	164	102	46	18	46
Union of South Africa .. ..	(a)	(a)	—	10	—	—	485
Malaya (b) .. ..	(a)	13	8	3	29	158	258
<b>FOREIGN COUNTRIES</b>							
Austria .. .. ..	(a)	(a)	6,019	9,522	12,135	12,292	14,074
Belgium-Luxemburg E.U.	(a)	(a)	(a)	522	446	1,042	168
Czechoslovakia .. ..	(a)	28,451	56,351	(c) 56,808	(a)	(a)	(a)
Denmark .. .. ..	615	89	163	10	—	33	34
France .. .. ..	272	6,531	10,583	8,630	9,030	6,166	8,420
Germany (Federal) .. ..	(a)	(a)	(a)	983	4,150	10,037	15,382
Italy .. .. ..	(a)	(a)	179	403	—	24	49
Portugal .. .. ..	36	6,417	9,773	4,322	773	2,024	9,938
Spain .. .. ..	22	4	98	47	55	174	205
Sweden .. .. ..	3,033	3,990	3,404	941	8	60	907
Algeria .. .. ..	—	—	193	918	562	536	633
Morocco (Spanish) .. ..	1,860	(a)	(a)	(a)	(a)	(a)	(a)
United States .. ..	11,073	14,177	16,684	17,030	19,499	25,233	32,531
Argentina .. .. ..	97	5	(a)	(a)	(a)	(a)	(a)
Brazil .. .. ..	63	3	—	—	—	(a)	(a)
Chile .. .. ..	628	317	181	—	(a)	(a)	(a)
Jordan .. .. ..	—	—	—	—	(a)	(a)	(a)
Portuguese India .. ..	367	227	51	87	—	(a)	(a)

(a) Information not available.

(b) Including re-exports.

(c) January to October only.

**IMPORTS OF CHINA CLAY**

(Less Re-exports)

(Long tons)

Importing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom (b)	—	18	157	396	276	(a)	(a)
Union of South Africa (c)	148	365	592	584	613	537	(a)
Canada (f)	56,839	54,609	71,422	80,024	75,447	83,062	96,097
Newfoundland (e)	(a)	—	958	1,027	(e)	(e)	(e)
India	333	307	890	1,510	3,314	2,664	6,470
Malaya (total imports)	(a)	28	12	106	30	5	3
Australia	(a)	—	(d)	(d)	721	2,108	644
<b>FOREIGN COUNTRIES</b>							
Austria	(a)	(a)	524	1,281	1,134	858	1,725
Belgium-Luxemburg E.U.	(a)	(a)	(a)	40,887	34,763	36,386	48,376
Czechoslovakia	(a)	—	30	—	(a)	(a)	(a)
Denmark—							
Crude	—	1,006	2,594	736	968		
Washed	384	8,594	13,538	11,563	14,883	18,478	20,876
Finland (total imports)	11,665	19,435	24,883	35,764	15,486	18,405	29,720
France	14	271	9,641	14,645	10,873	32,125	55,771
Germany (Federal)	(a)	(a)	(a)	32,438	44,725	61,002	70,964
Italy..	(a)	(a)	14,578	18,037	25,878	33,266	41,010
Netherlands (g)	(a)	(a)	(a)	42,284	43,511	54,092	53,925
Norway	2,940	10,791	15,504	19,500	17,628	19,410	25,747
Poland	(a)	(a)	19,073	(a)	(a)	(a)	(a)
Portugal	104	101	107	82	14	48	28
Spain	294	511	51	119	242	184	1,082
Sweden	16,341	32,084	33,841	44,291	35,310	41,610	(a)
Yugoslavia	(a)	(a)	(a)	(a)	(a)	741	305
Algeria	—	94	88	360	1,409	1,545	3,149
United States	51,323	79,672	73,757	89,223	68,952	109,798	98,638
Argentina	2,455	4,878	(a)	(a)	(a)	(a)	(a)
Chile	92	24	(a)	(a)	(a)	(a)	(a)
Colombia	55	21	(a)	(a)	(a)	(a)	(a)
Peru..	29	71	(a)	(a)	(a)	125	(a)
Uruguay	(a)	633	1,741	346	1,006	1,707	(a)
Iran	(a)	—	1,935	(a)	(a)	(a)	(a)
Japan	(a)	(a)	94	(a)	(a)	(a)	(a)
Turkey	29	133	317	77	62	4	88

(a) Information not available.

(b) Including Ball clay.

(c) Including Cornish or china stone.

(d) Years ended June 30 of that stated.

(e) Years ended March 31 of year following that stated. Included with Canada from April 1, 1949.

(f) Including Newfoundland from April 1, 1949.

(g) Including Pipe clay.

**CHROME ORE AND CHROMIUM**  
**PRODUCTION OF CHROME ORE**  
 (Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951	Estimated Cr <sub>2</sub> O <sub>3</sub> content*						
								1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>														
Sierra Leone	569	10,138	16,504	7,761	21,752	7,399	16,166	240	4,300	7,000	3,300	9,100	3,100	6,800
Southern Rhodesia	183,377	149,043	152,699	227,061	239,662	286,922	291,27	88,000	72,000	109,000	115,000	138,000	142,000	142,000
Union of South Africa	97,526	208,902	367,204	406,266	397,967	488,497	536,399	45,100	166,563	183,433	179,000	219,000	219,000	241,000
Canada	5,138	2,777	1,930	1,531	322	—	—	2,400	1,300	900	700	140	—	—
Cyprus (b)	732	2,740	4,840	10,847	13,862	16,371	12,349	352	1,260	2,320	5,093	6,511	7,792	5,938
India	—	—	34,717	22,555	19,416	16,729	15,802	15,802	15,500	22,400	11,000	9,700	8,000	7,600
Pakistan	—	—	20,523	17,427	15,673	18,125	17,498	17,498	891	1,360	—	7,500	8,700	8,400
Australia	—	—	—	555	632	—	—	—	—	—	—	—	—	(a)
Total	...	318,800	418,300	598,400	694,000	709,300	834,900	895,100	—	—	—	—	—	—
<b>FOREIGN COUNTRIES</b>														
Greece	2,375	8,919	2,598	1,500	1,73	3,666	12,627	24,933	(a)	3,400	900	(a)	(a)	9,000
Portugal	—	1,643	602	(a)	(a)	87	44	32	655	241	69	34	18	13
U.S.S.R. (estimated)	—	(a)	(a)	92,000	74,600	59,600	107,400	450,000	550,000	(a)	24,000	29,000	41,000	(a)
Yugoslavia	—	—	—	148	262	188	49	—	98,065	(a)	110	80	—	—
Egypt	—	—	—	188,646	161,586	108,619	114,782	95,830	106,4780	77,816	(a)	(a)	(a)	(a)
Cuba	—	—	—	435	600	615	467	300	142	1,120	208	300	230	(a)
Guatemala	—	—	—	12,476	3,667	846	3,231	387	361	6,300	5,700	340	1,600	180
United States	—	—	—	2,953	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	3,100
Argentina	—	—	—	1,466	171	—	1,600	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Brazil (exports)	—	—	—	42,827	43,538	2,825	9,194	26,682	31,448	39,769	(a)	(a)	(a)	(a)
Japan	—	—	—	3,474	25,893	192,072	252,847	242,847	246,555	312,667	(a)	1,300	3,850	11,600
Philippine Republic	—	—	—	146,041	101,648	154,459	28,812	445,382	415,030	588,343	70,000	49,000	135,000	13,900
Turkey (d)	—	—	—	58,883	24,556	49,732	73,834	87,585	83,462	87,590	31,000	25,800	214,000	199,000
New Caledonia	—	—	—	—	—	—	—	—	—	—	—	—	—	282,000
Total	...	800,000	750,000	1,000,000	1,250,000	1,370,000	1,420,000	1,790,000	—	—	—	—	—	45,400
World's Total	1,100,000	1,150,000	1,598,000	1,943,000	2,080,000	2,255,000	2,685,000	—	—	—	—	—	—	—

\* Only approximate estimates can be given owing to the wide variation in the chromium content of the ore produced in several of the countries concerned.

(b) Imports into Japan from Philippine Republic.

(b) Figures relate to saleable production.

(a) Information not available.

(d) Revised.

EXPORTS OF CHROME ORE, ETC.

(Domestic Produce)

(Long tons)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Chromium metal ..	86	50	8	83	128	(a) 161	(a) 86
Ferro-chrome ..	42	85	57	21	29	(a) 653	(a) 200
Chromates of potash ..	238	460	24	424	697	2,057	1,964
Chromates of soda ..	1,403	1,678	203	1,232	1,599		
Sierra Leone—							
Ore .. ..	11,595	31,301	22,687	8,411	17,656	13,909	11,930
Southern Rhodesia—							
Ore .. ..	204,443	149,557	160,372	222,454	202,468	237,976	300,593
Union of South Africa—							
Ore .. ..	171,279	238,668	299,016	287,362	303,890	483,923	507,145
Canada—							
Ferro-chrome ..	(a)	5,604	24,762	20,103	16,204	29,389	39,046
Cyprus—							
Ore and concentrates ..	1,054	1,140	5,200	6,790	14,640	18,150	12,453
India (b)—							
Ore .. ..	10,528	16,448	37,615	9,250	6,382	3,864	8,838
Pakistan—							
Ore .. ..	(a)	(a)	(a)	(a)	(a)	12,154	19,351
Australia—							
Ore .. ..	—	5	—	2	—	—	—
<b>FOREIGN COUNTRIES</b>							
Belgium-Luxemburg E.U.—							
Chromates of potash and soda .. ..	(a)	(a)	(a)	215	144	391	712
France—							
Ferro-chrome .. ..	1	39	37	(a)	(a)	(a)	(a)
Chromates, chrome alum, etc. .. ..	2	119	310	292	1,797	754	808
Germany (Federal)—							
Chromates of potash and soda, and oxides of chromium .. ..	(a)	(a)	(a)	295	1,905	5,030	3,208
Greece—							
Ore .. ..	(a)	(a)	(a)	984	—	9,389	23,414
Netherlands—							
Chromium compounds..	(a)	—	—	12	16	32	35
Norway—							
Ferro-chrome .. ..	623	4,492	11,487	15,464	14,559	16,152	21,624
Portugal—							
Ore .. ..	1,050	918	801	49	786	689	—
Sweden—							
Ore .. ..	—	202	20	—	—	—	15
Ferro-chrome .. ..	177	1,952	3,650	271	1,079	4,624	5,150
Chromates and chrome alum .. ..	832	1,501	2,533	2,478	1,168	1,615	1,736
Switzerland—							
Ferro-chrome, including ferro-silicon .. ..	2	77	540	1,728	1,569	1,289	3,724
U.S.S.R.—							
Ore (c) .. ..	162,546	99,562	241,827	357,906	102,758	71,959	(a)

(a) Information not available.

b) Including chrome ore mined in British India, but exported via the Portuguese port of Mormugao as follows:—  
1945—Nil, 1946—Nil, 1947—8,849 tons, 1948—4,773 tons, 1949—610 tons, 1950—1,100 tons, 1951—Nil.

(c) Exports are not available. Figures are imports from U.S.S.R. as recorded in the trade returns of the United Kingdom, Germany, Sweden and the United States.

## EXPORTS OF CHROME ORE, ETC. (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Yugoslavia— Ore .. . .	(a)	(a)	(a)	(a)	(a)	39,677	52,113
Cuba— Ore .. . .	270,010	173,065	100,135	160,446	72,383	115,505	68,511
United States— Ore .. . .	11,041	1,927	3,067	2,584	2,127	1,825	1,813
Ferro-chrome .. .	1,313	2,241	2,751	6,030	1,964	309	214
Chromates of potash ..	665	1,745	1,000	1,147	1,270	372	1,611
Chromates of soda ..	3,325	8,491	5,247	5,405	5,100	1,828	7,862
Brazil— Ore .. . .	1,466	171	—	1,600	3	(a)	(a)
Philippine Republic— Ore .. . .	(b) 3,474	(a)	(b) 189,500	238,158	231,441	(a)	361,568
Turkey— Ore .. . .	61,692	35,756	180,874	304,716	347,667	348,018	496,639
New Caledonia— Ore .. . .	50,147	63,619	43,062	69,066	101,287	72,799	91,670

(a) Information not available.

(b) Imports into Japan from Philippine Republic.

IMPORTS OF CHROME ORE, ETC.

(Less Re-exports)

(Long tons)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Ore .. ..	42,887	65,753	87,751	114,415	131,710	105,879	131,802
Chromium metal ..	—	—	53	59	5	—	—
Ferro-chrome ..	2,999	3,683	20,815	15,773	10,054	12,117	22,279
Chromates of soda ..	—	1	74	108	—	1	88
Canada—							
Ore .. ..	54,188	14,139	87,788	61,771	59,148	106,540	131,249
Bichromate of potash ..	94	117	142	77	143	137	211
Bichromate of soda ..	1,843	2,146	2,035	2,048	1,400	2,004	3,138
India (total imports)—							
Bichromate of potash ..	7	—	50	3	—	—	2
Bichromate of soda ..	—	—	—	132	2	—	—
Palestine—							
Ore .. ..	809	—	(a)	(a)	(a)	(a)	(a)
Australia—							
Ore .. ..	2,391	—	1,360	2,606	6,848	3,091	3,654
Bichromate of potash (e) ..	46	130	10	5	81	53	(a)
Bichromate of soda (e) ..	961	302	48	2	256	312	(a)
<b>FOREIGN COUNTRIES</b>							
Austria—							
Ore .. ..	(a)	(a)	(a)	(a)	(a)	(a)	48,183
Ferro-chrome ..	(a)	(a)	(a)	2,111	3,271	4,686	3,249
Chromates ..	(a)	(a)	33	225	325	662	393
Belgium-Luxemburg E.U.—							
Ore .. ..	(a)	(a)	(a)	(a)	1,426	1,036	3,421
Chromates of potash and soda .. ..	(a)	(a)	(a)	250	610	784	813
Bulgaria—							
Chromates of potash ..	—	19	(a)	(a)	(a)	(a)	(a)
Czechoslovakia—							
Ore .. ..	(a)	3,357	2,935	(b) 2,043	(a)	(a)	(a)
Chromates of potash and soda .. ..			310		(a)	(a)	(a)
Denmark—							
Chromates of potash and soda .. ..	114	375	105	321	286	233	437
Finland (total imports)—							
Ferro-chrome .. ..	59	157	132	206	410	410	607
Chromates of potash and soda .. ..	2	150	150	68	414	224	608
Chrome sulphate ..	—	155	156	381	271	166	300
France—							
Ore .. ..	8,496	45,978	42,365	(c) 37,629	(c) 35,911	(c) 14,171	(c) 42,919
Ferro-chrome .. ..	507	134	832	(a)	(a)	(a)	(a)
Chromates of potash and soda .. ..	39	108	65	540	362	264	408
Other chromates .. ..	10	45	951	1,149	620	423	2,018
Germany (Federal)—							
Ore .. ..	(a)	(a)	(a)	7,308	49,137	72,788	104,944
Italy—							
Ore .. ..	(a)	2,950	2,923	(a)	(a)	(d)	17,028
Ferro-chrome .. ..	—	116	81	524	1,534	6,180	907

(a) Information not available.

(b) January to October only.

(c) Imports from Turkey and New Caledonia only.

(d) July 15 to December 31 only.

(e) Years ended June 30 of that stated.

## IMPORTS OF CHROME ORE, ETC. (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Netherlands— Chromium compounds	(a)	900	1,702	1,328	1,246	1,375	2,164
Norway— Ore .. .. ..	—	9,571	51,088	50,524	39,242	51,634	49,130
Portugal— Chromates of potash and soda .. .. ..	48	348	79	3	5	1	1
Chrome alum .. .. ..	13	43	32	—	3	1	—
Spain— Chromates .. .. ..	112	329	59	91	28	228	2
Sweden— Ore .. .. ..	12,947	45,357	56,258	26,273	30,917	54,319	40,843
Ferro-chrome .. .. ..	16	725	1,116	2,140	2,255	2,035	(a)
Chrome alum .. .. ..	—	6	19	10	—	1	(a)
Chromates .. .. ..	123	532	315	606	598	854	(a)
Switzerland— Ferro-chrome and ferro- silicon .. .. ..	127	2,260	2,769	4,434	1,321	1,280	8,037
Egypt— Chromates of potash and soda .. .. ..	193	632	600	572	293	(a)	(a)
Mexico— Chromates .. .. ..	610	1,076	(a)	(a)	(a)	(a)	(a)
United States— Ore .. .. ..	826,684	690,601	987,660	1,376,853	1,074,920	1,161,087	1,275,911
(Cr <sub>2</sub> O <sub>3</sub> content) .. .. ..	363,568	298,994	433,921	607,765	476,420	517,305	545,300
Ferro-chrome (Cr content) .. .. ..	3,860	886	5,759	4,209	3,515	11,375	14,671
Metal and alloys .. .. ..	—	—	—	—	—	53	83
Argentina— Bichromate of potash .. .. ..	2	88	(a)	(a)	(a)	(a)	(a)
Bichromate of soda .. .. ..	881	652	(a)	(a)	(a)	(a)	(a)
Chromate of lead .. .. ..	120	164	(a)	(a)	(a)	(a)	(a)
Chrome alum .. .. ..	64	53	(a)	(a)	(a)	(a)	(a)
Brazil— Chromates of potash and soda .. .. ..	300	1,477	388	500	1,571	(a)	(a)
Other chromium salts .. .. ..	46	125	149	50	109	(a)	(a)
Chile— Ferro-chrome .. .. ..	11	22	22	—	(a)	(a)	(a)
Bichromate of potash .. .. ..	10	86	(a)	(a)	(a)	(a)	(a)
Bichromate of soda .. .. ..	154	518	(a)	(a)	(a)	(a)	(a)
Colombia— Chromates .. .. ..	110	119	(a)	(a)	(a)	(a)	(a)
Peru— Chromium compounds .. .. ..	115	210	(a)	(a)	(a)	(a)	(a)
Japan— Ore .. .. ..	3,474	(a)	(a)	(a)	(a)	6,986	27,912
Turkey— Chromates .. .. ..	43	—	80	43	89	89	59
Chrome alum .. .. ..	67	—	—	25	14	26	53

(a) Information not available.

# COAL, COKE AND BY-PRODUCTS

## PRODUCTION OF COAL (Including Brown Coal and Lignite)

(Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Great Britain—							
Mined—							
Anthracite .. ..	3,162,645	3,525,550	3,599,250	3,794,100	3,724,200	3,654,800	3,731,500
Bituminous .. ..	171,495,258	177,717,403	183,603,569	193,851,600	198,964,500	200,484,500	208,144,400
Opencast .. ..	8,125,600	8,838,900	b 10,260,900	(b) 11,782,200	12,477,400	12,185,400	11,009,800
Northern Ireland—							
Bituminous .. ..	680	640	1,300	1,420	650	570	1,296
Lignite .. ..	2,546	174	386	70	—	—	—
Nigeria .. ..	512,552	607,652	579,354	607,757	550,517	583,238	550,281
Southern Rhodesia .. ..	1,642,485	1,587,243	1,484,163	1,668,454	1,887,513	2,094,501	2,263,794
Union of South Africa .. ..	23,182,397	23,229,292	23,127,179	23,645,052	25,093,379	26,055,179	26,211,876
Canada—							
Bituminous .. ..	10,512,646	11,474,433	9,877,375	12,206,893	12,613,095	12,155,639	11,931,686
Sub-bituminous .. ..	2,856,745	3,068,654	2,888,446	2,847,140	2,788,297	2,965,690	2,678,587
Lignite .. ..	1,368,746	1,360,258	1,402,810	1,418,904	1,670,078	1,967,163	1,985,105
India .. ..	29,167,152	29,709,346	{ 301,445,050	30,124,175	31,695,375	32,307,481	34,430,522
Pakistan .. ..			357,744	240,077	331,964	435,149	504,703
Malaya .. ..	226,702	224,674	226,301	375,460	386,898	415,777	382,539
Australia—							
Bituminous (c) .. ..	12,812,368	13,776,383	14,663,157	14,543,567	13,762,804	16,287,040	15,876,613
Sub-bituminous (d) .. ..	41,452	135,460	193,351	239,464	344,638	261,337	1,731,805
Lignite .. ..	5,445,108	5,707,039	6,140,173	6,692,413	7,375,559	7,327,119	7,836,056
New Zealand—							
Anthracite .. ..	2,531	2,272	1,606	1,705	1,885	1,959	672
Bituminous .. ..	962,215	955,998	934,365	950,901	934,802	919,029	677,258
Sub-bituminous .. ..	1,623,336	1,569,020	1,504,942	1,508,045	1,577,908	1,468,397	1,470,465
Lignite .. ..	245,494	266,580	310,810	315,195	298,680	280,066	287,110
TOTAL .. ..	273,589,000	283,953,000	291,657,000	306,774,000	316,465,000	321,850,000	331,706,000
Irish Republic—							
Anthracite .. ..	53,121	56,943	48,723	39,197	28,465	47,522	
do. dust .. ..	68,397	63,779	71,266	48,033	19,213	49,250	
Semi-bituminous .. ..	90,962	90,553	97,885	81,956	78,925	72,405	62,600

(a) Information not available.

(b) Production of Opencast coal by kinds was as follows (long tons):—

1947—	Anthracite 234,670,	Bituminous 9,964,000	and Lignite 62,205.
1948—	" 222,900	" 11,559,300	" Nil.
1949—	" 605,100	" 11,871,300	" Nil.
1950—	" 905,200	" 11,280,200	" Nil.
1951—	" 616,200	" 10,393,600	" Nil.

(c) Including semi-anthracite.

(d) South Australia only for the years 1945 to 1950.

## PRODUCTION OF COAL (Cont.)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES</b>							
Albania— Lignite (estimated) ..	16,000	16,000	16,000	16,000	16,000	16,000	16,000
Austria— Bituminous ..	70,485	106,625	174,962	177,674	180,166	180,053	192,581
Brown coal ..	2,033,352	2,364,186	2,794,472	3,285,184	3,755,635	4,239,706	4,909,890
Belgium (d) ..	15,582,969	22,491,193	24,050,471	26,269,581	27,414,085	26,889,325	29,196,116
Bulgaria— Anthracite (estimated) ..	27,000	27,000	27,000	(b)	(c) 3,514,141	4,647,746	5,621,449
Bituminous (estimated) ..	200,000	200,000	200,000	295,487			
Lignite (d) ..	3,275,000	3,239,000	3,750,000				
Czechoslovakia— Bituminous ..	11,530,951	13,913,000	16,047,254	17,465,474	16,879,000	18,159,000	17,600,000
Brown coal ..	15,113,522	19,204,000	22,030,861	23,217,014	25,983,000	27,072,000	30,500,000
Denmark— Lignite ..	2,283,000	2,275,000	2,758,000	2,362,000	1,575,000	758,000	(a)
France— Anthracite (e) ..	463,000	580,000	603,960	515,410	(f) 30,390,575	50,039,932	52,135,000
Bituminous ..	32,323,983	45,860,000	43,898,169	42,094,665			
Lignite ..	1,676,702	2,070,809	2,060,164	1,812,655			
Germany— Bituminous ..	40,557,000	56,891,000	74,016,000	f 87,020,000	f 103,155,000	f 10,542,800	f 18,775,000
Brown coal ..	117,880,000	157,351,000	158,060,000	f 63,949,000	f 71,085,000	f 74,643,000	f 81,808,000
Greece— Lignite ..	70,000	122,016	130,900	124,600	177,000	(a)	(a)
Hungary— Bituminous ..	697,000	709,000	1,043,000	1,206,000	g 1,360,000	(a)	(a)
Brown coal and lignite ..	3,520,000	5,539,000	7,627,000	9,229,000	g 10,271,000	(a)	(a)
Italy— Anthracite ..	60,289	103,331	114,299	85,156	74,073	66,996	80,890
Bituminous ..	685,007	1,056,048	1,222,253	871,923	1,012,612	947,012	1,067,283
Brown coal ..	755,118	1,496,918	1,821,550	892,971	819,094	767,930	840,035
Netherlands— Bituminous ..	5,016,074	8,182,522	9,940,824	10,858,086	11,520,099	12,053,900	12,228,000
Brown coal ..	125,402	493,266	466,463	274,554	195,278	191,011	245,122
Poland— Bituminous ..	26,933,847	46,541,155	58,196,455	69,152,000	73,306,000	76,769,000	g 80,697,000
Brown coal ..		1,431,712	4,690,700	4,960,000	4,554,000	4,764,000	(a)
Portugal— Anthracite ..	429,229	373,532	364,301	380,661	436,458	412,208	410,225
Brown coal ..	160,278	138,649	106,020	101,622	113,006	92,107	83,799
Roumania— Anthracite ..	16,545	14,757	23,404	2,589,000	2,341,000	(a)	(a)
Bituminous ..	191,281	148,807	137,173				
Brown coal ..	1,484,006	1,402,339	1,632,469				
Lignite ..	306,983	413,844	439,674				
Saar ..	(h)	7,760,000	10,318,000	12,368,800	14,038,000	14,853,000	16,027,000
Spain— Anthracite ..	1,505,375	1,434,509	1,389,062	1,439,634	1,416,487	1,485,424	1,588,416
Bituminous ..	9,057,198	9,154,183	9,049,522	9,019,408	9,244,921	9,296,577	9,541,212
Lignite ..	1,329,440	1,315,003	1,243,050	1,378,062	1,311,135	1,340,635	1,461,259
Spitzbergen and Bear Island	5,912	94,911	331,184	507,979	571,000	541,862	707,433
Sweden ..	605,618	480,467	409,218	368,532	311,612	304,411	274,364
Switzerland— Bituminous ..	99,940	73,367	26,477	—	—	—	—
Brown coal ..	205,984	101,633	12,000	—	—	—	—

(a) Information not available.

(b) Included with Lignite.

(c) Including Anthracite.

(d) Revised.

(e) Excluding "Houilles maigres ou anthraciteux" which are included with Bituminous.

(f) Western Zones. Figures for the Russian Zone are not available; estimates are included in the totals.

(g) Estimated.

(h) Included with Germany.

PRODUCTION OF COAL (Cont.)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
U.S.S.R. (b)	.. .. 140,000,000	159,000,000	179,100,000	203,700,000	230,000,000	256,000,000	280,000,000
Yugoslavia—							
Bituminous .. ..	(a) 745,000	1,045,000	957,000	1,268,000	1,136,000	974,000	
Lignite .. ..	(a) 5,951,000	8,099,000	9,597,000	10,661,000	10,527,000	10,601,000	
Algeria—							
Bituminous .. ..	159,781	211,496	201,369	219,070	261,000	253,700	242,700
Belgian Congo .. ..	49,553	100,292	100,462	115,638	149,964	157,441	214,459
Madagascar .. ..	3,140	371	—	—	16	1,870	5,380
Morocco (French)—							
Anthracite .. ..	175,800	218,248	264,300	285,700	336,025	362,058	387,730
Mozambique .. ..	11,684	16,038	15,917	8,938	12,899	55,087	87,554
Tunis—							
Lignite .. ..	67,512	93,465	75,166	69,283	46,500	40,500	8,040
Greenland .. ..	7,000	8,000	7,000	8,000	7,000	8,000	7,000
Mexico .. ..	900,000	967,300	1,022,800	1,040,528	1,012,000	927,000	1,087,000
United States—							
Anthracite .. ..	49,048,133	54,023,994	51,062,508	51,017,811	38,126,539	39,354,199	38,098,212
Bituminous .. ..	513,347,336	474,334,329	560,491,132	532,528,877	388,192,773	457,983,113	473,547,882
Lignite .. ..	2,382,420	2,381,803	2,565,762	2,755,255	2,760,830	3,008,898	2,938,486
Argentina .. ..	3,200	3,100	14,000	17,200	17,600	25,700	38,900
Brazil .. ..	2,040,142	1,866,764	1,967,326	1,993,007	2,100,147	1,951,743	1,918,759
Chile—							
Bituminous .. ..	2,045,702	1,923,201	2,046,279	2,198,774	2,043,892	2,146,478	2,176,371
Colombia .. ..	526,000	542,000	497,000	506,000	492,000	(a)	(a)
Peru—							
Anthracite .. ..	36,266	80,793	80,749	41,620	27,552	26,357	(a)
Bituminous .. ..	161,818	145,388	131,182	140,797	139,454	166,210	(a)
Venezuela (f) .. ..	16,782	15,374	14,831	20,291	23,403	24,985	27,100
Afghanistan .. ..	(a)	(a)	(a)	(a)	(a)	(a)	13,306
China—							
"Free" .. ..	5,155,000	18,118,000	(a)	8,600,000	16,000,000	36,000,000	42,600,000
North and Central .. ..	(a)	(a)	(a)	(b)	1,500,000	1,623,000	1,412,000
Formosa .. ..	(c) 782,000	1,041,000	1,269,000	(b)	1,500,000	1,412,000	b 1,542,000
French Indo-China—							
Anthracite .. ..	318,000	257,600	243,531	349,413	370,274	486,607	632,100
Bituminous, etc. .. ..	13,000	—	—	—	—	—	—
Indonesia .. ..	(d) 100,000	75,354	219,389	531,241	651,990	791,730	848,149
Iran (b) .. ..	(a) 150,000	150,000	150,000	200,000	250,000	250,000	250,000
Japan—							
Anthracite .. ..	(e) 484,000	437,000	638,000	839,000	768,000	674,000	933,000
Bituminous .. ..	c 2,531,000	19,617,000	26,172,000	32,491,000	36,695,000	37,179,000	41,703,000
Lignite .. ..	c 1,618,000	2,315,000	2,776,000	2,512,000	2,055,000	1,264,000	1,382,000
Korea (c) .. ..	(a)	272,755	459,896	769,836	1,049,000	555,000	600,000
Lebanon—							
Lignite .. ..	(a)	—	—	354	(a)	(a)	(a)
Philippine Republic .. ..	(a)	46,644	72,568	86,361	121,388	156,314	148,311
Turkey—							
Bituminous .. ..	3,660,960	3,770,038	3,882,811	3,959,283	4,116,645	4,291,728	4,654,892
Lignite .. ..	713,766	594,000	826,740	994,140	1,251,848	1,184,501	1,234,997
<b>TOTAL</b> .. ..	<b>1,050,000,000</b>	<b>1,160,000,000</b>	<b>1,930,000,000</b>	<b>1,960,000,000</b>	<b>1,290,000,000</b>	<b>1,440,000,000</b>	<b>1,540,000,000</b>
<b>WORLD'S TOTAL</b>	<b>1,324,000,000</b>	<b>1,445,000,000</b>	<b>1,622,000,000</b>	<b>1,668,000,000</b>	<b>1,610,000,000</b>	<b>1,762,000,000</b>	<b>1,872,000,000</b>

(a) Information not available.

(b) Estimated.

(c) Years ended March 31 following that stated.

(d) Average annual production during Japanese occupation.

(e) Southern Korea only.

(f) Revised to include clandestine production.

**PRODUCTION OF COKE**  
(Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Great Britain—							
Gas-works—coke (b) ..	9,407,600	9,994,700	9,889,700	10,875,800	11,318,900	11,768,000	12,361,000
breeze (b) ..	2,174,100	2,361,900	2,373,900	2,621,200	2,546,700	2,705,000	2,665,000
Coke-ovens—coke ..	13,985,727	13,986,600	13,814,947	15,422,800	15,491,000	15,381,400	15,996,000
breeze ..	741,738	732,000	782,001	858,000	930,400	1,017,000	1,068,000
Northern Ireland—							
Gas-works (estimated) ..	120,000	120,000	120,000	120,000	120,000	120,000	120,000
Southern Rhodesia ..	83,760	84,465	62,684	78,109	79,969	94,357	92,786
Union of South Africa—							
Coke-ovens ..	680,107	692,249	655,011	789,561	940,687	1,019,660	1,233,845
Gas-works ..	(a)	29,062	(a)	(a)	(a)	(a)	(a)
Canada—							
Gas-works—coke ..	241,980	231,398	233,107	236,029	235,254	216,497	} 225,138
breeze ..	32,760	5,137	2,545	2,326	1,783	1,996	
Coke-ovens—coke ..	2,975,516	2,551,429	2,654,487	3,067,502	2,989,983	3,103,922	} 3,261,543
breeze ..	242,887	214,812	247,496	217,157	223,518	217,474	
India—							
Gas-works ..	(a)	(a)	75,082	78,337	80,004	75,440	74,606
Hard ..	1,634,005	1,674,997	1,868,838	1,750,954	2,006,019	2,215,089	2,201,641
Soft ..	547,292	627,622	671,033	850,517	1,025,122	1,268,870	1,250,165
Australia (d)—							
Gas-works—coke ..	1,032,950	1,027,157	1,072,906	1,170,545	1,181,516	988,336	1,041,715
breeze ..	50,480	51,845	55,546	60,556	69,160	75,606	118,231
Coke-ovens—coke ..	1,223,892	986,005	1,197,636	1,384,238	1,150,039	1,164,401	1,586,461
breeze ..	102,402	78,466	93,403	111,062	83,439	87,394	108,658
New Zealand (e)—							
Gas-works ..	93,412	88,554	91,605	94,355	93,419	95,523	(a)
Irish Republic—							
Gas-works (e) ..	95,415	121,019	79,978	77,867	86,392	83,975	89,902
<b>FOREIGN COUNTRIES</b>							
Austria—							
Gas-works ..	(a)	299,821	283,121	309,700	555,519	547,520	449,830
Coke-ovens ..	(a)	112,601	338,962	581,700	844,963	971,705	1,068,540
Belgium—							
Gas-works ..	(a)	(a)	(a)	39,400	33,400	27,959	22,569
Coke-ovens (j) ..	2,027,623	3,839,350	4,717,970	5,540,373	4,955,270	4,525,440	6,009,783
Bulgaria—							
Coke-ovens ..	(a)	(a)	(a)	8,341	(a)	(a)	(a)
Czechoslovakia—							
Gas-works ..	286,172	371,312	4,074,614	4,542,100	(a)	(a)	(e)
Coke-ovens ..	1,870,540	2,215,115	5,907,800	6,148,199	4,612,000	4,799,000	(e)
Denmark (gas-works) (g) ..	336,113	481,538	505,734	553,200	574,100	363,300	401,700
Finland (gas-works) ..	64,532	56,650	55,914	62,961	66,684	66,622	74,806
France—							
Gas-works ..	563,658	1,180,393	1,652,089	2,071,800	2,089,000	2,031,000	2,787,000
Coke-ovens ..	2,687,361	5,069,425	5,907,800	6,148,199	6,744,000	6,922,000	8,232,000
Semi-coke ..	140,872	165,330	182,672	198,787	236,000	248,000	(a)
Germany (Federal)—							
Gas-works ..	(a)	1,467,600	1,651,600	2,211,200	(i) 2,661,800	3,080,000	3,520,000
Coke-ovens—Hard coke ..	(h) 5,201,000	(i) 9,556,000	(i) 4,886,000	(i) 19,487,000	(i) 24,743,000	26,901,700	33,079,000
do. Brown-coal coke	(h) 210,000	(h) 292,000	(h) 356,000	(h) 444,000	(i) 594,400	654,300	680,000

(a) Information not available. (b) Excluding coke used for heating retorts.

(c) Including coke-breeze.

(d) Years ended June 30 of that stated.

(e) Sales for years ended March 31 of the year following that stated

(f) January to October only.

(g) Years ended March 31 of the year following that stated.

(h) British and American Zones. (i) Western Zones. (j) Revised. (k) Calendar year.

PRODUCTION OF COKE (Cont.)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Greece (gas-works) ..	(a)	(a)	(a)	11,300	15,300	(a)	30,818
Italy—							
Gas-works ..	(a)	(a)	773,530	971,515	966,708	1,049,796	1,066,281
Coke-ovens ..	(a)	38,504	945,523	1,287,972	1,487,304	1,486,469	2,138,876
Netherlands—							
Gas-works ..	(c) 98,500	488,594	938,000	988,000	998,600	980,000	943,000
Coke-ovens ..	842,027	1,287,110	1,746,000	2,205,000	2,435,300	2,759,600	2,926,000
Norway (gas-works) ..	17,124	51,024	54,982	58,540	71,198	60,031	60,154
Poland—							
Gas-works ..	(a)	497,752	693,351	} 5,011,000	5,662,000	5,952,000	6,250,000
Coke-ovens ..	(a)	3,019,555	3,703,348		(a)	(a)	(a)
Semi-coke ..	(a)	8,640	55,037		84,071	84,079	(a)
Portugal (gas-works)—							
Coke ..	18,859	18,291	22,529	23,432	20,096	24,498	(a)
Breeze ..	3,396	4,532	4,958	6,997	6,775	(a)	(a)
Coke dust ..	2,660	3,476	5,909	7,165	4,191	(a)	(a)
Saar—							
Gas-works ..	(a)	(a)	(a)	2,200	2,000	600	
Coke-ovens ..	380,000	804,000	1,925,000	2,700,785	3,275,026	3,176,023	3,791,000
Semi-coke ..	—	34,769	44,223	47,343	37,413	50,321	85,323
Spain—							
Gas-works ..	136,000	181,600	151,606	186,900	211,067	200,000	200,000
Coke-ovens ..	758,200	746,500	802,761	834,976	952,217	933,000	980,000
Sweden (including breeze) ..	426,286	403,564	631,296	685,197	658,840	(a)	(a)
Switzerland—							
Gas-works ..	129,007	177,321	331,648	400,600	393,700	406,500	459,000
Algeria (gas-works) ..	76,404	77,437	81,586	91,546	41,795	75,242	94,815
Canary Islands (gas-works) ..	3,825	3,500	2,907	2,029	1,158	1,343	364
Tunis (gas-works) ..	13,587	10,573	10,028	10,680	18,448	12,732	12,633
United States—							
Coke-ovens—							
Coke ..	52,169,711	45,052,916	56,406,616	57,884,486	50,512,936	56,314,174	
Breeze and screenings ..	3,819,036	3,498,954	4,629,682	4,825,671	4,061,587	4,299,431	64,274,261
Coke-ovens (gas-works) (d)—							4,576,637
Coke ..	3,271,618	3,098,376	3,199,231	3,466,047	3,257,137	3,409,592	
Breeze and screenings ..	313,587	279,843	257,919	361,827	339,383	319,103	
Beehive—							
Coke ..	4,655,262	4,078,929	5,970,804	5,872,831	3,049,061	5,203,054	6,556,723
Breeze and screenings ..	82,405	67,871	114,310	96,667	53,120	80,993	78,262
Gas-works—							
Coke ..	767,184	672,621	593,371	472,655	338,769	155,734	113,070
Breeze and screenings ..	88,474	86,446	69,039	69,479	52,139	22,192	17,326
Brazil ..	(a)	(a)	(a)	(a)	261,556	267,419	282,069
Chile ..	98,631	(a)	107,022	123,506	122,468	119,52	114,462
Colombia (b) ..	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Uruguay (gas-works)—							
Coke ..	22,791	22,887	24,808	26,271	27,728	32,116	33,408
Breeze ..	3,049	2,622	3,640	3,483	3,253	4,139	4,926
Japan—							
Coke-ovens ..	1,642,000	354,000	461,000	984,000	1,559,000	2,055,000	2,740,000
Beehive, etc. ..	720,000	555,000	685,000	921,000	980,000	614,000	1,063,000
Gas-works ..	945,000	449,000	673,000	1,064,000	1,287,000	1,311,000	1,665,000
Turkey—							
Gas-works ..	43,924	47,559	52,622	55,137	52,857	54,932	(a)
Coke-ovens ..	223,700	258,012	261,244	266,210	288,680	299,052	302,990
Semi-coke ..	54,995	42,410	59,515	65,300	70,221	(a)	(a)
Coke dust ..	5,291	2,088	2,707	888	(a)	(a)	(a)

(a) Information not available.

(c) October to December only.

(b) Estimated.

(d) By-product coke plants owned by gas companies.

PRODUCTION OF BRIQUETTES

(Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Great Britain .. ..	986,500	1,542,900	1,832,700	1,466,100	1,512,000	1,397,000	1,747,000
Canada .. ..	271,585	294,378	286,117	318,031	452,646	403,742	353,571
Australia (b)—							
Brown-coal briquettes ..	431,344	493,144	490,338	545,236	558,899	588,564	511,404
New Zealand .. ..	9,784	12,975	11,409	12,906	13,715	11,132	11,078
Irish Republic .. ..	117,598	84,426	53,205	(a)	(a)	(a)	(a)
<b>FOREIGN COUNTRIES</b>							
Belgium (c) .. ..	775,092	1,062,569	1,327,183	954,857	770,946	1,003,617	1,773,353
Czechoslovakia—							
Coal .. ..	70,183	205,876	255,037	(a)	(a)	(a)	(a)
Brown-coal briquettes ..	189,445	248,465	279,164	(a)	(a)	(a)	(a)
Denmark—							
Brown-coal briquettes ..	(a)	(a)	18,253	16,282	38,317	19,217	(a)
France .. .. ..	3,416,445	5,080,916	5,136,406	5,735,974	6,236,000	6,201,000	7,925,000
Germany (c)—							
Coal briquettes .. ..	1,302,000	1,872,000	2,142,000	2,925,000	3,529,500	3,662,900	4,039,000
Brown-coal briquettes ..	4,496,000	10,604,000	11,653,000	12,694,000	14,024,600	14,676,900	15,672,500
Italy—							
Anthracite briquettes ..	15,372	(a)	11,063	2,982	(a)	(a)	(a)
Brown-coal briquettes ..	9,885	(a)	15,184	1,565	(a)	(a)	(a)
Netherlands—							
Coal briquettes .. ..	406,055	714,395	895,674	921,084	976,134	1,032,524	1,045,571
Brown-coal briquettes ..	26,826	42,966	41,015	61,993	60,204	55,541	71,358
Poland—							
Coal briquettes .. ..	(a)	520,726	622,272	704,520	681,826	619,100	(a)
Brown-coal briquettes ..	(a)	—	41,038	111,839	168,570	166,700	(a)
Portugal .. .. ..	71,037	76,055	95,879	72,655	70,476	78,328	87,194
Spain .. .. ..	1,032,944	820,282	777,065	989,408	1,117,919	(a)	(a)
Sweden .. .. ..	29,251	25,161	85,527	109,571	58,558	(a)	(a)
Switzerland (estimated) ..	(a)	100,000	100,000	100,000	100,000	100,000	100,000
Algeria .. .. ..	100,148	95,978	81,581	76,591	49,328	64,553	(a)
Morocco (French) .. ..	37,921	21,851	45,485	31,234	14,380	34,027	(a)
Tunis .. .. ..	16,358	31,836	36,183	45,024	43,444	41,481	(a)
United States (d) .. ..	2,466,254	2,682,167	2,831,782	2,793,283	2,146,403	2,473,232	2,131,446
Indonesia .. .. ..	(a)	(a)	2,000	(a)	(a)	(a)	(a)
Turkey .. .. ..	23,338	12,364	14,891	7,205	(a)	(a)	(a)

(a) Information not available.

(b) Years ended June 30 of that stated.

(c) Western Zones only from 1946 inclusive.

(d) In addition packaged fuel produced was as follows (long tons):—  
1945, 185,842; 1946, 170,463; 1947, 163,287; 1948, 140,190; 1949, 112,454; 1950, 121,145; 1951, 106,728.

(e) Revised.

## PRODUCTION OF COAL BY-PRODUCTS

(Long tons)

Producing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Great Britain—							
Tar (quantity distilled) ..	2,121,000	2,196,000	2,274,000	2,447,000	2,481,000	2,530,000	2,700,000
Road tar (incl. refined) ..	628,000	735,000	732,000	742,000	648,000	616,000	608,000
Pitch .. ..	412,000	474,000	529,000	624,000	643,000	599,000	639,000
Motor benzol ..	172,900	224,300	174,500	215,700	230,600	216,900	195,700
Other motor spirits, etc.	110,300	118,300	81,000	111,000	134,000	134,300	119,700
Other refined light oils ..	140,800	89,700	86,500	99,100	94,100	116,100	138,800
Creosote-pitch mixture..	559,000	381,000	305,000	310,000	425,000	580,000	632,000
Creosote oil ..	286,000	357,000	452,000	490,500	504,800	452,400	490,500
White naphthalene ..	7,400	7,500	10,700	11,800	11,800	12,000	13,200
Hot-pressed do. ..	10,000	8,400	8,900	14,000	13,600	13,900	15,400
Crude do. ..	14,900	19,400	12,600	13,700	12,200	14,000	12,600
Pyridine bases ..	600	650	650	700	700	750	930
Natural phenol ..	8,200	9,600	9,100	10,000	9,100	11,500	11,200
Refined cresylic acid ..	32,500	40,000	40,000	45,600	32,200	45,650	53,600
Anthracene 40-50% ..	1,940	2,240	2,280	2,700	2,600	2,550	2,590
Ammonium sulphate (b)	760,400	833,700	796,700	901,000	924,500	960,700	968,100
Canada—							
Tar* (crude) .. ..	194,847	169,456	167,053	193,544	194,118	207,325	(a)
Tar (refined) .. ..	53,732	26,845	18,243	12,532	18,169	22,178	22,447
Pitch .. ..	60,843	75,909	67,367	78,227	82,403	101,348	100,126
Creosote oils ..	48,782	48,738	45,823	52,592	59,795	55,848	55,841
Ammonium sulphate ..	35,077	27,210	29,465	37,168	35,105	36,516	(a)
Benzol .. ..	29,650	23,104	23,121	24,038	26,161	28,748	(a)
Ammonia liquor ( $\text{NH}_3$ content) ..	760	696	662	622	650	(a)	(a)
Toluol, naphthalene, etc.	6,569	2,635	4,060	567	584	(a)	(a)
India (coke-ovens)—							
Ammonium sulphate ..	19,591	19,108	18,395	16,212	19,328	22,104	25,713
Tar .. ..	59,836	62,953	63,810	59,183	66,587	80,521	82,909
Benzol (crude) ..	1,049	1,349	1,286	4,353	4,070	4,741	4,130
Pitch .. ..	1,942	1,829	1,247	1,299	1,143	971	1,224
Naphthalene (crude) ..	143	121	126	120	133	144	205
Australia (gas-works) (c)—							
Tar (crude)* .. ..	161,553	165,032	185,817	193,853	192,932	178,745	154,430
Tar (refined)* .. ..	34,289	37,864	40,145	43,985	40,315	35,324	36,275
Tar oils (crude) ..	14,204	15,126	18,422	19,150	15,537	13,772	14,807
Ammonia liquor ..	92,945	74,150	68,417	75,756	85,172	80,731	107,740
Ammonium sulphate ..	1,880	2,274	1,186	(a)	(a)	760	(a)
New Zealand (a)—							
Tar (gas-works)* ..	10,924	11,958	13,051	13,223	13,822	13,713	(a)
Irish Republic (gas-works)—							
Tar .. ..	6,868	6,781	6,237	10,276	12,917	14,102	14,405
Ammonium sulphate ..	911	1,019	261	338	312	277	240
<b>FOREIGN COUNTRIES</b>							
Austria—							
Tar .. ..	}	(a)	(a)	(e)	21,235	(e)	20,831
Benzol .. ..							
						{	27,356 4,609
							21,341 4,384

\* See page 73 for conversion rates.

(a) Information not available.

(b) Source : British Sulphate of Ammonia Federation. Includes ammonium sulphates from other sources.

(c) Years ended June 30 of the year stated.

(d) Sales for years ended March 31 of the year following that stated.

(e) Total coal-tar products excluding crude tar.

## PRODUCTION OF COAL BY-PRODUCTS (Cont.)

Producing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Belgium—							
Tar (crude) .. .	52,872	127,346	158,249	189,588	178,682	164,273	200,473
Benzol, crude .. .	5,466	7,559	8,533	21,672	38,088	36,213	(a)
do. motor .. .	(a)	16,441	15,091	24,895	20,474	10,052	(a)
do. industrial .. .	(a)	7,913	7,786	10,563	7,082	16,175	28,700
Benzine .. .	(a)	3,117	7,389	5,678	8,716	6,156	15,498
Toluol and xylol .. .	(a)	2,595	2,886	3,128	4,327	3,913	5,524
Solvent naphtha .. .	(a)	815	826	672	844	814	1,091
Ammonium sulphate .. .	18,600	40,250	49,191	66,424	61,513	56,270	(a)
Pitch .. .	(a)	(a)	(a)	(a)	19,067	21,780	(a)
Denmark—							
Tar (gas-works) .. .	28,626	22,620	30,538	36,748	39,370	41,274	(a)
Finland—							
Gas-works—							
Tar .. .	1,941	1,996	2,586	2,744	2,742	2,984	3,583
Benzol .. .	139	201	186	176	161	455	621
Ammonia .. .	191	232	210	198	211	228	251
France—							
Tar (crude) .. .	207,943	354,300	419,091	428,269	462,570	468,132	530,000
Ammonium sulphate .. .	21,591	58,955	72,943	75,823	72,879	(a)	(a)
Benzol (crude) .. .	21,893	55,770	55,445	60,956	67,823	71,477	80,000
Pitch .. .	99,279	122,814	127,234	139,856	(a)	(a)	(a)
Phenol (crude) .. .	2,678	3,879	3,931	4,992	(a)	(a)	(a)
Naphthalene .. .	11,836	22,063	21,985	27,811	(a)	(a)	(a)
Germany (b)—							
Tar (crude) .. .	{ 446,900	638,200	806,600	1,036,452	1,159,835	1,378,353	
Pitch .. .	201,000	285,100	409,600	544,929	610,660	707,181	
Tar oils .. .	107,300	157,600	220,000	311,084	350,075	392,406	
Naphthalene .. .	(a) { 21,212	(c) 31,972	(a)	(a)	53,945	55,511	
Benzol (crude) .. .	96,200	144,600	207,900	272,365	309,534	383,174	
Refined benzols .. .	82,400	125,200	189,600	243,814	268,149	344,209	
Phenol, cresol, etc. .. .	3,200	4,600	7,500	7,144	17,067	15,577	
Italy—							
Tar .. .	{ 67,278	94,843	106,300	109,862	131,540		
Ammonium sulphate .. .	10,515	13,675	15,263	(a)	(a)		
Benzol (crude) .. .	9,976	13,471	14,221	14,852	19,277		
Naphthalene (crude) .. .	6,545	5,462	5,433	5,925	8,077		
Distillates .. .	(a) { 27,951	(a) { 43,002	44,391	56,589	60,314		
Benzol (refined) .. .	5,699	9,700	11,304	14,721	16,104		
Toluol and xylol .. .	698	1,911	1,727	2,413	4,523		
Pitch .. .	19,871	30,504	29,826	38,603	41,829		
Solvents .. .	3,405	4,686	2,298	3,283	3,576		
Netherlands—							
Tar (crude) .. .	(a)	(a)	108,950	135,968	140,040	146,424	150,684
Norway—							
Tar (gas-works) .. .	1,640	3,160	3,758	4,580	4,351	5,682	5,016
Poland—							
Tar (crude) .. .	{ 79,030	95,990	118,171				
Pitch .. .	(a) { 13,292	14,758	19,199				
Ammonium sulphate .. .	20,417	29,391	29,707				
Benzol (crude) .. .	24,876	24,515	38,712				
Portugal (gas-works)—							
Tar (crude) .. .	3,656	3,680	2,704	2,058	1,826	2,484	(a)
Tar (refined) .. .	2,667	2,515	2,053	1,341	425	2,938	(a)
Benzol .. .	25	8	21	24	11	144	(a)
Phenol .. .	18	41	46	28	20	176	(a)
Anthracene .. .	8	10	8	—	—	747	(a)
Creosote .. .	810	545	513	494	153	1,836	(a)
Naphthalene (crude) .. .	2	2	12	4	3	—	(a)
Pitch .. .	1,068	907	869	714	190	873	(a)

(a) Information not available.

(b) Bizonal area. Federal Germany after 1948.

(c) British Zone only.

## PRODUCTION OF COAL BY-PRODUCTS (Cont.)

Producing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Spain—							
Tar .. ..	35,700	35,900	35,941	34,893	48,787	(a)	(a)
Pitch .. ..	7,538	8,005	10,136	10,930	8,551	(a)	(a)
Benzol .. ..	(a)	(a)	7,613	6,636	7,101	(a)	(a)
Naphthalene .. ..	(a)	(a)	1,574	1,702	1,787	(a)	(a)
Ammonium sulphate .. ..	(a)	(a)	14,608	9,255	10,300	(a)	(a)
Creosote .. ..	3,365	6,056	2,955	3,778	2,557	(a)	(a)
Sweden—							
Tar (crude) .. ..	18,539	20,864	30,980	33,822	35,745	(a)	(a)
Other tar .. ..	16,082	24,159	24,378	28,814	25,727	(a)	(a)
Pitch .. ..	1,495	1,442	1,825	1,646	3,439	(a)	(a)
Ammonium sulphate .. ..	3,222	3,244	4,241	(a)	(a)	(a)	(a)
Benzol, toluol, etc. .. ..	3,369	3,084	3,995	4,067	3,825	(a)	(a)
Distillates, etc. .. ..	3,628	1,707	1,226	1,247	2,790	(a)	(a)
Switzerland—							
Tar (crude) (gas-works) .. ..	7,286	10,346	19,534	(a)	(a)	(a)	(a)
Benzol .. ..	(a)	1,858	2,450	(a)	(a)	(a)	(a)
Algeria—							
Tar (gas-works) .. ..	5,364	5,187	4,818	6,214	5,550	5,511	5,669
Tunis—							
Tar (gas-works) .. ..	871	1,080	1,488	1,281	1,388	1,392	(a)
United States—							
Coke-ovens—							
Tar* .. ..	2,975,672	2,550,721	3,146,045	3,157,073	2,873,536	3,161,832	3,398,766
Pitch .. ..	523,786	455,795	587,005	657,960	481,965	639,028	755,746
Sulphate equivalent of ammonia produced(b) .. ..	780,999	664,033	814,564	830,083	756,970	825,503	890,869
Benzol* .. ..	422,235	365,763	402,939	499,996	409,138	514,888	576,164
do, motor* .. ..	77,387	73,653	42,480	24,232	56,247	20,772	13,720
Naphthalene (crude) .. ..	39,142	31,967	43,919	47,240	31,618	44,522	58,534
Toluol and xylol* .. ..	112,985	73,549	109,565	116,776	114,167	126,574	141,825
Solvent naphtha* .. ..	15,393	14,106	20,986	18,406	16,016	19,240	19,347
Creosote* .. ..	146,155	123,503	160,707	138,828	96,740	149,642	170,524
Phenol* .. ..	(a)	(a)	(a)	3,760	2,818	3,544	3,556
Other light products .. ..	26,115	25,241	27,897	26,872	23,742	22,727	23,069
All sources (c)—							
Coal tar .. ..	3,074,120	2,633,611	3,219,397	3,218,205	2,920,782	3,201,547	(a)
Water gas and oil gas tar .. ..	769,231	942,030	1,076,068	1,149,701	990,555	1,022,457	(a)
Crude light oil (d) .. ..	867,457	887,967	931,207	890,680	792,390	897,033	(a)
Benzol, motor .. ..	87,234	85,556	52,965	28,263	62,798	38,177	(a)
do, other .. ..	520,717	454,510	558,840	579,533	444,193	586,743	(a)
Toluol .. ..	(d) 432,709	79,033	109,026	110,778	109,709	125,533	(a)
Xylol .. ..	31,163	26,539	27,000	26,118	26,680	31,163	(a)
Solvent naphtha .. ..	25,038	28,449	40,644	48,077	16,016	19,240	(a)
Other light oil derivatives .. ..	49,293	41,320	55,220	60,427	50,760	51,070	(a)
Naphthalene (crude) .. ..	128,409	108,157	140,500	146,230	105,339	128,800	(a)
Creosote oil .. ..	614,484	541,274	632,857	575,123	525,437	564,754	(a)
Coal tar (e) .. ..	33,308	40,145	48,893	42,838	39,534	40,577	(a)
Tar, refined (f) .. ..	133,291	74,581	83,808	91,739	120,312	2,013	(a)
Tar, road .. ..	718,496	664,637	682,085	554,081	644,530	644,538	(a)
Distillate products, others .. ..	29,024	50,833	87,155	93,746	150,802	143,635	(a)
Pitch of tar .. ..	1,494,643	1,783,000	1,294,000	1,528,000	1,055,000	1,333,000	(a)
Pitch of tar coke .. ..	77,679	83,000	90,000	58,000	52,000	57,000	(a)

(a) Information not available.

(b) Actual Ammonium sulphate produced was as follows (long tons): 1945—682,404; 1946—574,779; 1947—722,714; 1948—769,135; 1949—728,244; 1950—755,103; 1951—(a)

(c) Including products obtained from coke-ovens except Ammonium sulphate.

(d) Including some material produced from petroleum.

(e) Sold or consumed in coal-tar solution.

(f) Used for paints, etc.

PRODUCTION OF COAL BY-PRODUCTS (Cont.)

Producing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Brazil (b)—							
Tar (crude) .. ..				13,898	(a)	(a)	(a)
Road tar .. ..				9,111	(a)	(a)	(a)
Benzol, motor .. ..				2,405	(a)	(a)	(a)
do. other .. ..				334	(a)	(a)	(a)
Toluol and xylol .. ..		(a)	(a)	469	(a)	(a)	(a)
Solvent naphtha .. ..				44	(a)	(a)	(a)
Naphthalene .. ..				566	(a)	(a)	(a)
Creosote oil .. ..				78	(a)	(a)	(a)
Ammonium sulphate .. ..				4,209	(a)	(a)	(a)
Pitch .. ..				98	(a)	(a)	(a)
Carbolic acid .. ..				301	(a)	(a)	(a)
Chile—							
Tar .. .. .. ..	14,543	(a)	14,407	16,153	17,006	16,378	15,230
Uruguay (gas-works)—							
Tar .. .. .. ..	1,739	1,605	1,741	1,806	1,847	2,020	1,979
Benzol .. .. .. ..	591	334	338	54	56	33	99
Tar oil .. .. .. ..	216	254	291	46	74	127	87
Pitch .. .. .. ..	180	234	206	169	307	422	253
Japan—							
Tar .. .. .. ..	121,896	71,099	119,853	168,051	235,997	288,955	390,513
Benzol (crude) .. ..	20,267	8,161	14,184	27,566	45,423	58,757	81,610
do. (other) .. ..	11,598	3,957	6,496	14,411	21,826	27,520	38,892
Toluol and xylol .. ..	1,488	520	1,193	1,783	3,437	5,031	5,622
Solvent naphtha .. ..	1,098	437	1,630	1,878	3,520	4,984	5,374
Creosote oil .. ..	33,128	12,578	24,944	47,277	64,544	69,032	82,484
Carbolic acid (crude) .. ..	1,346	413	898	1,606	2,362	3,260	4,701
Pitch .. .. .. ..	72,873	36,872	54,293	87,126	119,309	157,658	(a)
Naphthalene (crude) .. ..	4,972	2,374	2,728	7,134	12,118	14,362	18,708
do. (refined) .. ..	1,854	921	1,016	3,366	5,552	7,228	11,173
Anthracene .. .. ..	1,311	343	531	1,453	2,575	2,622	3,212
Turkey—							
Coke-ovens—							
Tar (crude) .. ..	(a)	12,968	—	(a)	(a)	15,405	(a)
Benzol (crude) .. ..	(a)	3,389	—	(a)	(a)	3,161	(a)
Road tar .. ..	503	377	324	(a)	(a)	(a)	(a)
Heavy oils .. ..	(a)	3,792	5,257	(a)	(a)	(a)	(a)
Naphthalene (crude) .. ..	445	204	—	(a)	(a)	748	(a)
Anthracene (crude) .. ..	(a)	318	241	(a)	(a)	(a)	(a)
Pitch .. .. .. ..	6,244	7,691	7,245	7,636	(a)	(a)	(a)
Naphthalene (refined) .. ..	300	340	441	(a)	(a)	(a)	(a)
Motor benzol .. ..	2,293	2,670	2,775	(a)	(a)	(a)	(a)
Other benzol .. ..	(a)	1,579	—	(a)	(a)	(a)	(a)
Solvent naphtha .. ..	94	44	93	(a)	(a)	(a)	(a)
Gas-works—							
Tar .. .. .. ..	2,283	2,636	2,901	3,127	2,967	2,985	(a)

\* The following rates have been used for conversion of gallons to long tons : Tar, 195; Benzol, 250; Creosote, 210; Motor fuel, 310; Toluol, 255; Solvent naphtha, 260 Phenol, 210; Cresylic acid, 214.

(a) Information not available.

(b) Volta Redonda only.

EXPORTS OF COAL, COKE AND BY-PRODUCTS\*

(Domestic Produce)

(Long tons)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
<b>Anthracite</b> —							
smalls and graded ..	486,552	913,222	67,612	398,669	606,185	823,628	622,884
large .. ..	7,957	49,515	35,035	133,001	309,404	410,923	296,822
other .. ..	—	183	469	4,478	17,119	32,944	171,489
<b>Bituminous</b> —							
smalls and graded ..	1,639,780	1,959,875	490,037	5,335,887	6,230,309	5,432,948	1,780,410
unscreened ..	723,406	702,969	242,938	1,524,371	2,065,545	2,076,200	1,239,079
large .. ..	467,009	828,733	220,842	3,108,931	4,395,078	4,279,327	2,288,274
other .. ..	(a)	(a)	(i)	(a)	292,276	494,662	1,407,611
Bunkers .. ..	3,104,824	4,719,234	4,393,672	5,430,574	5,043,692	4,020,158	3,722,969
Coke, gas .. ..	25,851	79,286	4,067	634,752	795,616	865,630	222,727
do. other .. ..	157,567	397,665	68,313	227,004	873,003	1,339,709	672,810
Manufactured fuel .. ..	21,399	20,070	—	199,795	370,995	384,898	427,607
Tar .. ..	42,847	109,451	186,007	160,485	88,094	141,138	74,127
Pitch .. ..	154,208	179,008	216,469	232,196	241,269	282,128	352,109
Creosote oil .. ..	2,550	23,947	163,801	170,359	161,173	129,802	122,685
Other heavy coal-tar oils .. ..	970	4,457	5,435	3,250	3,861	3,201	6,473
Naphthalene .. ..	2,502	2,754	1,054	3,045	3,512	4,780	1,991
Carbolic acid—							
Crude .. ..	16	11	30	14	6		233
Crystals .. ..	1,534	394	23	36	1,563		
Cresylic acid .. ..	10,576	13,880	11,119	11,988	6,755	15,807	17,041
Benzol .. ..	122,404	4,832	2,274	213	90	44,564	163,639
Anthracene .. ..	—	—	—	—	3	1	—
Other coal-tar products .. ..	4,527	11,928	10,348	9,340	6,715	(a)	(a)
Malta—							
Coal (bunkers on merchant ships, (b) ..	(a)	3,672	4,112	8,717	2,888	1,853	1,445
Kenya—							
Coal (bunkers) (b) ..	48,260	29,899	39,099	24,141	27,688	18,076	2,949
Mauritius—							
Co <sub>2</sub> (bunkers) (b) ..	(a)	11,092	10,989	10,206	7,295	5,342	4,852
Nigeria—							
Coal .. ..	184,797	177,528	135,699	83,120	63,332	2,718	98,610
do. (bunkers) .. ..	7,827	10,854	20,937	14,186	(a)	(a)	—
do. do. (b) .. ..	6,058	2,809	—	—	—	—	—
Sierra Leone—							
Coal (bunkers) (b) ..	156,383	92,392	77,469	45,433	33,571	18,491	(a)
Southern Rhodesia—							
Coal .. ..	784,146	649,922	604,463	704,595	728,547	784,478	877,776
Coke .. ..	78,835	68,598	55,200	62,397	47,622	53,996	58,736
Union of South Africa—							
Coal .. ..	3,760,343	3,145,590	2,596,060	1,689,238	1,824,716	2,527,299	1,687,929
do. (bunkers) .. ..	760,481	712,896	605,216	560,678	580,432	371,780	237,423
Coke .. ..	63,482	49,879	39,321	11,462	14,443	42,401	41,410
Tar and pitch .. ..	2,231	5,515	8,338	5,742	2,891	2,766	(a)
Canada—							
Coal .. ..	735,455	762,430	630,721	1,127,631	379,468	340,071	374,983
do. (bunkers) (c) .. ..	164,573	197,240	159,725	105,885	107,029	85,871	93,053
do. do. (d) .. ..	458,283	309,271	381,062	365,705	321,379	261,720	246,771
Lignite .. ..	15,177	7,649	7,269	9,210	6,285	12,573	13,484
Coke .. ..	34,522	43,921	95,136	149,374	243,850	308,071	144,377
Tar and pitch .. ..	16,052	11,331	6,117	344	18	14	3,185
Creosote oil .. ..	8,298	412	151	3	—	41	32
Other coal tar oils .. ..	10,773	13,565	10,087	18,804	19,854	14,940	11,252

\* For Ammonium sulphate, etc. see Nitrogen Compounds, pages 203-204.

(a) Information not available.

(b) Foreign coal ("see imports").

(c) Domestic produce. Shipments from mines to ships' bunkers.

(d) Foreign coal, "ex-warehouse for ships' stores". (See imports.)

EXPORTS OF COAL, COKE AND BY-PRODUCTS (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES (Cont.)</b>							
<b>British West Indies—</b>							
Bermuda—							
Coal (bunkers) (c) ..	(a)	(a)	(a)	3,425	1,240	900	(a)
British Guiana—							
Coal (bunkers) (c) ..	167	97	11	—	3	3	10
Jamaica—							
Coal (bunkers) ..	(b) 11,271	(b) 26,284	(b) 72,929	(b) 34,966	(b) 38,732	(b) 14,973	20,819
Trinidad and Tobago—							
Coal (bunkers) (c) ..	79,969	59,819	81,172	55,742	33,483	18,482	16,769
Aden—							
Coal (bunkers) (c) ..	191,580	285,542	309,365	193,397	202,488	130,794	88,516
India—							
Coal ..	53,860	463,522	547,631	934,521	1,360,315	910,645	1,885,491
do. (bunkers—domestic produce) ..	382,595	551,499	495,274	382,122	410,861	231,257	291,685
do. (bunkers—foreign produce) ..	—	125	—	—	—	—	—
Coke ..	179	983	2,895	13,767	2,304	7,699	22,987
Malaya (including re-exports)—							
Coal ..	(a)	2,002	1,581	323	105	1	1,209
do. (bunkers) (c) ..	(a)	(a)	120,236	71,974	66,307	44,286	37,297
Coke ..	(a)	2,227	214	351	348	273	658
Tar and pitch..	(a)	234	241	272	247	254	1,222
Ceylon—							
Coal (bunkers) (c) ..	134,701	137,994	104,441	112,400	109,111	80,644	68,803
Cyprus—							
Coal (bunkers) (c) ..	(a)	96	163	638	560	225	329
Hong Kong (re-exports)—							
Anthracite ..	..	4,999	85				
Bituminous ..	..	(a) 1,442	3,080	2,768	19,406	53,107	10,974
Briquettes ..	..	—	—	—			
Coke ..	..	211	223	1,361	356	398	431
Australia—							
Coal ..	121,735	88,598	48,364	49,904	48,247	67,391	114,503
do. (bunkers) (d) ..	207,462	228,977	405,428	283,354	293,707	135,059	(a) 741
Coke ..	16,376	40,401	7,739	5,348	2,523	2,920	—
Carbolic acid (d) ..	(a)	(a)	(a)	23	353	652	(a) 3,255
Other coal tar oils ..	(a)	(d) 1,541	(d) 3,435	(d) 2,746	3,579	2,460	—
New Zealand—							
Coal ..	19	2,558	4,068	2,420	7,032	2,983	3,176
do. (bunkers) ..	21,970	24,809	23,967	16,493	14,543	2,083	2,889
Coke ..	5	7	11	19	323	1,134	292
Tar ..	10	49	9	17	13	138	59
Pitch ..	1	—	—	—	—	—	—
Irish Republic—							
Coal (bunkers) (c) ..	13,806	3,089	2,023	3,711	1,843	1,042	399
Coke ..	—	—	—	1,454	—	—	—
<b>FOREIGN COUNTRIES</b>							
<b>Austria—</b>							
Brown coal ..	(a)	(a)	(a)	(a)	(a)	1,084	2,207
Coke ..	(a)	(a)	(a)	20,061	18,663	14,586	15,944
Tar ..	(a)	(a)	(a)	(a)	(a)	—	168
Naphthalene ..	(a)	(a)	(a)	(a)	(a)	976	8,302
							2,250
							1,756

(a) Information not available.

(b) Amount imported for bunkers. Figures of actual shipments are not available.

(c) Foreign coal (see imports).

(d) Years ended June 30 of that stated.

EXPORTS OF COAL, COKE AND BY-PRODUCTS (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Belgium-Luxemburg E.U.—							
Coal .. .	36,591	304,827	827,683	{ 606,776	1,262,332	2,727,791	1,861,427
do. (bunkers) (b) .. .				163,999	80,823	(a)	(a)
Coke .. .	155,089	471,480	684,884	692,408	392,126	334,631	348,915
Briquettes .. .	651	15,803	72,103	45,440	12,648	15,126	273,945
Brown coal briquettes .. .	(a)	(a)	(a)	261	46	—	—
Tar .. .	(a)	(a)	(a)	1,573	4,655	5,064	1,592
Naphthalene .. .	(a)	(a)	(a)	8,659	5,739	9,109	9,870
Distillates .. .	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Bulgaria—							
Coal .. .	6,746	4,611	(a)	(a)	(a)	(a)	(a)
Czechoslovakia—							
Coal .. .	{ 24,590	34,035	(c) 438,250				
Brown coal .. .	308,589	941,987	(c) 942,665				
Coke .. .	270,503	567,846	(c) 840,114				
Briquettes .. .	20	3,076	(c) 20				
Tar and pitch .. .	(a) 67,160	31,813	(c) 19,412				
Benzol, etc. .. .	3,600	1,172	(c) 2,830				
Crude naphthalene .. .	1,023	1,779	(c) 5,794				
Crude carbolic acid .. .	248	1,606	(c) 3,261				
Cresol .. .	29	208	(c) 418				
Creolin, etc. .. .	818	1,612	(c) 1,498				
Denmark—							
Tar and pitch .. .	1,284	79	87	24	124	6,486	5,691
France—							
Anthracite .. .	{ 40,750	299,264	{ 33,588	14,570	9,959	16,554	17,211
Bituminous .. .			{ 284,735	3,439,185	5,247,756	6,161,423	5,830,856
Brown coal .. .	—	462	12,984	1,061	381	253	2,526
Coke .. .	986	45,129	47,315	419,514	404,811	277,346	254,439
Briquettes .. .	226	78,045	106,641	12,698	25,082	47,265	67,959
Brown coal briquettes .. .	—	1,083	—	2,058	718	2,289	5,268
Coal, coke and briquettes—							
Bunkers (domestic produce) .. .	36,834	(a)	(a)	(a)	(a)	(a)	(a)
do. (foreign produce) .. .	20,149	(a)	(a)	(a)	(a)	(a)	(a)
Tar and pitch .. .	380	1,317	4,715	25,061	5,416	3,480	32,452
Benzol, etc. .. .	—	84	148	2,680	276	1,200	10,038
Naphthalene .. .	4	926	1,296	1,025	2,178	10,101	8,264
Carbolic acid, etc. .. .	42	77	99	70	10	108	117
Carbolineum .. .	(a)	(a)	(a)	1,735	885	1,422	1,349
Anthracene .. .	62	97	61	1	25	206	258
Coal tar oils .. .	—	110	454	531	244	931	15,208
Germany (Federal)—							
Coal .. .	—	—	—	9,173,908	12,654,798	15,144,844	12,856,466
do. (bunkers for foreign ships) .. .	(a)	e 12,884,000	f 19,999,000	{ 129,674	326,037	346,182	351,720
Brown coal .. .	(a)	(a)	—	—	—	—	—
Coke .. .				6,736,716	7,663,176	8,018,510	9,734,545
Coal briquettes .. .				123,036	98,492	244,842	241,086
Brown-coal briquettes .. .				1,528,237	1,575,199	1,565,681	1,573,720
Tar and pitch .. .	(a)	(a)	(a)	390	34,123	107,453	132,076
Naphthalene .. .				3,349	7,040	30,302	15,881
Carbolic acid .. .				—	124	1,599	(d) 149
Cresol .. .				1	103	2,831	(d) 1,249
Light coal-tar oils, etc. .. .				3,152	792	1,092	14,394
Heavy coal-tar oils, etc. .. .				17,299	18,430	86,630	75,675

(a) Information not available.

(b) Bunkers for foreign ships only.

(c) January to October only.

(d) January to September only.

(e) British and French Zones only.

(f) British, French and Russian Zones.

## EXPORTS OF COAL, COKE AND BY-PRODUCTS (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
FOREIGN COUNTRIES (Cont.)							
Hungary—							
Coal							
Lignite	(a)	80,705	130,093	(a)	(a)	(a)	(a)
Coke							
Briquettes							
Italy—							
Coal (incl. bunkers)				4,508	7,130	8,149	3,167
Coke			(a)	—	50,413	116,846	58,983
Tar and tar oils				9	2	4,004	821
Pitch				(a)	(a)	(d)	8,384
Naphthalene		(a)	(a)	—	—	—	2
Netherlands—							
Coal			351	46,685	35,173	17,903	22,550
do. (bunkers) (b)		184,357	246,877	255,415	326,771	371,147	342,807
Brown coal		(a)	(a)	35,685	2,772	266	23,074
Coke		436,206	524,613	881,927	941,912	1,093,039	1,177,088
Briquettes		116	113	439	—	317	355
Brown coal briquettes		(a)	(a)	4,390	5,620	9,894	10,989
Tar		15	1,276	677	1,486	1,685	1,039
Creosote		3,720	9,225	17,791	(a)	29,423	26,865
Naphthalene		1,880	3,179	5,320	8,286	7,865	8,515
Anthracene		3,237	1,381	1,175	1,115	1,799	3,871
Carbolic acid		—	22	—	—	1,549	1,947
Benzol		2,521	10,511	11,782	16,900	13,813	12,981
Toluol and xylol		23	29	394	—	727	22
Solvent naphtha		14	—	35	9	101	195
Norway—							
Coal		—	—	33	4,951	—	14
Tar		—	4	4	1	—	(a)
Pitch		5	43	32	5	19	191
Poland—							
Bituminous		5,403,194	13,270,447	17,609,908	24,361,553		
Brown coal		(a)	1,174,869	4,171,882	4,193,280		
Coal (bunkers) (c)		9,842	317,899	400,108	563,560		
Coke		90,744	1,411,746	1,423,084	1,542,382	(a)	(a)
Briquettes		4,921	4,921	8,303	1,674	(a)	(a)
Naphthalene		—	1,575	841	3,393		
Benzol		—	10,563	8,923	10,386		
Creosote, etc.		—	1,022	(a)	(a)		
Portugal—							
Coal		192	4	137	116	1,227	152
do. (bunkers) (c)		21,329	28,252	18,280	21,541	15,364	8,266
Tar and pitch		185	102	80	97	194	76
Spain—							
Anthracite		9,519	30,646	17,242	7,878	3,407	21,234
Bituminous		337,251	357,741	222,912	84,048	16,952	40,449
Other coal		3	13	214	443	—	858
Coke		243	568	555	733	858	1,206
Briquettes		4,190	2,737	59	—	—	59
Carbolic acid, naphthalene, etc.		32	95	149	97	171	62
Tar and pitch		19	20	5	6	27	119
Spitzbergen—							
Coal (including bunkers)		289	61,741	276,751	413,686	522,922	(a)
Sweden—							
Coal		14,335	—	793	—	—	30
Coke		9,979	—	1,000	—	—	43
Tar, pitch, etc.		428	3,570	8,205	10,893	4,690	26,469
Benzol		1,213	1,780	2,150	1,550	106	18,301
Carbolic acid, etc.		52	24	3	5	—	9,522
Toluol and xylol		56	844	547	113	237	2,498
Yugoslavia—							
Bituminous		(a)	(a)	(a)	(a)	(a)	104,077
Brown coal		(a)	(a)	(a)	(a)	(a)	26,204
Lignite		(a)	(a)	(a)	(a)	(a)	—

(a) Information not available.  
 (b) Including imported coal.

(c) Bunkers for foreign ships.  
 (d) July to December only.

## EXPORTS OF COAL, COKE AND BY-PRODUCTS (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Switzerland—							
Coal .. . . .	—	—	99	197	34	334	322
Coke .. . . .	—	—	9	976	976	25	—
Briquettes .. . .	—	—	1,544	309	197	546	573
Tar and pitch .. . .	—	2,524	3,024	5,098	4,679	2,561	2,391
Creosote, etc. .. . .	1	113	604	991	976	55	801
Naphthalene, etc. .. . .	47	675	840	1,129	1,295	3,016	2,978
Algeria—							
Coal .. . . .	(a)	(a)	33,324	30,019	40,873	44,407	78,077
do. (bunkers) .. . .	4,668	85,790	307	68	482	176	1,181
do. do. (b) .. . .	24,269	112,769	90,910	51,433	60,435	(a)	114,518
Coke .. . . .	5	—	3	—	90	10	74
Briquettes .. . .	9	21	—	93	—	—	9
do. (bunkers) (b) .. . .	—	—	107	163	400	21	307
Tar .. . . .	10	144	12	524	853	—	159
Angola (b)—							
Coal .. . . .	17	—	57	(a)	(a)	(a)	(a)
Tar .. . . .	857	252	(a)	(a)	(a)	(a)	(a)
Canary Islands—							
Coal .. . . .	3	3	7	1	2,143	41	—
do. (bunkers) (b) .. . .	21,265	55,505	63,434	78,776	87,847	61,831	49,497
Ceuta—							
Coal .. . . .	4,494	6,082	5,286	8,179	1,388	3,314	2,328
do. (bunkers) (b) .. . .	151,148	126,851	158,525	112,247	127,371	147,240	80,505
Egypt—							
Coke .. . . .	3	2	1	1	3	(a)	(a)
Tar and Pitch .. . .	—	50	104	5	15	(a)	(a)
Madagascar—							
Coal (bunkers) .. . .	7,509	15,729	11,964	3,289	56	3,142	88
Morocco (French)—							
Anthracite .. . . .	15,401	100,200	99,688	(a)	159,628	145,853	234,369
Other coal .. . . .	374	50,377	2,804	(a)	(a)	(a)	(a)
Briquettes .. . . .	15,401	12,470	18,225	(a)	(a)	(a)	(a)
Mozambique—							
Coal (incl. bunkers) .. . .	9,108	8,341	9,509	8,184	3,096	5,834	24,707
Mexico—							
Anthracite .. . . .	34	—	51	327	342	173	(a)
Other coal .. . . .	320	3,864					
Coke .. . . .	37	—	(a)	(a)	(a)	(a)	(a)
Naphthalene .. . . .	—	11					
Benzol, toluol, etc. .. . .	3	—	(a)	(a)	(a)	(a)	(a)
Creosote .. . . .	—	—					
United States—							
Anthracite .. . . .	3,295,756	5,787,413	7,598,210	5,960,638	4,413,098	3,474,615	5,320,692
Bituminous .. . . .	24,960,886	36,783,373	61,309,788	41,009,047	24,858,979	22,739,646	50,648,353
do. (bunkers) .. . . .	1,593,711	1,232,602	1,508,329	943,855	780,383	640,614	(a)
Coke .. . . .	1,320,309	1,099,399	747,533	630,527	489,514	355,220	916,723
Briquettes .. . . .	151,215	145,838	222,107	185,612	149,232	156,936	150,696
Tar and pitch .. . . .	70,207	328,425	292,678	159,124	149,762	49,646	76,867
Benzol .. . . .	9,816	23,429	5,156	5,760	4,332	4,307	1,121
Creosote .. . . .	3,361	1,311	4,134	3,189	2,879	1,593	1,590
Toluol and xylool .. . .	18,456	(c) 9,730	(c) 11,271	(c) 13,106	—	—	—
Carbolic acid .. . . .	7,523	11,021	9,178	13,419	10,242	6,272	9,418
Argentina—							
Coal .. . . .	36,958	70,147	(a)	(a)	(a)	(a)	(a)
Coke .. . . .	10	6	(a)	(a)	(a)	(a)	(a)
Tar and pitch .. . .	13	1	(a)	(a)	(a)	(a)	(a)

(a) Information not available.

(b) Foreign coal (see imports).

(c) Toluol only.

EXPORTS OF COAL, COKE AND BY-PRODUCTS (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Chile—							
Coal (including bunkers)	53,871	38,745	14,423	33,708	61,000	80,705	50,000
Coke	98	169	202	59	—	(a)	(a)
Colombia—							
Coal	765	10	(a)	(a)	(a)	(a)	(a)
Peru—							
Coal	22,945	55,398	47,277	24,820	16,126	27,104	(a)
do. (bunkers)	5,275	3,900	1,376	14		(a)	(a)
China—							
Coal (including bunkers)	—	41,669	15,333	18,976	(a)	(a)	(a)
Coal dust	—	8,088	756	—	(a)	(a)	(a)
Coke	(a)	5	1	—	(a)	(a)	(a)
French Indo-China—							
Coal (including bunkers)	93	239	23,822	67,884	71,469	57,596	200,000
Indonesia—							
Coal	(a)	—	—	27,250	27,538	61,206	114,339
Japan—							
Coal	(a)	786,731	803,112	1,086,564	767,681	499,666	845,433
Tar and pitch	(a)	1,352	2,156	148	(a)	16,437	(a)
Portuguese India—							
Coal	74	—	40	—	—	(a)	(a)
Syria and Lebanon—							
Coal	478	3,036	(a)	(a)	(a)	(a)	(a)
Coke	—	—	(a)	(a)	(a)	(a)	(a)
Tar	—	219	(a)	(a)	(a)	(a)	(a)
Turkey—							
Coal	18	174,063	110,813	1,109	1,458	335	25,207

(a) Information not available.

IMPORTS OF COAL, COKE AND BY-PRODUCTS\*

(Less Re-exports)

(Long tons)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Coal .. .. ..	1,041	7,211	694,438	80,224	476	4,834	1,225,544
Coke .. .. ..	10	3,200	2,212	—	—	1	4
Manufactured fuel .. .. ..	—	—	55	10	—	2	2
Tar and pitch .. .. ..	3,211	1,798	2,008	1,689	2,854	3,033	2,016
Other heavy coal-tar oils .. .. ..	1	5	(d) 779	14	4	(a)	(a) 16
Naphthalene .. .. ..	—	20	—	22	—	—	—
Carbolic acid .. .. ..	—	2,744	1,930	5,670	918	1,506	2,223
Benzol .. .. ..	—	372	(d) 281	—	—	—	—
Malta—							
Coal (c) .. .. ..	(a)	4,581	17,554	18,997	17,262	20,501	17,613
Anglo-Egyptian Sudan—							
Coal .. .. ..	60,291	45,021	29,544	71,072	71,260	53,353	59,490
Coke .. .. ..	895	380	—	1,892	498	888	(a)
Pitch .. .. ..	12	145	—	2	1	—	(a)
Tar .. .. ..	405	651	138	481	117	48	(a)
Tar oils .. .. ..	3	13	10	1,033	510	515	(a)
Gambia—							
Coal, coke and patent fuel .. .. ..	1,233	1,205	905	213	—	5	173
Tar and pitch .. .. ..	6	6	12	6	5	9	9
Gold Coast—							
Coal .. .. ..	91,243	107,243	87,809	98,710	129,767	61,892	160,725
Coke .. .. ..	426	245	505	246	450	298	696
Patent fuel .. .. ..	—	—	—	56	—	—	—
Tar and pitch .. .. ..	3,607	1,878	2,035	3,566	4,627	3,880	1,805
Kenya (c)—							
Coal (c) .. .. ..	229,480	192,637	219,416	159,960	59,288	41,640	19,001
Coke .. .. ..	1,072	687	846	659	1,205	1,523	1,440
Creosote, etc. .. .. ..	42	95	51	107	143	138	313
Tar .. .. ..	—	9,213	3,018	166	146	9	31
Tar oils .. .. ..	(a)	(a)	(a)	(a)	37	37	44
Mauritius—							
Coal (c) .. .. ..	32,448	50,050	51,425	63,799	40,520	48,261	24,232
Coke .. .. ..	152	527	512	486	520	289	628
Tar and pitch .. .. ..	82	(a)	36	(a)	13	6	36
Nigeria—							
Coal (c) .. .. ..	5,383	1,770	124	1,179	153	60,495	3
Coke .. .. ..	932	427	666	869	547	1,197	840
Patent fuel .. .. ..	(£28)	(£13)	2	—	—	1	1
Tar and pitch .. .. ..	3,660	4,287	3,363	2,216	509	859	1,737
Northern Rhodesia—							
Coal .. .. ..	555,350	391,786	487,805	565,608	562,737	637,988	696,181
Coke .. .. ..	3,745	3,029	5,363	5,762	6,366	6,025	7,692
Tar and creosote oil .. .. ..	87	18	15	23	28	53	56
Tar and pitch .. .. ..	252	174	85	157	197	253	468
Nyasaland—							
Coal .. .. ..	8,627	10,538	11,048	14,842	12,950	24,010	23,132
Coke .. .. ..	23	63	41	109	120	144	152
Tar and pitch .. .. ..	(a)	(a)	123	81	627	1,667	784
Sierra Leone—							
Coal (b) .. .. ..	162,344	125,036	93,975	69,455	61,820	39,722	9,985
Coke .. .. ..	52	171	—	118	215	5	—
Tar and pitch .. .. ..	102	130	73	328	116	286	4,954

\* For ammonium sulphate, etc., see Nitrogen Compounds, pages 205-210.

(a) Information not available.

(b) Imported chiefly for bunkering purposes. See exports.

(c) Includes coal imported for bunkering purposes. See exports.

(d) Excess of re-exports.

(e) Including Uganda up to 1948 inclusive.

## IMPORTS OF COAL, COKE AND BY-PRODUCTS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES (Cont.)</b>							
Southern Rhodesia—							
Coal .. ..	1,288	{ 1,264	1,463	2,196	2,642	3,582	6,902
Coke .. ..		73	69	40	57	—	—
Tar and pitch .. ..	1,023	600	759	3,621	2,273	1,233	2,113
South West Africa—							
Coal .. ..	7,215	11,902	18,621	23,448	16,529	25,896	(a)
Coke .. ..	10	17	104	15	70	53	(a)
Tanganyika—							
Coal .. ..	28,314	20,930	35,424	53,555	45,284	56,605	50,917
Coke .. ..	231	429	206	518	770	207	986
Creosote, etc. .. ..	45	78	41	124	128	102	112
Tar .. ..	36	95	317	233	126	37	42
Tar oils .. ..	(a)	(a)	(a)	8	3	1	11
Uganda—							
Coal .. ..					{ 42	25	11
Coke .. ..					213	132	198
Creosote, etc. .. ..		{ (b)	(b)	(b)	95	192	102
Tar .. ..					41	8	6
Tar oils .. ..					11	9	10
Union of South Africa—							
Coal .. ..	42,465	64,230	67,968	62,869	66,041	37,557	(a)
Coke .. ..	357	172	81	11	—	55	(a)
Naphthalene .. ..	—	5	44	21	4	49	(a)
Tar and creosote .. ..	361	1,030	1,214	2,214	2,648	2,237	(a)
Zanzibar—							
Coal .. ..	14,352	7,690	9,641	15,537	10,057	6,866	100
Canada (c)—							
Anthracite .. ..	3,027,576	4,092,711	3,785,940	4,656,084	3,507,892	3,822,422	3,439,390
do. dust .. ..	19,512	42,456	36,990	26,806	14,550	4,705	1,173
Bituminous .. ..	18,870,601	18,847,450	21,592,192	22,495,936	15,956,586	19,970,159	20,233,343
do. (f) .. ..	458,283	309,271	381,062	365,705	321,379	261,720	246,771
Brown coal .. ..	417	154	181	13,064	14,774	6,671	8,165
Briquettes .. ..	127,174	162,706	219,355	275,672	166,938	170,655	151,926
Coke .. ..	1,111,295	714,990	511,482	485,975	373,446	301,715	538,521
Cresyllic acid .. ..	192	125	161	274	79	206	915
Benzol .. ..	99	632	10	116	2,551	4,110	2,234
Tar .. ..	12,157	16,779	15,431	10,068	3,344	30,101	37,084
Pitch .. ..	1,839	1,716	12,921	29,696	20,199	15,732	36,672
Naphthalene .. ..	894	464	1,033	519	660	758	489
Carbolic acid, etc. .. ..	2,551	2,824	11,241	22,596	11,777	23,227	20,420
Newfoundland (d)—							
Anthracite .. ..	25,946	22,039	53,956	20,321			
Other coal .. ..	486,297	438,276	521,669	416,313			
Coke .. ..	(e) 503	(e) 421	(e) 3,482	68,764			
Tar .. ..	839	916	521	396			
Pitch .. ..	106	104	240	117			
Creosote .. ..	12	136	261	856			
British Guiana—					{ (d)	(d)	(d)
Coal (g) .. ..	7,902	5,600	6,405	5,250	3,998	291	3,281
Coke .. ..	34	140	131	192	144	126	309
Patent fuel .. ..	—	—	—	1,000	321	3,050	2,007
British West Indies—							
Bahamas—							
Coal .. ..	25	93	75	29	32	16	3
Barbados—							
Coal, coke, and patent fuel .. ..	2,010	1,617	3,115	2,134	1,491	2,009	2,093
Bermuda—							
Bituminous (g) .. ..	5,251	2,686	10,600	3,795	4,363	1,389	1,081
Coke .. ..	27	5	366	—	—	40	(a)

(a) Information not available.

(b) Included with Kenya.

(c) Including Newfoundland from April 1, 1949.

(d) Years ended March 31 of year following that stated. Included with Canada from April 1, 1949.

(e) Including charcoal.

(f) "Ex-warehoused for ships' stores." See exports.

(g) Includes coal imported for bunkering purposes. See exports.

## IMPORTS OF COAL, COKE AND BY-PRODUCTS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES (Cont.)</b>							
British West Indies—cont.							
Grenada—							
Coal .. ..	8	3	1	4	10	3	5
Coke .. ..	29	—	—	11	—	—	—
Jamaica—							
Coal (b) .. ..	34,971	52,284	85,464	39,085	44,993	14,966	24,237
Coke .. ..	139	157	148	445	479	706	583
Tar and pitch .. ..	3	2	10	19	11	20	18
Leeward Islands—							
Coal, coke and patent fuel .. ..	3,501	2,076	4,021	21	5,201	(d)	5,747
St. Lucia—							
Coal .. ..	—	—	3	79	56	57	38
Coke .. ..	—	2	2	—	—	—	—
Tar .. ..	—	2	1	25	4	5	4
St. Vincent—							
Coal .. ..	26	(a)	17	14	(a)	(a)	(a)
Trinidad and Tobago—							
Coal (o) .. ..	83,073	59,860	86,654	58,960	38,676	26,007	9,583
Coke .. ..	3,821	30	—	214	228	39	227
Patent fuel .. ..	5	—	—	5	1,080	6	(a)
Tar and pitch .. ..	135	150	118	90	135	84	(a)
Falkland Islands—							
Coal .. ..	2,762	4,568	2,866	2,500	1,471	1,796	2,793
Coke .. ..	130	87	174	41	40	26	83
British Honduras—							
Coal and coke .. ..	61	82	24	21	42	18	19
Tar and pitch .. ..	13	227	4	9	4	13	31
Aden—							
Coal (b) .. ..	211,967	275,114	327,603	227,349	230,077	109,061	115,178
Coke .. ..	47	20	50	29	50	—	220
Tar and pitch .. ..	11	121	—	15	70	64	52
Naphthalene .. ..	477	357	606	457	522	297	39
India (total imports)—							
Coal .. ..	302	8,345	200	10	4	1,425	—
Coke .. ..	855	10	—	750	—	—	—
Tar and pitch .. ..	592	376	431	657	1,162	386	712
Naphthalene .. ..	210	146	62	39	106	15	19
Carbolic acid .. ..	148	39	6	27	163	46	19
Malaya (total imports)—							
Coal (b) .. ..	(a)	57,457	211,165	125,820	135,648	93,627	152,475
Coke .. ..	(a)	392	2,346	7,337	4,762	5,695	13,069
Tar and pitch .. ..	(a)	994	1,261	1,266	986	1,650	1,054
Ceylon—							
Coal (c) .. ..	332,676	342,966	319,668	343,928	310,655	367,792	237,639
Coke .. ..	38	319	53	1,104	1,474	654	918
Tar and pitch .. ..	233	115	409	277	158	46	94
Cyprus—							
Coal (c) .. ..	1,574	1,110	1,047	7,390	3,851	1,492	647
Coke and briquettes .. ..	—	270	379	353	497	413	645
Tar and pitch .. ..	3	11	6	2	13	18	14
Naphthalene .. ..	9	20	38	41	14	41	9
Hong Kong (total imports)—							
Anthracite .. ..	(a)	20,087	16,390	{ 325,573	421,718	317,124	277,623
Bituminous .. ..	(a)	12,114	206,816	12,720	6,472	2,753	3,664
Coke .. ..	(a)	517	1,829	(f)	(f)	(f)	(f)
Palestine—							
Anthracite .. ..	4,676	4,058	{ (a)	(a)	(f)	(f)	(f)
Other coal .. ..	11,220	738					
Coke .. ..	1,653	93					
Patent fuel .. ..	—	—					
Briquettes .. ..	—	—					
Tar and pitch .. ..	3	46					

(a) Information not available.

(c) Including imports for bunkering purposes. See exports.

(b) Imported chiefly for bunkering purposes. See exports.

(d) Incomplete.

(e) Excess of re-exports.

(f) See "Israel" under Foreign Countries.

## IMPORTS OF COAL, COKE AND BY-PRODUCTS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES (Cont.)</b>							
Australia—							
Coal .. .. ..	756	1,343	2,600	32,927	442,226	636,219	352,734
Coke (e) .. .. ..	—	—	—	862	—	21,269	(a)
Naphthalene .. .. ..	12	45	8	10	2	35	48
Tar oils .. .. ..	208	49	—	56	(c) 746	(e) 118	83
Fiji—							
Coal .. .. ..	11,202	20,150	21,997	21,498	25,828	9,750	18,659
Coke .. .. ..	310	402	442	418	354	381	355
Tar and bitumen .. .. ..	242	477	1,421	746	686	1,447	292
New Guinea (e)—							
Coal and coke .. .. ..	(a)	(a)	(a)	(a)	478	336	1,866
New Zealand—							
Coal .. .. ..	—	27,185	93,411	62,657	78,625	45,186	27,563
Coke .. .. ..	2,674	3,239	2,982	2,633	4,263	2,750	1,431
Tar .. .. ..	69	94	586	2,776	127	2	198
Pitch .. .. ..	486	621	1,260	751	579	794	86
Benzol, toluol, etc. .. .. ..	39	101	123	42	187	214	110
Naphthalene (£ N.Z.) .. .. ..	(\$32)	(\$1,761)	(\$2,508)	—	8	7	9
North Borneo—							
Coal and coke .. .. ..	(a)	(a)	(a)	21	32	21	87
Papua (e)—							
Coal, coke and charcoal .. .. ..	(a)	(a)	(a)	(a)	342	(\$41,893)	(a)
Solomon Islands (b)—							
Coal .. .. ..	—	—	—	50	8	1	516
Sarawak—							
Coal and coke .. .. ..	(a)	—	260	1	10	11	11
Tar .. .. ..	(a)	(a)	(a)	63	67	132	114
Irish Republic—							
Anthracite .. .. ..	22,229	42,686	17,254	55,252	54,323	42,910	49,029
Bituminous (d) .. .. ..	898,344	1,229,367	1,486,570	1,640,391	1,578,023	1,785,759	1,982,323
Coke .. .. ..	74,849	74,557	31,132	24,199	23,463	40,455	24,697
Tar and pitch .. .. ..	18,141	30,484	23,818	7,368	6,340	6,296	14,336
Creosote, etc. .. .. ..	592	212	1,750	2,592	4,838	5,267	4,368
Tar and bitumen mixture .. .. ..	713	16,317	26,572	36,390	19,488	21,327	26,421
Benzol .. .. ..	5	9	20	23	47	40	27
<b>FOREIGN COUNTRIES</b>							
Austria—							
Coal .. .. ..							
Brown coal .. .. ..	(a)	1,866,083	{ 1,333,157	3,034,767	4,277,651	4,215,494	4,110,296
Coke .. .. ..			{ 441,954	781,899	705,065	438,968	537,548
Briquettes .. .. ..			{ 107,921	212,449	359,3/8	252,588	290,082
Light coal-tar oils .. .. ..	(a)	(a)	{ 498,266	543,974	664,162	558,109	799,435
Heavy coal-tar oils .. .. ..	(a)	(a)	(a)	(a)	62	778	1,299
Carbolic acid .. .. ..	(a)	(a)	(a)	(a)	3,061	3,275	1,531
Ta, pitch, etc. .. .. ..	(a)	(a)	(a)	(a)	390	787	546
Belgium-Luxemburg E.U.—							
Coal .. .. ..	1,450,738	2,304,206	5,572,931	3,054,434	1,158,456	886,162	2,430,353
do. coke .. .. ..	311,800	1,217,854	1,242,837	2,742,373	2,240,111	2,410,940	3,049,096
do. briquettes .. .. ..	12,980	52,004	8,520	338	875	2,151	5,509
Brown coal .. .. ..	{ 230,605	389,005	{ (a)	4,712	2,345	67	1,171
do. do. coke .. .. ..			{ (a)	99	(a)	5,170	7,362
do. do. briquettes .. .. ..			{ 171,137	203,629	207,761	189,091	242,938
Tar .. .. ..	(a)	(a)	(a)	14,726	6,451	11,024	34,174
Naphthalene .. .. ..	(a)	(a)	(a)	373	1,092	(a)	4,144
Asphalt .. .. ..	(a)	(a)	(a)	(a)	3,987	5,741	5,182

(a) Information not available.

(b) Years ended March 31 following that stated.

(c) Excess of re-exports.

(d) Includes coal for bunkering purposes. See exports.

(e) Years ended June 30 of that stated.

## IMPORTS OF COAL, COKE AND BY-PRODUCTS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Bulgaria—							
Coal .. .. ..	816	65					
Coke .. .. ..	2	4,590					
Benzol .. .. ..	20	79	(a)	(a)	(a)	(a)	(a)
Carbolic acid .. .. ..	—	78					
Naphthalene .. .. ..	132	236					
Creosote, etc. .. .. ..	—	—					
Czechoslovakia—							
Coal .. .. ..	106,543	945,699	(c) 1,722,477				
Brown coal .. .. ..	42,637	62,003	(c) 10,798				
Coke .. .. ..	297	20,521	(c) 3,558				
Briquettes .. .. ..	(a)	1,793	(c) —	a)	(a)	(a)	
Tar and pitch .. .. ..	65	4,043	(c) 109				
Benzol, etc. .. .. ..	219	1,137	(c) —				
Carbolic acid .. .. ..	147	27	(c) 31				
Denmark—							
Coal .. .. ..	1,100,005	2,522,333	3,379,989	2,685,293	3,052,421	3,941,613	4,478,486
Brown coal .. .. ..	22,097	—	—	—	—	—	15
Coke .. .. ..	163,865	1,149,402	626,788	790,244	1,274,402	1,489,984	1,037,681
Briquettes .. .. ..	2,857	—	—	—	—	37,460	20,896
Brown coal briquettes .. .. ..	47,092	62,094	249,511	2,520	233,479	256,164	104,503
Tar .. .. ..	674	5	—	514	—	15	10
Pitch .. .. ..	181	974	2	89	28	142	264
Carboneum .. .. ..	93	46	3	2	—	(a)	(a)
Benzol .. .. ..	434	2,674	1,074	637	625	1,096	977
Toluol .. .. ..	94	2,121	785	830	915	1,374	1,090
Carbolic acid .. .. ..	15	240	178	268	233	85	368
Finland (total imports)—							
Anthracite .. .. ..	—	8,957	1,075	2,492	4,600	1,906	46,378
Other coal .. .. ..	71,985	676,776	1,278,521	1,968,346	929,867	1,435,277	1,959,906
Coke .. .. ..	37,555	237,415	195,707	405,989	246,569	461,645	339,783
Tar .. .. ..	270	156	2,382	1,541	1,440	1,284	1,084
Carbolic acid, creosote and cresol .. .. ..	51	310	1,891	1,543	2,778	2,844	4,158
Naphthalene .. .. ..	—	59	17	17	83	140	51
Benzol .. .. ..	98	261	763	1	293	391	192
Carboneum .. .. ..	—	15	271	323	212	455	464
France—							
Anthracite .. .. ..	115,013	431,498	512,353	1,032,610	1,162,367	559,958	1,347,206
Bituminous .. .. ..	3,044,552	8,428,770	12,208,208	12,303,462	12,983,962	6,814,248	8,471,703
Lignite .. .. ..	—	7,296	33,206	40,848	2,886	—	302
Coke .. .. ..	358,466	1,183,962	1,895,342	3,075,239	3,918,850	2,604,172	3,502,508
Coal briquettes .. .. ..	131,465	26,909	3,659	23,061	2,686	246	108,158
Brown-coal briquettes .. .. ..	174,481	608,524	227,368	261,321	285,856	378,057	448,153
Tar and pitch .. .. ..	156,262	437,671	519,193	454,170	417,118	472,441	393,126
Naphthalene .. .. ..	1,954	274	—	709	11	—	68
Carbolic acid, etc. .. .. ..	—	251	49	153	425	694	634
Anthracene .. .. ..	—	1,588	380	934	1,112	321	176
Benzol, etc. .. .. ..	2,098	15,554	14,541	7,533	2,375	809	1,592
Heavy coal-tar oils .. .. ..	1,551	1,884	3,449	3,148	6,255	10,494	1,187
Germany (Federal)—							
Coal .. .. ..	(a)	(a)	(a)	1,140,531	2,103,064	4,002,434	9,498,417
Brown coal .. .. ..	(a)	(a)	(a)	785,480	947,129	1,005,889	486,472
Coke .. .. ..	(a)	(a)	(a)	47,486	69,270	235,000	200,992
Coal briquettes .. .. ..	—	—	—	—	483	95	—
Brown-coal briquettes .. .. ..	—	—	—	—	5,160	5,348	2,676
Tar and pitch .. .. ..	—	—	—	—	161	16,225	11,750
Naphthalene .. .. ..	(a)	(a)	(a)	526	41	2,779	5,905
Carbolic acid .. .. ..	—	—	—	679	2,211	1,245	(b) 2,225
Cresol .. .. ..	—	—	—	4	393	651	(b) 258
Light coal-tar oils, etc. .. .. ..	—	—	—	118	2,286	29,956	10,435
Heavy coal-tar oils, etc. .. .. ..	—	—	—	22	—	273	5,745

(a) Information not available. (b) January to September only.

(c) January to October only.

## IMPORTS OF COAL, COKE AND BY-PRODUCTS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
FOREIGN COUNTRIES (Cont.)							
Greece—							
Coal .. .. ..	146,287	174,153	167,748	243,521	285,363	279,624	376,040
Coke .. .. ..	528	3,359	7,053	7,444	12,870	17,436	12,823
Naphthalene .. .. ..	—	943	413	848	842	581	835
Pitch .. .. ..	204	174	235	330	355	845	(a)
Benzol .. .. ..	—	24	2	37	134	77	66
Tar .. .. ..	(a)	(a)	(a)	(a)	8,229	845	374
Hungary—							
Coal .. .. ..	(a)	116,875	129,059	} 773,000	(a)	(a)	(a)
Coke .. .. ..	(a)	203,434	415,902				
Iceland—							
Coal .. .. ..	114,975	93,959	164,717	125,622	96,630	93,362	67,327
Coke .. .. ..	30	135	73	790	562	892	708
Tar .. .. ..	260	906	522	268	59	64	97
Carbolineum .. .. ..	7	—	5	—	—	—	—
Italy—							
Anthracite .. .. ..			337,513	44,093	150,015	305,036	465,493
Bituminous .. .. ..			8,153,963	8,088,874	8,273,364	7,773,243	9,886,991
Lignite .. .. ..			189,495	77,629	156,600	91,927	60,786
Coke .. .. ..			222,970	33,413	12,436	7,003	43,839
Briquettes .. .. ..			(a)	(a)	663	2,121	(c) 16,362
Tar and tar oils .. .. ..					85	13,175	92,356
Benzol .. .. ..					22,188	5,789	4,114
Toluol and xylol .. .. ..					18,291	25,593	5,678
Naphthalene .. .. ..					3,139	2,605	3,381
					5,167	3,342	6,247
Netherlands—							
Coal (b) .. .. ..			2,901,587	3,718,189	3,325,545	3,917,395	4,367,030
Coke .. .. ..			8,706	1,257	9	6,798	161,553
Briquettes .. .. ..			16,595	10,153	38,380	24,582	128,868
Brown-coal briquettes .. .. ..			316,660	192,020	232,272	194,640	219,839
Tar .. .. ..			3,710	2,961	6,640	5,899	236,349
Creosote .. .. ..			6	36	25	5	8,162
Naphthalene .. .. ..			(a)	—	70	40	2,206
Carbolic acid .. .. ..			286	326	324	124	1,056
Benzol .. .. ..			—	—	68	30	1,640
Toluol and xylol .. .. ..			73	687	426	2,124	97
Carbolineum .. .. ..			1,347	357	21	132	398
Solvent naphtha .. .. ..			6	1	83	58	404
Asphalt .. .. ..			255	63	763	879	443
						1,088	1,147
Norway—							
Coal .. .. ..	990,857	1,481,680	2,033,691	1,481,437	1,384,675	1,280,793	1,798,884
Coke .. .. ..	—	55,694	10,087	228,332	172,010	388,125	190,480
Tar and pitch, etc. .. .. ..	2,224	8,826	10,988	9,769	12,461	9,173	(a)
Pitch coke .. .. ..	7,166	11,283	18,384	21,327	28,012	14,166	1,194
Creosote, etc. .. .. ..	474	6,088	7,946	7,960	9,227	7,733	10,347
Portugal—							
Anthracite .. .. ..	18,342	38,767	40,903	20,267	13,603	26,295	21,870
Other coal .. .. ..	463,208	527,197	912,816	755,104	856,901	743,197	631,995
Coke .. .. ..	5,795	35,382	17,644	42,881	21,454	23,766	36,990
Briquettes .. .. ..	—	2,053	(a)	851	1,306	11,100	9,716
Tar and pitch .. .. ..	3,022	8,975	6,446	6,816	4,363	7,599	9,746
Carbolic acid .. .. ..	29	2	27	27	39	6	(a)
Naphthalene .. .. ..	31	236	122	71	136	173	76

(a) Information not available.

(b) Of which the amounts imported for bunkering purposes were :—

Year	long tons (a)
1945	181,014
1946	232,451
1947	104,903
1948	111,998
1949	78,990
1950	62,051
1951	

(c) July to December only.

## IMPORTS OF COAL, COKE AND BY-PRODUCTS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Spain—							
Anthracite .. .	—	—	—	98	113	—	325,133
Bituminous .. .	52,523	72,149	17,004	467,237	898,993	571,667	82,427
Coke .. .	464	1,764	—	31,963	83,140	143,203	13,937
Briquettes .. .	—	—	6	3,346	944	—	69,751
Tar and pitch .. .	8,452	45,290	22,417	63,076	68,073	39,208	1,338
Benzol, toluol, xylol, etc.	—	668	3,002	1,230	62	865	—
Sweden—							
Anthracite .. .	—	—	517,528	33,517	32,288	48,045	5,235,978
Other coal .. .	267,943	2,404,772	3,577,189	5,282,205	3,869,809	4,705,457	2,476,263
Coke .. .	88,021	995,335	889,523	1,590,353	1,953,920	2,272,754	596,429
Briquettes .. .	745	58,262	636,222	211,467	5,274	23,617	1,649
Tar, pitch, etc. .. .	725	3,228	7,613	13,587	4,619	2,998	—
Benzol, etc. .. .	2,204	9,601	4,048	10,033	6,543	8,817	9,815
Carbolic acid, etc. .. .	276	1,049	2,043	2,150	2,168	2,228	(a)
Naphthalene .. .	(a)	(a)	(a)	(a)	1,430	2,169	(a)
Switzerland—							
Coal .. .	207,730	1,079,362	1,695,169	1,761,207	1,325,390	1,760,585	2,342,328
Lignite .. .	399	25,601	68,558	3,057	854	805	5,204
Coke .. .	19,506	283,445	394,464	634,952	429,264	576,340	558,599
Briquettes .. .	7,488	123,105	323,673	197,597	233,268	294,595	418,336
Tar and pitch .. .	16,325	117,700	50,147	43,463	37,524	54,113	66,932
Creosote, etc. .. .	378	4,663	1,760	2,528	1,465	1,091	3,141
Naphthalene, etc. .. .	2,959	9,322	13,303	17,208	8,842	10,514	15,464
Yugoslavia—							
Anthracite .. .	(a)	(a)	(a)	(a)	(a)	40,671	53,057
Other coal .. .						4,395	3,703
Coke .. .						336,229	466,981
Coke dust .. .						29,309	10,365
Benzol, toluol, etc. .. .						1,860	2,240
Naphthalene .. .						168	184
Algeria—							
Coal .. .	216,311	707,727	565,796	382,926	353,808	383,028	360,666
Coke .. .	2,424	3,378	2,337	3,783	948	4,660	—
Briquettes .. .	6,868	15,953	8,787	17,138	1,067	13,143	3,520
Tar and pitch .. .	2,953	7,212	5,105	6,693	2,104	9,913	6,289
Benzol, toluol, etc. .. .	1	3	81	98	128	211	215
Naphthalene .. .	—	174	13	27	95	48	56
Heavy oils .. .	—	211	82	337	40	83	135
Angola—							
Coal .. .	13,313	5,974	5,558	(a)	25,015	19,972	(a)
Coke .. .	289	459	253	(a)	(a)	(a)	(a)
Tar and pitch .. .	381	435	667	(a)	(a)	(a)	(a)
Belgian Congo—							
Coal .. .	94,935	118,717	106,255	117,259	157,933	148,517	(a)
Coke .. .	67,994	72,555	67,528	54,225	44,302	56,648	(a)
Briquettes .. .	—	20,5,3	22,717	10,191	32,081	—	(a)
Tar .. .	227	171	127	(a)	(a)	254	(a)
Cameroon (French)—							
Coal .. .	149	4,953	10,726	18,073	26,641	7,921	14,670
Canary Islands—							
Coal (b) .. .	126,442	111,839	186,794	94,127	106,356	63,363	72,928
Ceuta—							
Coal (b) .. .	231,295	225,834	186,577	208,902	247,339	213,228	99,535
Egypt—							
Coal .. .	257,658	191,964	267,009	251,910	257,329	143,840	(a)
Coke .. .	4,915	2,802	1,508	13,184	7,068	7,869	(a)
Briquettes .. .	—	—	—	24,690	52,353	24,296	(a)
Tar and pitch .. .	1	26	116	31	59	(a)	(a)
Naphthalene .. .	68	186	24	129	43	(a)	(a)
Coal-tar residues .. .	—	44	4	256	900	(a)	(a)
French Equatorial Africa—							
Coal and briquettes .. .	3,842	8,315	11,160	24,876	51,218	7,249	3,099

(a) Information not available.

(b) Imported chiefly for bunkering purposes. See exports.

IMPORTS OF COAL, COKE AND BY-PRODUCTS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
French Somaliland— Coal .. ..	—	17,407	17,321	40,446	21,172	12,536	17,300
French Togoland— Coal and briquettes ..	4	4,343	31	2,100	—	(a)	(a)
French West Africa— Coal and briquettes (b)	102,317	112,665	99,167	78,709	110,307	102,096	159,929
Madagascar— Coal .. ..	31,074	36,370	30,779	27,463	24,818	60,644	25,657
Melilla— Coal .. ..	18,007	18,769	16,797	12,355	9,854	17,764	15,694
Morocco (French)— Coal .. ..	113,445	106,702	159,191	179,500	104,800	89,600	77,900
Coke .. ..	1,782	1,083	2,898	(a)	(a)	(a)	(a)
Briquettes .. ..	—	—	—	(a)	(a)	(a)	(a)
Tar .. ..	52	192	81	(a)	(a)	(a)	(a)
Morocco (Spanish)— Anthracite .. ..	3,970	2,593	1,533	(a)	(a)	(a)	(a)
Other coal .. ..	(a)	3,778	5,630	(a)	(a)	(a)	(a)
Coke .. ..	(a)	65	23	(a)	(a)	(a)	(a)
Tar .. ..	23	15	13	(a)	(a)	(a)	(a)
Mozambique— Coal .. ..	160,623	169,077	180,861	180,457	191,844	216,598	209,957
Coke .. ..	125	92	74	48	167	381	512
Tar, pitch and asphalt ..	355	2,337	673	961	852	1,388	2,296
Naphthalene .. ..	7	9	11	4	2	33	6
Reunion— Coal .. ..	1,210	3,595	10,928	11,887	12,750	(a)	(a)
Tunis— Coal .. ..	204,605	282,299	273,700	189,601	204,369	157,337	(a)
Coke .. ..	382	48	2,383	4,686	(a)	(a)	(a)
Briquettes .. ..	—	—	17	—	(a)	(a)	(a)
Tar .. ..	2,172	1	213	757	(a)	(a)	(a)
Costa Rica (c)— Coal .. ..	94	87	122	2,951	100	(a)	(a)
Cuba (c)— Coal .. ..	278,099	107,865	(a)	29,040	24,305	(a)	(a)
Coke .. ..	13,391	(a)	(a)	16,993	18,622	(a)	(a)
Creosote oil .. ..	147	(a)	(a)	(a)	(a)	(a)	(a)
Tar .. ..	185	(a)	(a)	(a)	(a)	(a)	(a)
Benzol .. ..	56	(a)	(a)	(a)	(a)	(a)	(a)
Dominican Republic (c)— Coal, coke, briquettes, etc.	930	(a)	3,808	5,400	454	151	(a)
French West Indies— Guadeloupe— Coal .. ..	34	2,190	5,336	3,615	1,379	59	2,358
Martinique— Coal .. ..	2,947	6,208	6,608	3,764	8,108	5,703	2,559
Coke .. ..	1	854	1	1	1		
Guatemala— Coal .. ..	(a)	(a)	1,152	82	120	44	136
Coke .. ..	(a)	(a)	154	330	638	1,124	162
Haiti— Coal .. ..	(d)	61	(d)	5	(d)	(a)	(a)

(a) Information not available.

(b) Imported chiefly for bunkering purposes. See exports.

(c) Total imports.

(d) Years ended September 30 of that stated.

## IMPORTS OF COAL, COKE AND BY-PRODUCTS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Mexico—							
Coal .. .. ..	990	756	742	1,349	(a)	(a)	(a)
Coke .. .. ..	2,686	2,323	11,153	32,947	77,491	(a)	(a)
Tar and pitch .. ..	96	56	30	17	(a)	(a)	(a)
Benzol .. .. ..	38	181	192	176	(a)	(a)	(a)
Creosote .. .. ..	2,258	245	1,491	4,483	(a)	(a)	(a)
Nicaragua (total imports)—							
Coal and coke .. ..	60	7	58	(a)	(a)	(a)	(a)
St. Pierre and Miquelon—							
Coal .. .. ..	6,973	11,614	12,760	18,221	12,098	11,772	6,606
United States—							
Anthracite .. .. ..	133	8,532	9,241	844	—	16,329	23,939
Bituminous .. .. ..	324,766	289,180	236,234	213,885	222,793	227,641	193,138
Lignite .. .. ..	11,921	7,103	2,268	1,066	1,196	1,999	1,282
Slack and culm .. ..	70,400	91,824	20,553	45,171	57,243	79,919	65,879
Coke .. .. ..	46,396	46,596	92,940	144,107	247,774	390,699	144,321
Briquettes .. .. ..	645	583	346	294	326	718	110
Tar and pitch .. ..	1,955	7,131	5,466	9,918	8,223	13,762	5,839
Benzol .. .. ..	108,792	8,137	3,516	7,834	9,918	79,218	228,465
Cresylic acid .. ..	6,106	10,300	9,936	11,567	4,857	13,580	15,562
Creosote oil .. .. ..	8,907	9,294	136,898	164,664	132,520	165,274	196,427
Naphthalene .. .. ..	310	112	1,054	16,778	22,359	50,101	34,359
Carbolic acid .. .. ..	—	24	1	11	69	69	2
Argentina—							
Coal .. .. ..	755,745	1,126,294	1,195,427	2,142,842	1,319,650	1,424,232	2,167,638
Coke .. .. ..	30,513	7,450	29,527	61,165	38,753	19,895	50,195
Briquettes .. .. ..	—	—	7,077	15,112	—	—	—
Tar and pitch .. ..	329	316	—	—	—	—	—
Naphthalene .. .. ..	429	1,867	—	—	—	—	—
Carbolic acid .. .. ..	1,188	638	—	—	—	—	—
Creolin .. .. ..	—	—	1	—	—	—	—
Heavy coal-tar oils .. .. ..	1,824	758	—	—	—	—	—
Bolivia—							
Coal .. .. ..	(a)	21,686	8,268	6,888	(a)	(a)	(a)
Brazil (total imports)—							
Coal .. .. ..	687,250	1,021,118	1,506,929	1,043,406	755,257	1,065,622	989,493
Coke .. .. ..	17,240	23,111	40,963	22,457	22,030	35,835	(a)
Briquettes .. .. ..	—	9,961	—	—	24,349	(a)	(a)
Carbolic acid .. .. ..	245	75	100	163	327	(a)	(a)
Benzol, toluol, etc. .. .. ..	(a)	(a)	448	234	512	(a)	(a)
Naphthalene .. .. ..	6	21	118	243	181	(a)	(a)
Chile—							
Anthracite .. .. ..	93	62	8,811	2,273	2,650	—	76,768
Other coal .. .. ..	452	3,405	31,228	90,248	(a)	—	193,889
Coke .. .. ..	5,214	7,070	5,543	7,935	7,312	5,905	1,960
Naphthalene .. .. ..	62	24	(a)	70	63	(a)	(a)
Carbolic acid and cresol .. .. ..	1,131	993	556	1,569	1,428	474	(a)
Creolin, etc. .. .. ..	109	156	(a)	(a)	(a)	(a)	(a)
Colombia—							
Coal .. .. ..	21	57	(a)	(a)	(a)	(a)	(a)
Tar and pitch .. .. ..	79	160	(a)	(a)	(a)	(a)	(a)
Naphthalene .. .. ..	8	15	(a)	(a)	(a)	(a)	(a)
Cresol, creolin, etc. .. .. ..	60	19	(a)	(a)	(a)	(a)	(a)
Dutch Guiana—							
Coal .. .. ..	509	1,970	2,786	4,276	(a)	(a)	(a)
French Guiana—							
Coal .. .. ..	345	24	54	10	(a)	—	(a)

(a) Information not available.

## IMPORTS OF COAL, COKE AND BY-PRODUCTS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
FOREIGN COUNTRIES (Cont.)							
Peru—							
Coal .. .. ..	701	370	305	(a)	(a)	210	(a)
Coke .. .. ..	1,363	890	714	(a)	(a)	461	(a)
Tar .. .. ..	18	18	(a)	(a)	(a)	(a)	(a)
Naphthalene .. .. ..	8	13	(a)	(a)	(a)	(a)	(a)
Uruguay—							
Coal .. .. ..	278,148	149,827	103,943	112,732	109,021	126,030	(a)
Coke .. .. ..	2,976	5,294	6,067	5,602	4,227	847	(a)
Naphthalene .. .. ..	(a)	(a)	(a)	95	63	25	(a)
Venezuela—							
Coal .. .. ..	925	1,040	940	756	(a)	(a)	(a)
Naphthalene .. .. ..	8	6	19	17	(a)	(a)	(a)
China—							
Coal .. .. ..	199	71,951	212,029	135,974	(a)	(a)	(a)
Coke .. .. ..	(a)	1,053	4,507	1,183	(a)	(a)	(a)
Tar and pitch .. .. ..	(a)	343	287	107	(a)	(a)	(a)
French Indo-China—							
Coal .. .. ..	(a)	(a)	7,408	10,244	9,488	11,490	10,457
Iran (total imports) (b)—							
Coal, coke and peat .. .. ..	(a)	2	1	—	—	—	(a)
Iraq—							
Coal .. .. ..	10	(a)	(a)	(a)	(a)	(a)	(a)
Coke .. .. ..	107						
Tar and pitch .. .. ..	27						
Israel—							
Anthracite .. .. ..	(e)	(e)	(e)	(e)	{	20,001	13,500
Other coal .. .. ..	(e)	(e)	(e)	(e)		4,766	7,920
Coke .. .. ..	(e)	(e)	(e)	(e)		1,033	12,319
Japan (total imports)—							
Coal .. .. ..	(d) 307,072	—	35,431	1,169,237	1,677,088	807,843	1,904,355
Korea (total imports)—							
Coal .. .. ..	(a)	(a)	(c) 627,960	963,481	(a)	(a)	(a)
Portuguese India—							
Coal .. .. ..	6,178	5,640	25,549	4,296	2,779	(a)	(a)
Coke .. .. ..	—	1	9	61	153	(a)	(a)
Syria and Lebanon—							
Anthracite .. .. ..	34,472	24,874	{ (a)	(a)	(a)	(a)	(a)
Other coal .. .. ..	—	—					
Coke .. .. ..	14	1					
Turkey—							
Coal .. .. ..	3,470	218	—	35	—	20	3
Cresol and naphthalene .. ..	342	166	495	169	40	122	44
French Oceania—							
Coal .. .. ..	5,311	3,045	6,436	2,907	3,852	5,941	3,410
New Caledonia—							
Coal .. .. ..	113,747	53,041	35,670	28,079	125,541	67,481	87,197

(a) Information not available.

(b) Years ended March 20 following year stated.

(c) Exports from Japan to Korea.

(d) Including coke.

(e) See "Palestine" under British Countries.

# COBALT

## PRODUCTION OF COBALT

*(In terms of metal)*

(Cwt.)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Northern Rhodesia ..	13,335	9,348	7,627	(c) 7,759	10,237	13,177	13,985
Canada (b) .. ..	974	660	5,113	13,793	5,527	5,213	8,457
Australia (d) .. ..	184	203	162	198	181	208	165
<b>FOREIGN COUNTRIES</b>							
Finland .. .. ..	1,653	1,988	2,008	—	—	—	—
Italy .. .. ..	8	—	—	—	—	—	—
Sweden .. .. ..	183	—	—	—	—	—	—
Belgian Congo .. ..	55,200	42,400	69,000	84,600	86,670	101,334	112,494
Morocco (French) .. ..	1,929	4,720	7,280	5,252	4,901	8,346	14,251
Mexico .. .. ..	—	—	—	—	—	—	35
United States .. ..	9,818	4,628	5,762	6,138	4,658	7,226	8,059
Chile .. .. ..	28	—	—	(a)	(a)	(a)	(a)
<b>TOTAL .. ..</b>	<b>83,312</b>	<b>63,947</b>	<b>96,952</b>	<b>117,740</b>	<b>112,174</b>	<b>135,500</b>	<b>157,500</b>

Complex ores containing cobalt are produced in Greece, China and Korea, but figures are not available.

(a) Information not available.

(b) Metal recovered from smelter products plus cobalt contained in cobalt ores and residues exported.

(c) The greater part of the 1948 production was shipments from stockpiles of ores mined in earlier years.

(d) Estimated cobalt content of cobalt oxide.

EXPORTS OF COBALT, ETC.

(Domestic Produce)

(Cwt.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Cobalt and cobalt alloys	348	1,435	698	606	751	602	849
Cobalt oxide .. ..	1,043	1,829	1,087	951	882	2,450	421
Other compounds .. ..	(a)	(a)	5,967	6,917	9,683	12,376	7,940
Northern Rhodesia—							
Cobalt alloy .. ..	34,268	26,125	18,196	21,214	28,268	35,750	33,946
Canada—							
Cobalt ore ( <i>Co content</i> )	580	429	797	7,777	440	149	315
Cobalt .. .. ..	5,208	4,558	360	280	107	—	1,717
Cobalt alloys .. ..	2,866	997	533	792	305	9	7
Cobalt oxides and salts	4,960	4,072	7,477	7,829	5,273	3,466	5,888
Australia—							
Cobalt .. .. ..	(a)	(a)	(c) 851	—	80	—	—
<b>FOREIGN COUNTRIES</b>							
Belgium-Luxemburg E.U.							
Cobalt .. .. ..	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Finland—							
Cobalt ore .. ..	37	4	232	—	—	2,479	80
Cobalt .. .. ..	1,516	2,136	682	98	—	—	—
Cobalt oxide .. ..	66	38	—	217	—	—	—
France—							
Cobalt salts .. ..	—	12	25	(d) 4	(d) 12	(d) 4	(d) 169
Sweden—							
Cobalt .. .. ..	2	—	98	—	—	—	(a)
Belgian Congo—							
Cobalt .. .. ..	129,390	93,736	160,662	{ 37,277	37,690	45,952	51,295
Cobalt-copper ingots .. ..				{ 123,833	109,778	130,608	139,813
Morocco (French)—							
Cobalt ore .. ..	16,732	62,989	31,495	106,294	35,628	62,596	131,687
United States—							
Cobalt ore .. ..	—	13	—	1,203	—	—	—
Cobalt alloys and scrap..	17	141	5	435	1,472	1,422	92
Cobalt salts .. ..	741	(a)	(a)	(a)	(a)	(a)	(a)
Chile—							
Cobalt ore .. ..	—	—	(a)	(a)	(a)	(a)	(a)
Cobalt salts .. ..	4	11	(a)	(a)	(a)	(a)	(a)

(a) Information not available.

(b) Exports of cobalt metal are not separately recorded, but imports into the United States from Belgium were as follows (cwt.):—1945—4,159; 1946—15,049; 1947—24,339; 1948—15,399; 1949—19,470; 1950—24,595; 1951—27,570.

(c) Year ended June 30 of that stated.

(d) Oxide only.

## IMPORTS OF COBALT, ETC.

(Less Re-exports)

(Cwt.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Rondels, pellets and squares .....	3,906	5,179	6,341	8,688	6,705	5,836	5,587
Other kinds, including alloys .....	13,281	9,197	18,021	20,082	24,419	30,117	25,507
Cobalt oxide .....	3,279	3,365	4,419	7,177	5,635	5,111	8,305
Other compounds .....	(a)	(a)	2,516	2,734	688	2	453
Canada—							
Ore .....	21,338	10,446	—	7,572	727	34,933	32,927
Cobalt oxide .....	144	145	6	1	9	231	—
Australia—							
Cobalt .....	(a)	(a)	(a)	480	322	290	(a)
Cobalt salts .....	(c) 12	(c) 396	(c) 394	(c) 592	(c) 853	800	640
<b>FOREIGN COUNTRIES</b>							
Czechoslovakia—							
Zaffre and smalt .....	(a)	522	423	(b) 108	(a)	(a)	(a)
France—							
Cobalt ore .....	10,669	13,862	4,518	22,643	20,286	30,756	72,810
Matte and speiss .....	—	3,455	4,287	(a)	(a)	(a)	(a)
Ingots .....	606	2,447	2,051	(a)	(a)	(a)	(a)
Cobalt oxide, including zaffre and smalt .....	3	102	10	116	22	297	167
Cobalt salts .....	—	285	709	(a)	(a)	(a)	(a)
Italy—							
Metal and alloys, crude and scrap .....	(a)	(a)	(a)	(a)	(a)	(f) 2,106	423
Cobalt oxide .....	—	344	356	226	691	(e) 191	(a)
Sweden—							
Cobalt .....	284	1,567	1,780	1,630	2,543	2,067	(a)
Mexico—							
Cobalt .....	—	2	(a)	(a)	(a)	(a)	(a)
United States—							
Cobalt ore (d) .....	7,678	15,685	10,910	107,760	32,466	30,734	37,682
Co content .....	974	4,585	2,374	22,769	14,579	17,081	16,066
Cobalt metal .....	8,451	17,282	68,602	47,182	49,896	60,240	75,856
Cobalt oxide .....	1,077	9,596	7,281	6,922	3,217	8,368	3,898
Cobalt salts .....	2	3	5	12	3	42	28
Argentina—							
Cobalt .....	27	23	(a)	(a)	(a)	(a)	(a)
Brazil—							
Cobalt oxide .....	64	130	180	78	235	(a)	(a)
China—							
Cobalt oxide .....	(a)	1,108	785	(a)	(a)	(a)	(a)
Japan—							
Cobalt oxide .....	(a)	(a)	2,775	(a)	(a)	89	343
Turkey—							
Cobalt metal .....	(a)	(a)	30	—	7	—	—
Cobalt salts .....	—	58	60	1	—	—	4

(a) Information not available.

(b) January to October only.

(c) Years ended June 30 of that stated.

(d) As recorded in official trade returns. According to U.S. Bureau of Mines includes Cobalt alloy.

(e) January to July only.

(f) July to December only.

# COPPER

## PRODUCTION OF COPPER ORE

*(In terms of metal)*

(Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Great Britain .. ..	20	22	20	(a)	(a)	(a)	(a) 100
Kenya .. ..	—	—	—	—	—	—	314,329
Northern Rhodesia (d)	196,188	188,520	194,172	222,900	254,988	292,788	94
Southern Rhodesia ..	155	143	171	129	79	115	
South West Africa ..	—	—	(c) 4,980	8,150	9,514	10,823	12,417
Tanganyika .. ..	—	—	—	—	—	41	171
Union of South Africa ..	23,638	26,578	28,869	28,809	30,821	33,446	33,198
Canada (d) .. ..	212,015	164,257	201,663	214,939	235,229	235,901	241,503
Newfoundland .. ..	4,619	4,388	3,792	4,061	—	—	
Cyprus (e) .. ..	180	6,000	15,000	14,900	26,000	20,800	23,700
India .. ..	6,550	6,500	6,350	6,460	6,440	7,180	7,580
Australia .. ..	24,520	17,755	13,123	12,368	13,462	14,905	16,607
New Zealand .. ..	—	60	—	—	75	—	19
<b>TOTAL .. ..</b>	<b>468,000</b>	<b>414,000</b>	<b>468,000</b>	<b>513,000</b>	<b>577,000</b>	<b>616,000</b>	<b>650,000</b>
<b>FOREIGN COUNTRIES</b>							
Austria .. ..	(a)	103	317	857	1,339	1,651	1,813
Finland (d) .. ..	15,808	13,980	15,356	18,089	18,422	15,203	18,018
France (d) .. ..	—	22	55	93	66	42	(a)
Germany (Federal) .. ..	(a)	(f) 461	(f) 235	(f) 358	854	1,340	1,643
Italy .. ..	700	200	300	370	400	380	(a)
Norway .. ..	5,121	12,056	14,475	14,873	14,640	15,044	13,782
Portugal .. ..	1,600	1,800	2,100	2,500	2,900	2,585	2,963
Spain (g) .. ..	7,000	8,500	8,000	9,000	10,000	12,000	13,000
Sweden .. ..	14,690	15,119	12,936	14,601	16,016	15,846	14,200
U.S.S.R. (estimated) (b)	120,000	146,000	159,000	192,000	231,000	251,000	296,000
Yugoslavia .. ..	(g) 20,000	24,000	33,000	41,000	38,000	42,609	35,382
Angola .. ..	(a)	90	280	388	730	1,259	1,140
Belgian Congo (smelter) ..	157,691	141,613	148,458	153,025	139,166	173,142	188,927
Morocco (French) ..	382	60	40	433	354	20	28
Cuba .. ..	9,528	12,590	11,044	15,000	17,000	20,235	20,873
Mexico (d) .. ..	60,706	60,089	62,489	58,143	56,342	60,724	66,287
United States (d) .. ..	690,084	543,515	756,753	745,369	672,098	811,913	828,866
Bolivia (exports) .. ..	6,001	6,030	6,142	6,512	4,994	4,630	4,769
Chile (d) .. ..	462,756	345,336	419,931	437,922	365,233	357,028	373,729
Ecuador .. ..	3,764	2,046	91	333	698	518	(a)

(a) Information not available.

(b) Revised.

(c) Including ore sorted ex dumps.

(d) Amount estimated as recoverable.

(e) Estimated copper content of saleable pyrites plus the copper content of copper concentrates produced. The copper content of the latter was as follows (long tons): 1945—Nil; 1946—4,700; 1947—12,100; 1948—11,200; 1949—18,500; 1950—14,800; 1951—17,100.

(f) British Zone only.

(g) Estimated.

PRODUCTION OF COPPER ORE (*Cont.*)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Peru .. .. ..	31,412	24,204	22,137	17,784	27,517	29,457	32,075
Japan .. .. ..	27,542	14,739	21,542	25,322	32,219	38,809	41,620
Korea (Southern) .. ..	1,230	144	127	65	28	(a)	(a)
Philippine Republic .. ..	(a)	—	2,462	3,300	6,896	10,220	12,505
Saudi Arabia .. ..	—	9	249	66	48	41	
Turkey (smelter) .. ..	9,692	9,891	9,921	10,806	11,105	11,515	12,889
<b>TOTAL .. ..</b>	<b>1,650,000</b>	<b>1,396,000</b>	<b>1,710,000</b>	<b>1,770,000</b>	<b>1,670,000</b>	<b>1,875,000</b>	<b>1,980,000</b>
<b>WORLD'S TOTAL ..</b>	<b>2,120,000</b>	<b>1,806,000</b>	<b>2,180,000</b>	<b>2,280,000</b>	<b>2,250,000</b>	<b>2,490,000</b>	<b>2,630,000</b>

Copper ore is also produced in small quantities in certain European countries, China and Iran, information for which is not available.

(a) Information not available.

METAL PRODUCTION OF COPPER

(Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Northern Rhodesia ..	194,014	182,289	192,500	213,615	259,302	276,433	309,141
Union of South Africa ..	23,291	26,166	28,568	28,536	29,248	32,816	32,403
Canada (b) ..	195,295	149,043	177,159	190,015	200,377	206,465	210,746
India ..	6,000	6,311	5,931	5,863	6,390	6,614	7,083
Australia ..	20,498	22,659	19,505	11,389	9,858	13,509	12,483
<b>TOTAL ..</b>	<b>439,000</b>	<b>386,500</b>	<b>423,700</b>	<b>449,400</b>	<b>505,200</b>	<b>535,800</b>	<b>571,100</b>
<b>FOREIGN COUNTRIES</b>							
Austria (d) ..	1,134	—	488	2,109	3,735	5,284	6,348
Belgium ..	—	—	—	—	—	—	—
Finland ..	15,423	24,483	25,370	23,612	21,052	17,322	21,146
France ..	25	2	313	273	(a)	(a)	(a)
Germany (Federal) (f)	(a)	5,952	18,046	38,998	101,470	131,622	138,869
Italy ..	394	7	103	164	29	54	59
Norway ..	1,665	7,430	7,795	8,794	9,159	8,892	8,519
Portugal ..	168	81	2	—	—	—	19
Spain (e) ..	6,496	9,094	7,795	8,740	11,574	9,567	6,260
Sweden ..	17,960	14,242	14,032	16,909	14,132	16,247	14,700
U.S.S.R. (estimated) (c)	120,000	146,000	159,000	192,000	231,000	251,000	296,000
Yugoslavia ..	(g) 20,000	21,600	47,900	50,500	47,800	53,891	45,288
Angola ..	—	—	—	—	787	1,353	1,139
Belgian Congo ..	157,691	141,613	148,458	153,025	139,166	173,142	188,927
Mexico ..	52,445	51,544	54,945	51,136	53,454	55,311	54,028
United States (h) ..	771,778	582,876	843,476	826,295	767,525	900,472	92,569
Chile ..	455,409	353,294	402,698	418,897	345,197	340,004	354,412
Ecuador ..	3,764	2,046	—	—	—	—	—
Peru ..	25,146	19,286	17,542	11,637	20,785	22,860	22,473
China ..	1,160	672	1,591	(g) 1,000	(a)	(a)	(a)
Japan (i) ..	25,404	20,397	28,357	28,664	37,935	36,589	43,155
Korea ..	(j) 419	(j) 158	(j) 386	(j) 506	(j) 303	(a)	(a)
Turkey ..	9,692	9,891	9,921	10,806	11,105	11,515	12,889
<b>TOTAL ..</b>	<b>1,686,000</b>	<b>1,411,000</b>	<b>1,788,000</b>	<b>1,844,000</b>	<b>1,818,000</b>	<b>2,037,000</b>	<b>2,142,000</b>
<b>WORLD'S TOTAL</b>	<b>2,125,000</b>	<b>1,798,000</b>	<b>2,212,000</b>	<b>2,294,000</b>	<b>2,323,000</b>	<b>2,573,000</b>	<b>2,714,000</b>

(a) Information not available.

(b) Copper content of blister and anode copper.

(c) Revised.

(d) Includes secondary metal.

(e) Up to and including 1950, figures refer to black and blister copper and exclude electrolytic copper which is, in part, obtained from blister copper. Source : Centro Industrial de Vizcaya (U.N. Monthly Bull. of Stats.). In 1951 figures refer to blister copper only.

(f) Revised. Figures now exclude secondary metal from fire-refined scrap which was as follows (long tons) : 1946—11,610; 1947—13,464; 1948—22,263; 1949—41,767; 1950—59,098; 1951—57,296.

(g) Estimated.

(h) In addition, secondary metal was recovered as follows (long tons): 1945—898,675; 1946—717,452; 1947—858,697; 1948—868,561; 1949—636,735; 1950—872,535; 1951—832,395.

(i) In addition, secondary metal was recovered as follows (long tons): 1945—14,173; 1946—2,504; 1947—7,878; 1948—24,818; 1949—34,936; 1950—46,805; 1951—46,356.

(j) Southern Korea only.

EXPORTS OF COPPER, ETC.

*(Domestic Produce)*

(Long tons)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Ore, matte, etc. .. ..	—	56	—	—	143	(a)	(a)
Bars and ingots .. ..	5,990	19,217	20,215	21,247	32,113	23,470	3,174
Scrap .. ..	150	308	—	331	1,640	3,084	678
Plates, sheets, etc. .. ..	3,672	16,819	17,420	12,531	12,598	10,738	9,255
Rods and wire .. ..	7,516	29,859	24,545	28,143	33,533	30,141	11,157
Tubes .. ..	1,633	4,597	4,409	5,742	6,089	4,769	4,848
Sulphate .. ..	44,317	52,152	25,241	24,524	38,267	54,839	40,104
Northern Rhodesia—							
Blister .. ..	113,768	124,448	128,416	156,656	180,765	217,481	186,886
Electrolytic .. ..	60,501	56,241	57,480	59,179	62,653	73,288	103,847
South West Africa—							
Copper-lead ore ( <i>Cu content</i> ) (b) .. ..	—	—	16,162 (ore)	6,322	9,486	10,515	11,272
Tanganyika—							
Ore .. ..	£1,330	—	—	—	—	9	—
Union of South Africa—							
Copper-gold concentrates .. ..	—	526	490	597	(f) 172	(f) 82	(f) 21
Copper matte .. ..	(a)	(a)	606	971	(f) 362	(f) 347	(f) 680
Ingots, bars, plates, etc. .. ..	23,781	25,257	28,088	22,918	29,662	33,988	29,178
Canada (c)—							
Ore, matte, etc. ( <i>Cu content</i> ) .. ..	17,227	15,739	25,977	25,496	33,087	28,839	32,904
Ingots, etc. .. ..	115,490	90,549	78,106	103,723	113,536	119,861	90,921
Scrap, slag, etc. .. ..	1,284	1,099	5,085	4,684	3,139	5,566	887
Rods, sheets and strips .. ..	6,501	{ 14,023	17,579	24,972	27,727	13,627	11,088
Tubes .. ..	..	189	712	599	424	607	779
Wire (excl. insulated) .. ..	(£66,342)	(£147,337)	(£819,804)	(£265,564)	(£84,869)	(£444,133)	(£495,707)
Newfoundland (d)—							
Concentrates .. ..	17,944	17,631	16,604	14,580	(d)	(d)	(d)
Cyprus—							
Concentrates, cement copper and cupreous pyrites ( <i>Cu content</i> ) .. ..	—	70	12,481	15,486	23,558	22,933	22,451
Hong Kong (including re-exports)—							
Bars, sheets, tubes and wire (incl. alloyed) .. ..	(a)	160	77	770	3,587	5,821	237
India—							
Matte, etc. .. ..	7	2	188	23	68	74	164
Malaya (including re-exports)—							
Ingots, sheets, wire, etc. .. ..	a)	86	47	38	107	112	85
Australia—							
Ore, etc. ( <i>Cu content</i> ) (e) .. ..	1,669	66	179	930	285	455	(g) 610
Matte (e) .. ..	—	—	—	331	—	300	(a) 12
Blocks and ingots .. ..	—	6,840	407	32	6	1	65
Scrap .. ..	..	230	4	—	34	69	69
Bars, sheets, wire, etc. .. ..	135	{ 1,004	477	62	54	120	69

(a) Information not available.

(b) Copper content of lead-copper-zinc ores and concentrates, the gross weight of which is shown under "Lead."

(c) Including Newfoundland from April 1, 1949.

(d) Years ended March 31 of year following that stated. Included with Canada from April 1, 1949.

(e) Years ended June 30 of that stated.

(f) *Cu content.*

(g) Calendar year.

## EXPORTS OF COPPER, ETC. (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
FOREIGN COUNTRIES							
Austria—							
Ore .. .. ..	(a)	(a)	(a)	(a)	2,487	—	1,978
Rough copper .. ..	(a)	(a)	3	237	12	1,353	1,394
Scrap .. .. ..	(a)	(a)	15	15	65	468	32
Bars, sheets and wire ..	(a)	(a)	(a)	(a)	232	8	49
Sulphate .. .. ..	(a)	(a)	(a)	(a)	1,484	477	38
Belgium-Luxemburg E.U.—							
Ore .. .. ..	—	1	(a)	65	—	—	—
Rough copper .. ..	1	(a)	102,137	{ 88,181	126,808	116,966	104,000
Scrap .. .. ..	(a)	(a)		6,945	5,819	8,452	2,812
Bars, sheets, wire, etc. ..	(a)	(a)	(a)	18,038	14,314	19,123	22,226
Sulphate .. .. ..	(a)	(a)	(a)	4,731	8,336	8,126	19,856
Bulgaria—							
Ore, matte, etc. .. ..	25,286	16,890	8,863	(a)	(a)	(a)	(a)
Rough copper and scrap	2	—	(a)	(a)	(a)	(a)	(a)
Sheets and rods .. ..	—	—	(a)	(a)	(a)	(a)	(a)
Czechoslovakia—							
Rough copper .. ..	(a)	—	—	(b) 1,508	(a)	(a)	(a)
Sheets, rods, wire, etc. ..	(a)	{ 8	70	(b) 185	(a)	(a)	(a)
Sulphate .. .. ..	(a)	{ 74	76	(b) 11	(a)	(a)	(a)
Denmark—							
Rough copper .. ..	499	298	—	5	28	123	378
Scrap and alloyed .. ..	221	71	36	174	1,557	2,028	1,534
Bars, sheets, wire, etc. ..	3	20	28	30	51	57	15
Finland—							
Ore .. .. ..	7,568	—	—	—	—	3	—
Rough copper and scrap	1,056	4,642	4,317	5,287	3,447	4,257	4,203
Sheets and wire .. ..	—	237	865	525	652	564	860
France—							
Ore, matte, etc. .. ..	116	2,297	19	—	—	—	—
Ingots, alloys, etc. ..	114	625	1,518	690	629	16,196	6,678
Scrap .. .. ..	2	109	114	(a)	(a)	(a)	(a)
Bars, sheets and wire ..	38	1,299	4,246	2,016	2,220	2,570	3,502
Sulphate .. .. ..	11	101	6,768	7,886	5,966	5,751	8,835
Germany (Federal)—							
Ore, including burnt cuprous pyrites .. ..	{ (a)	(a)	(a)	{ 9,738	22,193	36,106	35,209
Rough copper .. ..	(a)	(a)	(a)	—	—	47	1,043
Coin and scrap .. ..	(a)	(a)	(a)	377	1,429	5,626	4,997
Bars, sheets, wire, etc. ..	(a)	(a)	(a)	—	274	1,278	692
Sulphate, including ferrous sulphate .. ..	(a)	(a)	(a)	—	—	—	—
Greece—							
Ore .. .. ..	—	—	—	—	—	1,526	—
Italy—							
Ore .. .. ..	—	—	97	—	19	3	668
Ingots and alloys .. ..	—	11,202	430	197	499	163	261
Scrap .. .. ..	—	198	4,827	1,050	136	19	2
Bars, sheets, wire, etc., and alloys .. ..	—	3,425	6,603	6,714	4,031	1,986	1,368
Netherlands—							
Ingots and bars .. ..	{ (a)	{ 1,672	53	578	175	453	326
Scrap .. .. ..	(a)	{ 1,659	2,175	1,951	2,125	15,205	15,701
Sheets, tubes and wire ..	{ (a)	{ 110	644	575	313	234	175
Sulphate .. .. ..	(a)	{ —	2	—	—	28	92
Norway—							
Ore .. .. ..	3,660	187	227	588	6,125	6,289	11,259
Matte .. .. ..	2,105	12,800	14,494	12,054	12,598	16,147	13,571
Burnt cupreous pyrites .. ..	650	4,055	6,077	2,810	—	817	(a)
Rough and refined copper .. ..	344	6,514	6,191	7,939	7,050	8,910	6,433
Scrap, including alloyed .. ..	381	1,853	1,946	1,370	1,568	2,116	1,757

(a) Information not available.

(b) January to October only.

## EXPORTS OF COPPER, ETC. (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
<b>Portugal—</b>							
Rough copper, sheets, etc.	52	11	7	24	14	23	23
Sulphate .. . .	—	10	21	32	83	113	153
<b>Spain—</b>							
Ore .. . .	(a)	(a)	(a)	(a)	3,175	—	—
Ingots, bars and alloyed	32	14	6	9	9	39	9
Sheets, tubes, wire and alloyed .. . .	46	105	74	679	505	36	32
Sulphate .. . .	196	898	363	296	352	185	432
<b>Sweden—</b>							
Rough copper .. . .	11	180	2,639	3,882	4,212	5,485	5,115
Scrap, including brass ..	6	79	108	9	131	1,940	551
Sheets, tubes, wire, etc.	955	7,818	10,112	10,694	9,945	14,506	12,137
Sulphate .. . .	21	2	—	—	1	1	67
<b>Switzerland—</b>							
Ore, filings and turnings	—	100	235	87	266	3,048	2,385
Bars, ingots, etc. ..	—	112	2	101	114	1,276	191
Scrap .. . .	—	20	110	10	308	844	162
Sheets, tubes, wire, etc. (b)	17	1,054	3,369	3,695	2,806	4,755	2,361
<b>Yugoslavia—</b>							
Concentrates .. . .	(a)	(a)	(a)	(a)	(a)	640	7,672
Blister .. . .							
Electrolytic .. . .							
Scrap .. . .							
<b>Algeria—</b>							
Bars, sheets and wire ..	1	1	418	489	365	707	1,002
Scrap .. . .	33	263	656	56	395	1,196	226
Sulphate .. . .	—	—	—	—	—	—	6
<b>Angola—</b>							
Ore .. . .	524	205	—	1,076	207	(a)	(a)
Ingots .. . .	(a)	(a)	(a)	(a)	1,773	(a)	(a)
<b>Belgian Congo—</b>							
Copper-cobalt ingots (d)	6,470	4,687	8,033	6,192	5,489	6,530	6,991
Matte .. . .	28,309	17,981	9,749	154,911	149,024	164,246	181,025
Ingots .. . .	52,845	86,739	68,026				
Cathodes .. . .	79,133	49,486	78,700				
<b>Egypt—</b>							
Rough copper and scrap	—	2,032	2,578	22	137	—	(a)
<b>Morocco (French)—</b>							
Ore .. . .	699	905	—	(a)	1,781	(a)	404
Old and scrap .. . .	27	166	207	(a)	(a)	(a)	(a)
<b>Cuba—</b>							
Ore .. . .	31,268	34,800	33,919	46,817	40,057	77,026	67,200
Scrap .. . .	35	(a)	(a)	—	129	(a)	(a)
<b>Mexico—</b>							
Ore, concentrates, etc. ..	29,925	29,122	37,525	32,482	26,806	17,575	25,853
Rough copper .. . .	48,293	37,828	42,395	35,042	50,945	51,499	38,914
Cu content (c) .. . .	58,964	48,767	52,415	48,957	48,469	50,963	(a)
<b>United States—</b>							
Ores, matte, blister, etc. (Cu content) .. . .	30	21	103	2,208	179	550	209
Refined ingots, etc. ..	43,360	46,990	132,500	127,319	123,060	129,073	119,022
Scrap .. . .	119	811	866	2,023	7,396	8,433	6,876
Sheets, rods, wire, etc. ..	21,846	9,498	16,654	19,329	19,328	15,771	8,103
Sulphate .. . .	31,221	36,916	30,376	37,621	28,319	26,918	38,508
<b>Argentina—</b>							
Ore .. . .	—	197	(a)	(a)	(a)	(a)	(a)
Ingots, sheets and scrap	—	1	(a)	(a)	(a)	(a)	(a)
<b>Bolivia—</b>							
Ore, etc. (Cu content) ..	6,001	6,030	6,142	6,512	4,994	4,630	4,769

(a) Information not available.

(c) Total metal content of above items and *not* additional.

(b) Including alloys.

(d) Figures for the years 1945 to 1947 include, if any, exports of granulated cobalt.

EXPORTS OF COPPER, ETC. (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Chile—							
Ores and concentrates ..	63,898	24,247	10,623	19,881	14,960	15,944	54,427
Precipitate .. ..	16	2	7	—	1	3	2
Ingots—							
Blister .. .. ..	192,086	135,987	152,919	193,102	171,350	178,830	183,751
Electrolytic .. ..	232,286	232,130	228,240	304,688	176,861	138,183	119,483
Bars and sheets .. ..	7,743	2,542	3,054	1,024	1,123	840	10,038
Sulphate .. .. ..	898	54	—	24	129	914	543
Ecuador—							
Concentrates .. ..	108	249	1,016	1,935	2,912	(a)	(a)
Blister .. .. ..	3,737	2,231	—	—	—	(a)	(a)
Peru—							
Ore ( <i>Cu content</i> ) ..	4,467	3,160	7,055	4,740	7,129	5,209	(a)
Matte, etc. ( <i>do.</i> ) ..	314	189	512	258	330	191	(a)
Bars, etc. ( <i>do.</i> ) ..	23,340	22,326	17,189	12,225	19,561	21,224	(a)
Precipitate ( <i>do.</i> ) ..	—	—	649	213	294	137	(a)
Formosa—							
Ore ( <i>Cu content</i> ) ..	660	(a)	(a)	(a)	(a)	(a)	(a)
Japan—							
Ingots and blocks ..	(a)	390	300	1,968	—	20,586	48,802
Bars, rods and tubes ..	(a)			106	(a)	(a)	27,683
Plates, sheets and wire ..	(a)			(a)	(a)		6,332
Scrap .. ..	(a)	(a)	(a)	(a)	(a)		4,867
Philippine Republic—							
Ore .. .. ..	(b)	187	(a)	—	5,314	22,630	(a)
Syria and Lebanon—							
Ingots and scrap ..	277	811	(a)	(a)	(a)	(a)	(a)
Turkey—							
Ingots .. .. ..	332	23,196	5,346	1,224	7,116	6,216	7,413

(a) Information not available.

(b) Imports into Japan from Philippine Republic (*Cu content*).

IMPORTS OF COPPER, ETC.

(Less Re-exports)

(Long tons)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Bars, ingots, etc.—							
Electrolytic .. ..	75,049	166,724	203,206	202,484	175,565	209,858	219,166
Other refined .. ..	68,666	{ 14,749	24,445	21,994	14,688	1,516	5,532
Blister .. ..		103,304	134,040	132,247	120,449	105,998	130,931
Scrap .. ..	13	471	1,539	522	2,004	301	1,113
Plates, sheets, etc. ..	4	2	97	85	39	22	12
Rods .. ..	—	6,602	13,557	12,653	12,335	1,106	—
Tubes .. ..	—	—	35	44	11	46	8
Wire .. ..	73	47	1,653	125	22	160	42
Anglo-Egyptian Sudan—							
Sulphate .. ..	1	20	142	110	96	53	(a)
Kenya (b)—							
Crude, refined, alloys and scrap .. ..	(a)	(a)	(a)	(a)	25	52	(d) 202
Bars, sheets, tubes and wire .. ..	4	34	56	337	202	289	79
Sulphate .. ..	(a)	(a)	(a)	—	4	22	92
Mauritius—							
Bars, rods, sheets, wire, etc.	70	27	32	38	95	49	(d) 13
Southern Rhodesia—							
Ingots, bars and rods ..	282	83	131	265	329	355	624
South West Africa—							
Bars, sheets, pipes, wire, etc. ..	1	56	31	90	231	1	(a)
Tanganyika—							
Ore .. ..	—	22	1	(a)	(a)	(a)	(a)
Crude, refined, alloys and scrap .. ..	(a)	(a)	(a)	8	24	14	30
Sheets and wire .. ..	36	23	82	120	321	76	94
Sulphate .. ..	(a)	(a)	(a)	1	41	48	104
Uganda—							
Sheets and wire .. ..	(c)	(c)	(c)	(c)	74	19	12
Union of South Africa—							
Bars, ingots and slabs ..	12,691	8,363	10,116	14,126	13,592	17,149	16,875
Plates, sheets and tubes ..	568	1,230	1,521	3,290	2,104	1,198	(a)
Wire .. ..	324	705	1,537	4,712	1,412	687	(a)
Canada—							
Blocks, pigs and ingots ..	—	—	1	1	8	109	1,349
Bars, sheets, wire, etc. ..	1,685	2,492	3,300	2,666	1,794	1,917	2,384
Scrap .. ..	44	37	40	38	340	413	1,129
Sulphate .. ..	2,910	604	571	203	461	632	33
British West Indies (Barbados)—							
Bars and sheets .. ..	(£316)	(£1,751)	(£1,070)	(£2,522)	(£1,835)	(£1,926)	(£3,151)
Cyprus—							
Bars, sheets, wire, etc. ..	23	52	127	247	81	199	180
Hong Kong (total imports)—							
Bars, sheets, tubes and wire incl. alloys .. ..	(a)	136	485	1,905	5,600	7,470	249
Sulphate .. ..	(a)	79	85	2	11	120	35
India—							
Ingots, cakes, blocks, etc.	4,678	6,668	12,119	26,264	20,449	29,054	3,224
Scrap .. ..	100	2,449	2,890	6,883	4,780	6,564	1,032
Sheets, tubes, wire, etc.	8,144	8,702	7,517	2,789	1,216	170	748
Sulphate .. ..	99	1,076	1,548	834	721	1,418	1,592
Copper (government stores) .. ..	2,567	1,488	195	550	(a)	(a)	(a)

(a) Information not available.

(b) Including Uganda up to 1948 inclusive.

(c) Included with Kenya.

(d) Excess of re-exports.

## IMPORTS OF COPPER, ETC. (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES (Cont.)</b>							
Malaya (total imports)—							
Ingots, sheets, wire, etc.	(a)	684	770	1,393	1,032	972	1,029
Australia—							
Ore and concentrates ..	—	—	531	—	22	626	2
Matte ..	—	—	—	11	—	—	—
Blocks and ingots ..	8	156	1,311	9,264	23,033	13,948	20,142
Scrap ..	(a) 5	(c) 4	(c) 45	165	99	39	39
Bars, sheets, tubes, etc..	1,558	3,133	680	623	6,301	11,861	7,247
Sulphate (c) ..	20	20	2,055	518	226	1,541	(a)
New Zealand—							
Bars, sheets, pipes, etc..	1,399	1,311	1,704	2,502	2,045	3,370	3,162
Wire (£ N.Z.) ..	(\$38,949)	(\$150,950)	(\$252,111)	(a) 1	1,439	1,539	914
Sulphate ..	201	3	—	398	404	404	368
Irish Republic—							
Bars, sheets, wire, etc..	1,034	2,220	2,157	2,858	2,285	2,025	1,717
Sulphate ..	3,197	3,444	2,719	4,338	2,730	2,369	2,071
<b>FOREIGN COUNTRIES</b>							
Austria—							
Ore ..	(a)	(a)	(a)	(a)	(a)	8,547	—
Rough copper ..	(a)	(a)	226	1,426	3,808	4,396	4,658
Scrap ..	(a)	(a)	321	238	511	1,258	1,527
Bars, sheets, wire, etc..	(a)	(a)	26	411	3,227	2,179	3,700
Sulphate ..	(a)	(a)	866	1,001	—	—	76
Belgium-Luxemburg E.U.—							
Ore ..	332	3,212	(a)	13,388	5,222	5,540	6,699
Matte ..	62,878	180,075	220,354	{ 143,956	148,871	152,720	144,663
Rough copper ..				{ 10,922	9,948	18,652	20,660
Scrap ..				{ 790	734	2,117	596
Bars, sheets, wire, etc..				{ 27	47	30	5
Sulphate ..	(a)	(a)	(a)				
Bulgaria—							
Ore and matte ..	—	—	—				
Rough copper and scrap	284	677					
Bars, sheet and wire ..	388	1,668					
Sulphate ..	1,047	7,243					
Czechoslovakia—							
Crude, refined and scrap	(a)	2,976	22,518	(b) 36,610	(a)	(a)	(a)
Sheets, rods, wire, etc..	(a)	879	2,994	(b) 327	(a)	(a)	(a)
Denmark—							
Rough copper ..	674	2,574	2,491	3,271	2,318	4,607	3,403
Scrap, including alloyed	338	672	1,338	1,649	473	735	491
Bars, sheets, wire, etc..	1,555	7,226	7,227	8,344	9,981	10,754	10,137
Sulphate ..	871	2,674	1,142	2,579	1,250	1,967	1,220
Finland (total imports)—							
Rough ..	—	1,130	2,789	1,072	112	395	218
Scrap ..	3	—	—	32	4	651	200
Bars, sheets, tubes and							
wire ..	678	276	376	2,992	1,427	2,038	1,805
Sulphate ..	—	—	1	1	—	10	71
France—							
Ore, matte, etc. ..	—	—	788	(a)	(a)	(a)	(a)
Rough copper							
Unrefined ..	7,814	19,854	12,068	{ 81,058	122,110	105,143	108,584
Refined ..	26,752	90,947	104,511	{ 20,617	20,212	3,232	3,678
Alloyed ..	5,408	17,155	10,271	(a)	(a)	(a)	(a)
Scrap ..	88	4,801	31,716	338	594	322	262
Bars, sheets and wire ..	60	5,701	4,351	—	—	—	—
Sulphate ..	12,322	26,514	2,384	14,067	7,406	2,614	8,153

(a) Information not available.

(b) January to October only.

(c) Years ended June 30 of that stated.

## IMPORTS OF COPPER, ETC. (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Germany (Federal)—							
Ore and burnt cupreous pyrites .. ..				590,485	745,340	1,031,613	1,080,319
Rough copper .. ..	(a)	(a)	(a)	14,970	42,036	59,128	62,147
Coin and scrap .. ..				183	3,733	11,668	20,848
Bars, sheets, wire, etc. .. ..				146	233	33	4,888
Sulphate, including ferrous sulphate .. ..				—	—	75	603
Greece—							
Rough copper and alloys .. ..	22	367	216	2,072	185	444	279
Sheets, tubes, alloys, etc. .. ..	2	85	479	359	393	577	146
Sulphate .. ..	4,847	825	176	24	492	3,705	5,172
Iceland—							
Bars, tubes, wire, etc. .. ..	186	678	(a)	(a)	201	103	88
Italy—							
Ore .. ..	(a)	(a)	(a)	—	13,179	4,483	—
Ingots and alloys .. ..	—	23,975	56,478	56,299	44,204	60,459	62,874
Scrap .. ..	1,053	1,384	963	2,835	5,051	11,408	9,063
Bars, sheets, wire, etc., and alloys .. ..	—	213	5,453	10,462	6,999	4791	4,717
Sulphate .. ..	(a)	(a)	6,124	693	12,494	10,993	1,965
Netherlands—							
Ingots and bars .. ..		9,600	9,485	15,823	21,574	19,440	14,746
Scrap .. ..	(a)	8	—	3	51	946	1,898
Sheets, tubes and wire .. ..		11,523	15,598	9,895	6,011	9,108	6,761
Sulphate .. ..		1,049	944	1,352	975	1,242	819
Norway—							
Rough copper .. ..	700	1,122	1,484	2,172	3,196	2,390	1,682
Copper-nickel matte .. ..	1,882	11,138	14,464	16,771	19,006	16,362	(a)
Bars, sheets, rods, etc. .. ..	40	314	1,009	1,216	1,088	1,773	(a)
Tubes (including brass) and wire .. ..	2,209	5,832	8,144	7,644	7,616	8,427	7,416
Sulphate .. ..	312	19	50	258	320	117	(a)
Portugal—							
Ore and concentrates .. ..	524	205	—	1,076	—	165	(a)
Ingots, wire, alloys, etc. .. ..	650	9,119	7,916	7,352	4,529	2,963	(a)
Sulphate .. ..	5,267	239	1,200	414	658	1,046	1,760
Spain—							
Ore .. ..	84	—	3,972	—	93	—	31
Precipitate and scrap (b) .. ..	153	225	2,092	4,606	2,968	1,466	2,722
Ingots and bars (b) .. ..	3,899	7,029	3,119	5,359	5,538	3,413	1,557
Sheets, tubes and wire (b) .. ..	34	170	459	1,040	127	65	55
Sulphate .. ..	5,629	2,981	11,242	1,365	6,978	8,192	10,788
Sweden—							
Ore .. ..	9,242	273	—	—	4,993	3,985	(a)
Rough copper .. ..	14,649	50,673	53,629	34,124	38,156	37,219	37,704
Scrap, including brass .. ..	314	2,277	4,047	6,319	5,091	4,165	7,543
Sheets, rods, wire, etc. .. ..	2,016	1,292	3,222	1,331	669	480	(a)
Sulphate .. ..	10	202	142	126	135	488	(a)
Switzerland—							
Ore, filings and turnings .. ..	363	1,253	977	1,426	318	343	416
Bars, ingots, etc. (b) .. ..	8,530	25,990	22,392	32,928	16,411	17,474	24,801
Scrap (b) .. ..	419	13,047	2,204	2,323	173	54	732
Sheets, tubes, wire, etc. (b) .. ..	1,086	7,615	5,994	9,210	3,287	5,697	13,677
Algeria—							
Ore .. ..	980	503	605	989	181	—	—
Rough copper .. ..	1,958	1,773	297	2,793	5,207	2,097	3,510
Scrap .. ..	44	109	10	37	—	—	—
Bars, sheets, wire, etc. .. ..	63	434	1,050	1,262	466	326	316
Sulphate .. ..	1,090	3,453	7,739	7,289	7,973	6,039	5,958

(a) Information not available.

(b) Including alloys.

(c) Excluding alloys.

## IMPORTS OF COPPER, ETC. (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
FOREIGN COUNTRIES (Cont.)							
Angola— Bars, sheets, wire, etc. ..	17	66	50	(a)	(a)	(a)	(a)
Cameroon (French)— Sulphate .. .. ..	100	(a)	(a)	(a)	(a)	(a)	(a)
Egypt— Crude and scrap .. ..	268	(c) 512	(c) 3,866	558	2,043	3,300	(a)
Bars, sheets, tubes, etc.	320	914	(c) 513	549	1,323	1,976	(a)
Sulphate .. .. ..	213	135	1,121	1,207	1,864	2,795	(a)
Madagascar— Crude, sheets, wire, etc.	104	40	65	312	(a)	(a)	(a)
Morocco (French)— Ingots, sheets and wire (b)	581	299	498	(a)	(a)	(a)	(a)
Mozambique— Bars, sheets, wire and alloys .. .. ..	84	282	104	179	239	152	62
Tunis— Bars, sheets and wire (b)	300	450	672	425	548	551	(a)
Sulphate .. .. ..	156	60	—	—	(a)	(a)	(a)
Costa Rica— Bars, sheets and wire ..	57	68	73	28	40	(a)	(a)
Sulphate .. .. ..	3,036	5,193	5,112	8,274	6,828	(a)	(a)
Cuba (total imports)— Ingots and bars .. ..	281	(a)	(a)	268	247	(a)	177
Sheets, tubes and wire ..	561	(a)	(a)	2,585	1,421	(a)	(a)
Guatemala— Sheets and wire .. ..	(a)	(a)	(a)	315	238	408	205
Sulphate and carbonate ..	(a)	(a)	(a)	8,883	4,554	5,353	7,931
Honduras— Sulphate .. .. ..	7,276	8,201	(a)	(a)	(a)	(a)	(a)
Mexico— Ingots .. .. ..	4,941	6,295	1,483	488	(a)	(a)	(a)
Bars, sheets, alloys, etc.	1,675	1,812	(a)	(a)	(a)	(a)	1,835
Sulphate .. .. ..	2,491	2,679	(a)	(a)	(a)	(a)	(a)
United States— Cu content of— Ore and concentrates	51,729	28,265	72,301	55,353	113,862	84,791	87,643
Matte, precipitate, etc.	45,068	5,247	2,189	1,522	1,791	1,141	1,929
Blister .. .. ..	230,474	146,251	190,242	143,079	137,093	128,393	160,370
Refined ingots, bars and plates .. .. ..	471,735	136,275	134,253	223,337	246,671	288,373	219,780
Scrap .. .. ..	1,208	934	5,321	8,334	6,040	34,443	9,378
Sulphate .. .. ..	2	—	—	30	—	210	95
Argentina— Ingots, electrolytic .. ..	8,243	5,506	15,718	7,549	3,898	8,945	(a)
Tubes, including bronze ..	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Sulphate .. .. ..	4,689	2,904	2,591	1,446	1,097	2,900	(a)
Brazil (total imports)— Electrolytic .. .. ..	(a)	13,822	5,663	7,396	18,328	17,254	(a)
Rough .. .. ..	7,599	6,254	10,428	3,341	3,411	(a)	(a)
Plates and sheets .. ..	938	1,447	1,188	716	1,020	(a)	(a)
Tubes, pipes and wire ..	971	1,134	1,451	849	(a)	(a)	(a)
Sulphate .. .. ..	916	2,143	582	1,815	2,068	(a)	(a)
Chile— Bars, sheets and wire ..	—	—	1	2	(a)	(a)	(a)
Colombia— Ingots, sheets, etc. ..	826	516	(a)	(a)	209	375	(a)
Wire .. .. ..	2,027	689	(a)	(a)	(a)	4,573	(a)
Sulphate .. .. ..	363	405	(a)	(a)	1,366	(a)	(a)

(a) Information not available.

(b) Including alloys.

(c) Excess of re-exports.

IMPORTS OF COPPER, ETC. (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
FOREIGN COUNTRIES (Cont.)							
Peru—							
Bars, sheets, etc. ..	93	64	(a)	(a)	(a)	78	(a)
Sulphate .. ..	550	866	(a)	484	(a)	583	(a)
Uruguay—							
Bars and sheets .. ..	(a)	(a)	(a)	603	418	620	(a)
Venezuela—							
Sheets .. .. ..	243	162	207	240	(a)	(a)	(a)
Sulphate .. .. ..	25	37	70	(a)	(a)	(a)	(a)
China—							
Ingots and blocks ..	(a)	3,291	2,097	1,977	(a)	(a)	(a)
Bars, sheets, wire, rods and tubes .. ..	(a)	1,995	1,998	4,111	(a)	(a)	(a)
Iran (total imports) (b)—							
Ingots, bars, sheets and alloys .. .. ..	(a)	476	626	(a)	(a)	(a)	(a)
Iraq—							
Crude, sheets, pipes, etc.	57	(a)	(a)	(a)	(a)	(a)	(a)
Japan—							
Ore ( <i>Cu content</i> ) ..	853	(a)	(a)	(a)	(a)	(a)	(a)
Refined copper .. ..	(a)	(a)	190	—	(a)	(a)	(a)
Syria and Lebanon—							
Bars, sheets, tubes and wire .. .. ..	619	1,160	(a)	(a)	(a)	(a)	(a)
Turkey—							
Ingots, bars, and sheets	249	992	931	457	595	797	131
Sulphate .. .. ..	1,426	1,056	1,646	436	886	705	544

(a) Information not available.

(b) Year ended March 20 of year following that stated.

**DIAMONDS**  
**PRODUCTION OF DIAMONDS\***  
(Metric carats)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Gold Coast (exports)—							
Gem diamonds .. .	264,930	253,443	262,397	320,356	} 963,435	932,452	1,712,033
Bort .. .	275,049	241,104	202,003	297,516			
Diamond sand .. .	272,471	314,453	282,634	260,220			
Sierra Leone .. .	503,999	559,232	605,554	465,698	494,119	655,485	475,759
Southern Rhodesia .. .	—	—	—	—	6	—	40
South West Africa .. .	152,629	165,150	179,554	200,691	280,501	504,604	502,983
Tanganyika .. .	119,139	120,045	87,943	149,926	194,874	164,996	108,625
Union of South Africa .. .	1,222,945	1,349,099	1,242,423	1,382,327	1,264,795	1,731,510	2,228,911
British Guiana .. .	15,852	31,732	24,669	36,563	34,790	37,481	43,260
India .. .	1,380	1,107	1,284	2,426	1,632	2,769	1,674
Australia (Industrial) .. .	73	50	73	—	5	130	129
<b>TOTAL</b> .. .	<b>2,828,000</b>	<b>3,034,000</b>	<b>2,888,500</b>	<b>3,115,700</b>	<b>3,231,050</b>	<b>4,029,400</b>	<b>5,073,400</b>
<b>FOREIGN COUNTRIES</b>							
Angola .. .	803,887	806,962	799,210	795,509	769,981	538,867	734,324
Belgian Congo—							
Gem diamonds .. .	458,696	367,099	540,690	550,814	550,423	543,342	537,652
Industrial do. .. .	9,927,259	5,666,353	4,933,827	5,273,753	9,099,545	9,604,128	10,027,103
French Equatorial Africa .. .	82,849	87,230	107,076	118,800	122,928	111,407	147,791
French West Africa .. .	79,802	51,834	53,749	77,970	94,996	124,568	100,980
Brazil (b) .. .	275,000	325,000	275,000	250,000	250,000	250,000	250,000
Venezuela .. .	12,762	20,912	61,634	75,512	56,662	58,562	63,226
<b>TOTAL</b> .. .	<b>11,640,000</b>	<b>7,325,000</b>	<b>6,771,000</b>	<b>7,142,000</b>	<b>10,945,000</b>	<b>11,231,000</b>	<b>11,861,000</b>
<b>WORLD'S TOTAL</b>	<b>14,468,000</b>	<b>10,359,000</b>	<b>9,660,000</b>	<b>10,258,000</b>	<b>14,176,000</b>	<b>15,260,000</b>	<b>16,934,000</b>

\* For Values see next page.

(a) Information not available.

(b) Estimated.

PRODUCTION OF DIAMONDS\*

(£ sterling)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Gold Coast (exports)—							
Gem diamonds .. .	274,706	338,225	402,492	616,513			
Bort .. .	61,888	71,393	74,873	107,287	1,390,636	1,837,452	5,970,919
Diamond sand .. .	142,812	212,907	269,197	252,260			
Sierra Leone .. .	598,750	806,412	1,211,108	1,106,032	1,173,532	1,884,519	1,367,805
Southern Rhodesia .. .	—	—	—	—	26	—	200
South West Africa .. .	1,277,980	1,694,500	1,920,869	2,369,104	3,512,700	6,631,551	9,586,261
Tanganyika .. .	(b) 657,746	(b) 986,870	(b) 602,410	(b) 1,083,215	(b) 1,679,976	1,787,142	(b) 1,130,000
Union of South Africa .. .	6,425,096	9,041,762	7,166,528	8,719,356	7,646,727	10,854,496	14,043,432
British Guiana .. .	95,276	288,718	155,659	295,679	243,350	(b) 287,259	(b) 385,706
India .. .	13,491	13,314	12,952	31,311	20,630	31,347	40,087
Australia .. .	134	115	215	—	12	216	206
<b>TOTAL .. .</b>	<b>9,432,000</b>	<b>13,040,000</b>	<b>11,816,300</b>	<b>14,480,800</b>	<b>15,638,000</b>	<b>23,314,000</b>	<b>32,525,000</b>
<b>FOREIGN COUNTRIES</b>							
Angola .. .	(b) 1,000,000	1,622,000	1,891,000	1,864,000	2,524,000	2,138,000	3,422,000
Belgian Congo—							
Gem diamonds .. .	} b1,488,000	(b) 2,051,000	(b) 1,369,000	{ 617,455	631,454	(b) 766,000	782,000
Industrial do.							
French Equatorial Africa .. .	580,000	414,000	484,000	388,000	558,000	727,000	501,000
French West Africa .. .	559,000	73,000	64,000	72,000	207,000	408,000	351,000
Brazil (estimated) (c) .. .	(a) 54,993	71,648	189,836	119,000	(a) 566,000	(a) 586,000	(a) (a)
<b>Venezuela .. .</b>	<b>54,993</b>	<b>71,648</b>	<b>189,836</b>	<b>119,000</b>	<b>566,000</b>	<b>586,000</b>	<b>(a)</b>
<b>TOTAL .. .</b>	<b>4,600,000</b>	<b>5,300,000</b>	<b>5,000,000</b>	<b>4,900,000</b>	<b>7,509,000</b>	<b>8,545,000</b>	<b>10,130,000</b>
<b>WORLD'S TOTAL</b>	<b>14,032,000</b>	<b>18,340,000</b>	<b>16,820,000</b>	<b>19,380,000</b>	<b>23,150,000</b>	<b>31,860,000</b>	<b>42,660,000</b>

\* For Quantities in Metric Carats see previous page.

(a) Information not available.

(b) Estimated on export value.

(c) An allowance has been made for this in the totals.

EXPORTS OF DIAMONDS  
(Domestic Produce)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Gold Coast—							
Gem diamonds .. Ct.	264,930	253,443	262,397	320,356			
£	274,706	338,225	402,492	616,513			
Bort .. Ct.	275,049	241,104	202,003	297,516	963,435	932,451	1,712,033
£	61,888	71,393	74,873	107,287	1,390,636	1,837,452	5,970,919
Diamond sand .. Ct.	272,471	314,453	282,634	260,220			
£	142,812	212,907	269,197	252,260			
Sierra Leone .. Ct.	493,411	304,896	574,336	461,685	537,397	638,312	477,130
£	(a)	(a)	(a)	(a)	(a)	(a)	(a)
South West Africa (uncut)							
Ct.	249,474	153,452	189,072	208,907	251,611	455,288	379,753
£ (S.A.)	1,195,773	1,362,794	2,092,244	2,586,560	3,089,814	6,704,978	8,967,059
Tanganyika—							
Gem diamonds .. Ct.	45,833	62,782	45,833	61,213	83,757		
£	515,798	787,621	487,065	790,939	1,289,856	70,597	8,588
Industrial diamonds Ct.	67,818	56,664	46,397	86,691	107,947	746,370	88,953
£	122,585	194,212	144,585	278,830	362,551		
Union of South Africa—							
Uncut .. Ct.	1,227,066	835,460	1,175,453	896,901	1,079,565	2,919,842	4,483,279
£ (S.A.)	5,950,724	6,107,776	7,278,894	6,211,448	5,891,819	12,014,868	15,379,386
Cut and polished Ct.	77,823	80,474	59,959	77,399	79,305	113,591	116,819
£ (S.A.)	4,789,002	5,959,192	3,657,407	5,205,515	4,859,699	8,118,920	9,832,098
Canada—							
Industrial diamonds and dust .. Ct.	(a)	(a)	10,000	—	—	—	—
£	(a)	(a)	2,743	—	—	—	—
British Guiana .. Ct.	17,683	29,360	26,553	34,808	35,234	37,033	39,684
£	107,016	266,509	168,409	276,047	247,747	284,038	353,849
Malaya (re-exports) £	—	209	842	9,921	12,398	44,506	55,591
Palestine—							
Polished .. Ct.	137,832	116,588	(a)	(a)			
£ P.	5,909,297	5,502,878	(a)	(a)			
Powder .. Ct.	(a)	1,100	(a)	(a)			
£ P.	(a)	165	(a)	(a)			
Australia—							
Gem diamonds (d) Ct.	(a)	(a)	(a)	(a)	617	—	(a)
£ (A.)	(a)	(a)	(a)	(a)	1,288	—	(a)
Industrial diamonds Ct.	(a)	(a)	(a)	(a)	—	13,930	11,970
£	(a)	(a)	(a)	(a)	—	13,235	21,822
<b>FOREIGN COUNTRIES</b>							
Belgium-Luxemburg E.U.—							
Cut and polished Ct.	128,493	294,745	330,210	264,426	244,166	436,414	519,363
£	4,993,862	12,826,484	11,575,092	9,381,362	7,475,482	15,860,101	20,058,474
Industrial diamonds Ct.	(a)	244,817	576,302	855,631	1,200,354	1,600,524	1,130,214
£	(a)	553,557	988,558	1,355,520	2,403,948	2,949,692	3,698,520
Czechoslovakia—							
Glaziers' diamonds £	(a)	460	649	(c) 10	(a)	(a)	(a)
France—							
Uncut .. £	(a)	(a)	(a)	(a)	—	325,781	483,690
Cut .. £	(a)	(a)	(a)	(a)	25,844	66,952	1,673,377
Netherlands—							
Unpolished .. £	—	220,000	(a)	(a)	(a)	(a)	(a)
Polished .. £	—	2,300,000	(a)	(a)	(a)	(a)	(a)
Industrial diamonds £	—	98,000	(a)	(a)	(a)	(a)	(a)
Angola .. Ct.	801,714	808,443	802,099	672,985	889,377	555,330	(a)
£	1,002,960	1,744,425	2,015,150	2,003,038	3,220,185	2,285,339	(a)

(a) Information not available.

(b) See "Israel" under Foreign Countries.

(c) January to October only.

(d) Years ended June 30 of that stated.

EXPORTS OF DIAMONDS (*Cont.*)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
<b>Belgian Congo—</b>							
Gem diamonds .. Ct. £	227,000 97,875	1,306,516 1,422,589	1,150,750 1,159,269	10,841,000	9,822,978	536,307 758,491	617,216 894,164
Industrial diamonds Ct. £	7,340,000 950,618	4,751,267 654,142	6,786,000 829,586	3,450,000	3,818,000	9,163,290 2,786,664	9,714,159 3,262,216
<b>French Equatorial Africa</b>	Ct. £	60,000 35,000	142,000 550,000	140,476 511,418	124,801 (a)	132,897 608,000	135,600 456,000
<b>French West Africa</b>	Ct. £	73,000 60,000	95,000 167,000	29,908 29,584	34,870 37,056	(d) 85,140 62,170	(d) 128,960 76,122
<b>Cuba—</b>							
Cut .. .. £	(a)	(a)	(a)	(a)	(a)	(a)	(a)
<b>United States—</b>							
Uncut .. .. Ct. £	(a) (a)	(a) (a)	(a) (a)	(a) (a)	(a) (a)	4,602 37,851	4,234 32,054
Cut .. .. Ct. £	(a) (a)	(a) (a)	(a) (a)	(a) (a)	(a) (a)	5,238 243,852	6,388 696,679
Industrial diamonds Ct. £	119,895 10,771	95,003 117,617	92,626 127,115	47,747 77,510	25,760 51,070	(a) (a)	9,490 27,529
Dust .. .. Ct. £	92,019 23,762	116,650 36,350	122,925 80,539	52,600 19,938	55,637 37,204	58,563 45,032	60,621 59,478
<b>Brazil (b)—</b>							
Uncut .. .. Ct. £	49,010 271,339	113,815 986,274	133,075 510,736	59,275 208,969	37,225 (a)	(a) (a)	(a) (a)
Cut .. .. Ct. £	42,900 1,229,919	12,645 597,608	10,325 184,226	1,155 40,432	420 (a)	(a) (a)	(a) (a)
Carbons .. .. Ct. £	3,910 15,770	14,070 57,690	10,620 24,741	35,070 108,241	14,300 (a)	(a) (a)	(a) (a)
Venezuela .. .. Ct. £	1,208 79,000	11,148 150,000	55,449 310,000	(a) (a)	(a) (a)	(a) (a)	(a) (a)
<b>Israel—</b>							
Polished .. .. Ct. £I	(c)	(c)	(c)	(c)	75,668 1,830,770	119,510 3,146,702	(a) (a)
Powder .. .. Ct. £I					32,481 33,768	(a) (a)	(a) (a)

(a) Information not available.

(b) The actual exports are much in excess of those officially recorded.

(c) See "Palestine" under British Countries.

(d) Revised.

# IMPORTS OF DIAMONDS

*(Less Re-exports)*

Importing Country and Description		1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>								
United Kingdom (b)	Ct. £	11,231,178 10,892,848	9,307,118 12,988,187	8,769,070 15,114,602	13,833,486 15,685,761	13,542,619 17,785,060	14,780,625 28,293,792	17,144,539 37,097,275
Kenya .. ..	Ct. £	(a) (a)	(a) (a)	(a) (a)	60 547	73 3,547	77 1,899	357 7,468
Northern Rhodesia—								
Uncut .. ..	Ct. £	19,371 14,226	27,068 20,480	10,732 9,890	301 242	1,800 1,689	500 550	200 270
Union of South Africa—								
Rough diamonds	Ct. £ (S.A.)	279,810 23,384	3,202,027 987,383	1,228,376 62,751	(d) 1,248,627 (d) 678,237	6,771,247 1,594,365	4,846,796 (h) 2,074,346	(g) 12,996,707 (g) 6,065,139
Cut and polished	Ct. £ (S.A.)	— —	519 19,985	1,345 17,629	999 36,365	96 2,931	2 49	(a) (a)
Canada—								
Unset .. ..	Ct. £	(a) 741,442	(a) 1,439,589	14,954 699,739	37,392 1,272,390	44,443 1,592,288	44,297 2,280,063	40,624 2,296,503
Dust, bort, etc. ..	Ct. £	(a) 446,135	(a) 943,976	100,732 265,820	233,188 358,569	261,769 437,051	531,561 944,738	577,838 1,311,390
Bermuda .. ..	£	2,279	2,417	—	—	—	—	(a) (a)
Ceylon .. ..	Ct. £	— —	— —	— —	334 15,953	342 19,676	1,140 67,056	1,446 98,215
India .. ..	£	1,508,648	1,691,369	2,409,045	562,345	325,630	893	—
Malaya (total imports)	£	(a)	—	20,484	10,496	37,108	36,916	4,886
Palestine—								
Rough diamonds	Ct. £ P.	625,123 2,810,696	499,765 3,269,258	(a) (a)	(a) (a)			
Polished do. ..	Ct. £ P.	3,958 310,670	532 50,130	(a) (a)	(a) (a)			
Powder .. ..	Ct. £ P.	146,204 26,636	103,276 28,141	(a) (a)	(a) (a)			
Australia—								
Industrial diamonds	Ct. £ A (e)	(a) 27,111	(a) 96,025	(e) 101,577 (e) 108,034	(e) 247,344 (e) 226,348	190,694 319,558	208,518 459,591	195,994 444,470
Other diamonds	Ct. £ A (e)	(a) 450	(a) 296,833	(e) 11,277 (e) 460,516	(e) 78,184 (e) 613,818	(e) (f) 24,722 (e) (f) 745,647	96,116 1,124,158	67,504 1,245,527
<b>FOREIGN COUNTRIES</b>								
Belgium-Luxemburg E.U.—								
Cut diamonds ..	Ct. £	— —	— —	12,614 463,099	2,374 57,255	(a) (a)	31,441 1,408,852	26,461 1,297,388
Rough diamonds	Ct. £	875,926 3,745,503	2,051,738 11,474,371	1,579,037 7,157,717	1,332,612 7,943,656	1,472,603 6,213,765	2,782,712 16,752,013	2,726,285 20,481,542
Industrial diamonds	Ct. £	283,097 43,901	518,390 104,596	223,707 90,426	390,682 149,218	243,439 297,750	514,669 445,805	863,389 855,729
Czechoslovakia—								
Glaziers' diamonds	£	(a)	89	1,488	—	(a)	(a)	(a)

(a) Information not available.

(b) Declared imports represent a very small proportion of actual imports. These figures, therefore, represent exports of Rough Diamonds from the Union of South Africa, South-West Africa, Gold Coast, Sierra Leone, Tanganyika, Angola and Belgian Congo to the United Kingdom as recorded by those countries.

No figures are available as to the quantities re-exported from the United Kingdom.

(c) See "Israel" under Foreign Countries.

(d) Excess of re-exports.

(e) Years ended June 30 of that stated.

(f) Total imports. Re-exports amounted to 64,681 carats valued £ A. 53,078.

(g) Total imports. Re-exports, which are very large, are not available.

(h) Excess of re-exports by value only. Total imports amounted to 16,569,707 carats valued £7,366,649 and re-exports to 11,722,911 carats valued £9,410,995.

## IMPORTS OF DIAMONDS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
FOREIGN COUNTRIES (Cont.)							
France—							
Uncut £	(a)	(a)	(a)	(c) 1,673	(c) 158	1,073,635	1,494,206
Cut and polished £	(a)	(a)	(a)	(a)	(a)	858,773	1,623,913
Netherlands—							
Unpolished .. £	(a)	2,000,000	(a)	2,070,000	(a)	(a)	(a)
Polished .. £	(a)	50,000	(a)	240,500	(a)	(a)	(a)
Industrial diamonds £	(a)	130,000	(a)	546,000	(a)	(a)	(a)
Switzerland—							
Industrial diamonds £	44,000	(a)	(a)	(a)	(a)	(a)	(a)
Egypt—							
Cut .. Ct. £	30 1,338	74 849	(a)	(a)	(a)	(a)	(a)
Mexico—							
Uncut .. Ct. £	4,215 13,385	22,820 7,805	(a) (a)	(a) (a)	(a) (a)	(a) (a)	(a) (a)
Cut .. Ct. £	13,830 490,593	19,830 511,501	(a) (a)	(a) (a)	(a) (a)	(a) (a)	(a) (a)
Industrial diamonds Ct. £	499,140 8,369	323,590 8,144	723,135 20,325	136,615 (a)	(a)	(a) (a)	(a) (a)
United States—							
Uncut .. Ct. £	895,219 10,702,676	1,033,906 12,051,108	1,075,478 10,682,682	912,762 11,032,349	670,140 8,540,372	673,699 15,570,379	697,981 17,394,578
Cut and polished Ct. £	377,493 15,835,132	594,481 29,272,508	347,810 13,268,372	389,314 13,956,559	335,487 12,234,843	492,671 20,901,751	480,516 22,092,144
Industrial diamonds Ct. £	10,733,411 3,182,125	4,652,639 3,574,724	3,920,012 3,186,319	10,418,316 8,069,851	6,331,923 5,031,520	11,035,061 13,461,933	12,051,961 16,377,068
Dust .. Ct. £	62,317 11,715	77,732 32,077	116,391 57,106	226,430 153,416	101,300 67,346	128,715 74,231	166,760 168,391
Chile—							
Industrial diamonds Ct. £	13,595 11,901	3,100 3,833	(a) (a)	(a) (a)	(a) (a)	(a) (a)	(a) (a)
Peru—							
Glaziers' diamonds £	61	—	(a)	(a)	(a)	(a)	(a)
Venezuela—							
Carbons .. £	597	14,400	51,837	1,700	(a)	(a)	(a)
Israel—							
Rough diamonds Ct. £					185,266 1,539,845	366,661 3,211,809	(a) (a)
Bort .. Ct. £	(b)	(b)	(b)	(b)	52,428 31,987	81,057 54,454	(a) (a)
Powder .. Ct. £	(b)	(b)	(b)	(b)	3,540 3,127	6,552 4,860	(a) (a)
Philippine Republic—							
Diamonds .. Ct. £	— 469	4,322 33,819	(a) (a)	(a) (a)	(a) (a)	(a) (a)	(a) (a)
Dust and bort .. Ct. £	— —	100 371	(a) (a)	(a) (a)	(a) (a)	(a) (a)	(a) (a)

(a) Information not available.

(b) See " Palestine " under British Countries.

(c) Industrial diamonds.

# DIATOMACEOUS EARTH

## PRODUCTION OF DIATOMACEOUS EARTH

(Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Great Britain .. ..	3,000	2,000	2,328	7,000	10,600	3,736	7,222
Northern Ireland .. ..	9,958	7,049	8,638	6,858	7,789	6,443	8,726
Kenya .. ..	444	508	724	1,019	2,189	2,572	4,218
Union of South Africa ..	68	147	713	1,289	1,137	429	—
Canada (Shipments) ..	41	80	92	41	54	44	(a)
Australia .. ..	3,068	4,957	5,543	4,438	4,063	6,221	8,729
New Zealand .. ..	255	348	436	103	94	119	119
<b>FOREIGN COUNTRIES</b>							
Austria .. .. ..	841	848	1,941	4,719	3,480	3,233	3,832
Denmark—							
Diatomaceous earth ..	1,132	1,895	4,510	5,717	3,974	4,057	(a)
Moler (b) .. ..	(a)	40,000	60,000	70,000	70,000	70,000	95,000
Finland .. .. ..	686	815	830	1,067	1,434	1,009	(a)
France .. .. ..	10,381	20,122	29,042	47,583	37,038	68,559	(a)
Germany .. .. ..	(a)	(a)	(a)	(a)	28,872	(c) 33,175	(c) 43,258
Italy.. .. ..	—	3,110	2,357	5,128	6,524	(a)	(a)
Spain .. .. ..	543	768	(a)	(a)	(a)	(a)	(a)
Sweden .. .. ..	1,601	1,626	1,673	1,737	1,815	1,722	(a)
Algeria .. .. ..	4,832	5,866	6,437	8,276	13,366	13,493	20,660
Egypt .. .. ..	960	1,366	1,319	1,343	1,159	1,045	2,709
United States .. ..	(d) 190,704	(d) 190,704	(d) 190,704	(e) 215,080	(e) 215,080	(e) 215,080	(a)
Chile .. .. ..	219	(a)	(a)	1,044	3,261	152	(a)

Diatomaceous earth is also produced in Hungary, Norway, Portugal, Roumania, U.S.S.R., Argentina, Brazil, Japan and Korea.

(a) Information not available.

(b) Estimated.

(c) Bizonal area only.

(d) Average annual production 1945-1947.

(e) Average annual production 1948-1950.

EXPORTS OF DIATOMACEOUS EARTH

(Domestic Produce)

(Long tons)

Exporting Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Canada (including other natural abrasives) ..	11	3	53	15	7	6	19
Australia .. ..	(a)	65	168	144	85	136	88
<b>FOREIGN COUNTRIES</b>							
Belgium-Luxemburg E.U. .	(a)	(a)	(a)	6,733	391	1,042	1,185
Denmark—							
Diatomaceous earth ..	(a)	(a)	(a)	(a)	(a)	(a)	3,907
Moler .. ..	2,784	35,884	47,371	55,712	50,742	57,120	75,599
Moler bricks .. ..	1,130	3,496	4,388	6,497	6,435	6,618	9,654
Finland .. ..	15	88	59	107	—	18	—
France (incl. tripoli, etc.) ..	218	1,310	1,596	877	875	897	1,736
Germany (Federal) ..	(a)	(a)	(a)	268	626	1,815	3,892
Italy.. .. ..	(a)	(a)	15	5	84	140	33
Norway .. .. ..	3	125	214	280	106	207	(a)
Portugal .. .. ..	21	1	13	26	42	18	—
Sweden .. .. ..	23	23	—	41	8	118	31
Algeria (incl. tripoli, etc.) ..	2,754	5,687	3,524	6,703	11,190	11,112	14,570
Brazil .. .. ..	297	—	—	—	—	(a)	(a)
Chile .. .. ..	168	80	(a)	(a)	(a)	(a)	(a)

(a) Information not available.

**IMPORTS OF DIATOMACEOUS EARTH**

(Less Re-exports)

(Long tons)

Importing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom ..	5,568	32,361	48,962	52,114	46,087	52,183	61,347
Union of South Africa ..	146	205	250	361	453	224	(a)
Canada ..	11,801	15,235	13,459	15,358	15,102	16,292	18,811
Australia ..	(a)	585	1,495	572	1,275	1,651	1,430
<b>FOREIGN COUNTRIES</b>							
Belgium-Luxemburg E.U.	(a)	(a)	(a)	2,277	3,628	5,505	11,682
Denmark ..	—	24	25	89	134	314	102
Finland (total imports) ..	91	3	71	103	54	164	599
France (ncl. tripoli, etc.) ..	1,096	4,689	2,974	3,211	4,849	5,059	6,893
Germany ..	(a)	(a)	(a)	1,886	10,189	14,828	31,513
Iceland ..	(a)	(a)	(a)	(a)	16	11	37
Italy ..	(a)	(a)	22	161	129	333	520
Netherlands ..	(a)	(a)	(a)	2,805	2,363	2,917	4,484
Norway ..	71	455	1,142	1,540	2,761	4,396	(a)
Portugal ..	21	82	119	73	138	96	297
Sweden ..	374	753	862	710	468	681	(a)
Yugoslavia ..	(a)	(a)	(a)	(a)	(a)	69	167
Algeria (ncl. tripoli, etc.) ..	50	30	12	46	5	61	83
Egypt ..	32	(b) 58	(b) 64	(b) 1	(b) 5	(a)	(a)
Tunis ..	42	139	126	4	(a)	(a)	(a)
Cuba (total imports) ..	2,910	(a)	(a)	2,460	2,911	(a)	(a)
Mexico ..	779	1,156	1,825	1,484	(a)	(a)	(a)
Chile ..	18	—	127	144	(a)	(a)	(a)
Peru ..	628	274	(a)	(a)	(a)	(a)	(a)
Venezuela (incl. tripoli, etc.) ..	12	175	282	141	(a)	(a)	(a)
Turkey ..	(a)	230	206	107	375	403	500

(a) Information not available.

(b) Total imports.

# FELSPAR

## PRODUCTION OF FELSPAR

(Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Great Britain—							
China stone .. ..	32,125	36,495	47,709	54,591	64,258	68,364	71,388
Kenya .. .. ..	108	43	35	10	20	—	—
Southern Rhodesia .. ..	—	—	—	—	—	3,464	1,129
Union of South Africa .. (b)	625	1,537	1,649	2,533	3,493	5,096	3,290
Canada (sales) .. ..	27,005	31,467	32,236	48,974	32,989	31,739	32,699
India .. .. ..	335	1,283	1,722	987	849	1,722	3,145
Palestine .. .. ..	36	52	(a)	(a)	(a)	(a)	(a)
Australia (including china stone) .. .. ..	6,114	7,856	8,431	9,613	10,730	13,066	14,245
<b>FOREIGN COUNTRIES</b>							
Austria .. .. ..	472	758	936	1,089	1,882	3,847	3,701
Belgium .. .. ..	(a)	(a)	(a)	(a)	1,147	600	(a)
Finland .. .. ..	3,346	3,563	2,013	5,968	9,915	8,899	(a)
France .. .. ..	16,113	27,745	43,407	54,469	46,764	41,498	(a)
Germany (Federal) .. ..	(a)	(a)	(a)	(a)	47,500	75,500	70,401
Italy .. .. ..	841	8,043	9,431	13,256	10,729	14,029	22,273
Norway—							
Unground .. .. ..	3,881	2,808	15,863	23,008	19,048	17,534	23,024
Ground .. .. ..	296	2,440	5,927	9,586	8,000	5,787	7,602
Portugal .. .. ..	667	842	1,119	1,535	1,220	—	463
Spain .. .. ..	(a)	(a)	(a)	(c) 7,841	(a)	6,874	(a)
Sweden (sales)—							
Unground .. .. ..	5,061	11,100	21,604	21,268	22,723	18,005	(a)
Ground .. .. ..	9,872	13,777	15,749	16,808	15,620	17,457	(a)
Egypt .. .. ..	63	—	—	—	—	—	—
Madagascar .. .. ..	—	12	—	—	—	—	—
United States (sales) .. ..	373,054	508,380	459,910	460,713	369,378	407,925	400,439
Argentina .. .. ..	5,290	(a)	(a)	(a)	(a)	(a)	(a)
Brazil .. .. ..	(a)	(a)	(a)	186	(a)	(a)	(a)
Chile .. .. ..	(a)	(a)	214	871	124	857	1,181
Peru .. .. ..	325	171	29	207	295	—	(a)
Uruguay .. .. ..	(e) 313	458	830	4,800	798	699	664
Japan .. .. ..	(a)	(a)	21,157	24,681	19,738	12,979	26,109
<b>TOTAL*</b> .. ..	<b>490,000</b>	<b>695,000</b>	<b>720,000</b>	<b>800,000</b>	<b>700,000</b>	<b>770,000</b>	<b>780,000</b>

\*Excluding felspar produced in Czechoslovakia, Roumania, U.S.S.R., China, French Indo-China and Manchuria.

(a) Information not available.

(b) Sales and shipments.

(c) In addition 3,000 cubic metres were obtained from quarries.

(d) Exports.

(e) Incomplete.

### EXPORTS OF FELSPAR

*(Domestic Produce)*

*(Long tons)*

Exporting Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom .. ..	(b) 1,969	2,998	2,005	1,234	1,272	(a) 13,808	(a) 17,707
Canada .. ..	15,079	17,178	16,349	28,096	15,687	(d) 388	(d) 462
Palestine .. ..	2	3	(a)	(a)	(f) 80	(f) 210	
Australia .. ..	(a)	(a)	(a)	(f)			
<b>FOREIGN COUNTRIES</b>							
Austria .. ..	(a)	(a)	348	162	30	54	139
Czecho-slovakia .. ..	(a)	130	15	—	(a)	(a)	(a)
Finland .. ..	229	3,293	4,361	3,641	6,388	6,595	7,479
France .. ..	49	841	3,339	4,361	5,690	6,416	8,419
Germany (Federal) .. ..	(a)	(a)	(a)	2,631	5,734	6,373	(c) 28,653
Italy .. ..	(a)	(a)	(a)	(a)	(a)	(g) 303	1,711
Netherlands .. ..	(a)	—	1,649	2,302	2,303	1,402	2,793
Norway—							
Crude .. ..	1,312	4,947	15,922	22,139	15,337	14,505	25,018
Ground .. ..	242	2,257	7,220	7,515	6,249	6,012	5,907
Sweden .. ..	5,454	18,651	22,347	20,463	19,165	24,971	28,573
Israel .. ..	(e)	(e)	(e)	(e)	267	779	(a)

(a) Information not available.

(b) Including china stone.

(c) Including fluorspar.

(d) See " Israel " under Foreign Countries.

(e) See " Palestine " under British Countries.

(f) Years ended June 30 of that stated.

(g) July to December only.

### IMPORTS OF FELSPAR

*(Less Re-exports)*

*(Long tons)*

Importing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom .. ..	(b) 3,198	10,309	9,295	14,644	9,798	19,460	26,355
Canada .. ..	737	629	287	185	204	128	174
Palestine .. ..	23	83	(a)	(a)	(a)	(a)	(a)
Australia .. ..	—	—	—	(e) 35	118	273	356
<b>FOREIGN COUNTRIES</b>							
Austria .. ..	(a)	(a)	—	53	32	199	265
Czechoslovakia .. ..	(a)	50	1,890	(c) 250	(a)	(a)	(a)
Denmark .. ..	1,710	1,450	2,221	3,195	3,429	3,137	2,806
Finland (total imports) .. ..	—	—	—	111	48	—	15
France .. ..	—	549	1,801	3,738	3,657	4,361	18,750
Germany (Federal) .. ..	(a)	(a)	(a)	(a)	2,799	6,021	(d) 6,639
Italy .. ..	(a)	(a)	(a)	(a)	(a)	(f) 25	1,076
Netherlands .. ..	(a)	2,060	8,066	8,200	6,490	10,761	14,064
Sweden .. ..	—	1,891	3,555	1,094	443	15	(a)
Yugoslavia .. ..	(a)	(a)	(a)	(a)	(a)	103	79
Mexico .. ..	1,384	1,699	3,536	3,817	(a)	(a)	(a)
United States .. ..	14,924	16,365	16,685	31,047	15,826	12,367	17,128
Chile .. ..	1	7	(a)	(a)	(a)	(a)	(a)
Venezuela .. ..	9	—	106	18	(a)	(a)	(a)

(a) Information not available.

(b) Including china stone.

(c) January to October only.

(d) Including fluorspar.

(e) Year ended June 30 of that stated.

(f) July to December only.

# FLUORSPAR

## PRODUCTION OF FLUORSPAR

(Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom ..	43,582	46,454	44,305	58,017	52,032	49,965	63,889
Southern Rhodesia ..	—	—	152	12	236	440	109
South West Africa ..	—	—	—	—	—	71	767
Union of South Africa ..	3,599	4,745	4,739	3,695	4,780	6,838	12,087
Canada .. ..	6,580	7,180	6,416	10,125	}	57,333	77,625
Newfoundland .. ..	38,648	11,432	22,985	71,096			
India .. ..	431	—	—	—	—	—	—
Australia .. ..	931	1,182	1,200	511	562	576	489
<b>FOREIGN COUNTRIES</b>							
Belgium .. ..	—	—	2,027	4,153	(a)	(a)	(a)
France .. ..	14,305	18,931	31,097	32,914	45,302	40,664	39,000
Germany (Federal) ..	(a)	(c) (d) 2,077	(d)	6,392	48,565	46,200	90,768
Italy .. ..	3,280	7,683	19,962	38,951	17,441	31,112	141,471
Norway .. ..	3,092	4,517	1,072	1,102	881	825	40,193
Spain .. ..	9,484	8,574	13,666	41,877	58,653	(b) 75,110	99,397
Sweden (sales) .. ..	3,394	3,662	2,736	4,235	—	4,216	(a)
Morocco (French) ..	(a)	(a)	(a)	10	492	39	1,940
Tunis .. ..	—	—	—	515	346	—	—
Mexico (e) .. ..	49,457	19,797	45,017	74,190	54,893	64,630	65,707
United States (f) ..	289,251	248,161	294,182	296,204	211,343	269,205	309,843
Argentina .. ..	2,964	(a)	(a)	(a)	(a)	(a)	(a)
Bolivia (e) .. ..	18	—	27	223	260	(a)	(a)
Brazil .. ..	—	—	828	739	529	(a)	(a)
China (Occupied) (g) ..	3,907	(a)	(a)	(a)	(a)	(a)	(a)
Japan .. ..	3,156	307	94	67	945	2,386	3,933
Korea .. ..	19,127	(a)	(a)	(a)	(h) 1,211	(a)	(a)
Manchuria (i) .. ..	14,858	(a)	(a)	(a)	(a)	(a)	(a)
Turkey .. ..	—	113	—	—	492	—	—
<b>TOTAL*</b> .. ..	<b>600,000</b>	<b>515,000</b>	<b>617,000</b>	<b>817,000</b>	<b>684,000</b>	<b>824,000</b>	<b>994,000</b>

\* Including fluorspar produced in the U.S.S.R.

(a) Information not available.

(b) Revised.

(c) August to December only.

(d) French Zone only.

(e) Exports.

(f) Shipments.

(g) Exports to Japan from North and Central China.

(h) Southern Korea only.

(i) Exports to Japan from Manchuria.

# EXPORTS OF FLUORSPAR

*(Domestic Produce)*

*(Long tons)*

Exporting Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom .. ..	21	1,777	1,697	2,131	1,085	(a) —	(a) 840
South West Africa .. ..	—	—	—	—	—	—	3,498
Union of South Africa .. ..	1,380	193	58	59	32	41	
Canada .. ..	—	—	—	—	—	—	
Newfoundland (b) .. ..	21,750	27,932	34,050	32,102	13,700	(a) —	(a)
<b>FOREIGN COUNTRIES</b>							
France .. ..	—	575	995	578	2,371	3,670	2,831
Germany (Federal) .. ..	(a)	(a)	(a)	16,309	20,842	53,601	(d) 79,856
Italy .. ..	(a)	(a)	(a)	(a)	(a)	(c) 3,303	21,133
Norway .. ..	112	426	346	724	376	169	(a)
Sweden .. ..	137	1,616	833	635	234	34	26
Morocco (French) .. ..	(a)	(a)	(a)	(a)	(a)	(a)	522
Tunis .. ..	—	—	—	10	(a)	(a)	(a)
Mexico .. ..	49,457	19,797	45,017	74,190	54,893	64,630	65,707
United States .. ..	1,080	1,656	1,186	663	683	614	976
Bolivia .. ..	18	—	27	223	260	(a)	(a)
China (Occupied) (e) .. ..	3,907	(a)	(a)	(a)	(a)	(a)	(a)
Korea .. ..	(e) 15,844	—	(f) 334	—	(a)	(a)	(a)
Manchuria (e) .. ..	14,858	(a)	(a)	(a)	(a)	(a)	(a)

(a) Information not available.

(b) Years ended March 31 of year following that stated. Included with Canada from April 1, 1949.

(c) July to December only.

(d) Including feldspar.

(e) Exports to Japan.

(f) Southern Korea only.

# IMPORTS OF FLUORSPAR

*(Less Re-exports)*

*(Long tons)*

Importing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Canada (b) .. ..	18,314	(c) 28,405	(c) 28,573	43,683	2,241	1,404	7,311
Australia .. ..	(c) —	(c) 100	(c) 40	42	70	408	933
<b>FOREIGN COUNTRIES</b>							
Austria .. ..	(a)	(a)	993	1,937	3,735	6,665	7,229
Denmark .. ..	167	703	620	637	661	575	711
France .. ..	4,570	8,687	10,579	298	—	720	
Germany (Federal) .. ..	(a)	(a)	(a)	—	—	—	(d) 1,187
Netherlands .. ..	(a)	(a)	(a)	1,785	1,931	2,825	3,015
Norway .. ..	—	212	460	1,134	254	1,758	(a)
Portugal .. ..	20	17	21	9	35	34	32
Sweden .. ..	15	2,703	2,743	5,676	881	2,145	(a)
Mexico .. ..	—	38	44	2	(a)	(a)	(a)
United States .. ..	93,683	26,654	70,290	99,666	85,374	146,995	161,852
Peru .. ..	405	255	(a)	(a)	(a)	(a)	(a)
Japan .. ..	34,609	386	—	842	21,932	8,343	(a)

(a) Information not available.

(b) Including Newfoundland from April 1, 1949.

(c) Year ended June 30 of that stated.

(d) Including felspar.

# FULLER'S EARTH

## PRODUCTION OF FULLER'S EARTH

(Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Union of South Africa ..	(a)	(a)	(a)	(b) 715	1,549	2,079	2,504
India ..	13,232	9,418	2,831	6,011	4,852	4,560	4,000
Pakistan ..	(a)	(a)	5,752	4,814	(a)	(a)	(a)
Australia ..	276	420	40	132	119	40	60
New Zealand ..	76	75	31	68	—	—	—
<b>FOREIGN COUNTRIES</b>							
United States (sales) ..	264,614	266,743	293,811	305,429	286,532	353,594	431,806
Japan ..	(a)						

Fuller's earth is also produced in the United Kingdom and Turkey.

(a) Information not available. (b) Sales.

## EXPORTS OF FULLER'S EARTH\*

(Long tons)

Exporting Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Australia ..	(a)	(a)	(a)	(b) 46	136	—	—
<b>FOREIGN COUNTRIES</b>							
Italy ..	(a)	(a)	(a)	(a)	(a)	(d) 85	(a) 181
United States (c) ..	6,029	15,846	8,500	9,500	10,800	(a)	(a)

\* Statistics of exports of Fuller's earth are not generally separately recorded in official trade returns.

(a) Information not available. (b) Year ended June 30 of that stated.

(c) As recorded by producers. (d) July to December only.

## IMPORTS OF FULLER'S EARTH

(Less Re-exports)

(Long tons)

Importing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Union of South Africa ..	316	718	369	128	182	336	(a)
Canada ..	(£16,740)	(£17,629)	(£21,456)	(£23,343)	(£27,578)	(£39,211)	(£45,009)
Ceylon ..	22	76	41	—	—	4	36
Australia ..	581	657	519	390	591	598	458
<b>FOREIGN COUNTRIES</b>							
Austria ..	(a)	(a)	(a)	(a)	480	(b) 509	587
Italy ..	(a)	(a)	(a)	(a)	(a)	443	340
Belgian Congo ..	—	5	37	(a)	(a)	1,242	725
Mexico ..	500	820	1,347	982	(a)	(a)	(a)
United States—							
Crude ..	—	8	41	30	31	—	36
Prepared ..	300	165	97	85	316	212	326
Chile ..	53	—	(a)	(a)	(a)	(a)	(a)
Peru ..	264	265	(a)	(a)	(a)	(a)	(a)
Venezuela ..	187	143	140	18	(a)	(a)	(a)

(a) Information not available.

(b) July to December only.

# GOLD

## PRODUCTION OF GOLD ORE

*(In terms of metal)*

*(Fine troy ounces)*

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Anglo-Egyptian Sudan ..	1,623	3,670	3,725	3,579	4,114	3,533	1,495
Bechuanaland Protectorate ..	11,297	9,738	7,382	1,502	300	264	493
Gold Coast ..	539,252	585,910	558,011	672,388	676,931	689,429	698,676
Kenya ..	38,517	29,892	21,959	23,429	20,072	22,946	19,765
Nigeria ..	8,108	4,881	2,203	2,899	2,515	2,237	1,588
Northern Rhodesia ..	265	6,838	779	1,180	1,186	1,432	857
Southern Rhodesia ..	568,242	544,596	522,735	514,440	528,180	511,163	486,907
Sierra Leone ..	274	183	2,400	2,400	2,330	3,484	3,292
South West Africa ..	84	(a)	37	469	(a)	(a)	(a)
Swaziland ..	3,583	4,914	5,637	3,110	2,841	1,794	322
Tanganyika ..	51,302	49,952	46,842	57,189	69,042	(f) 66,552	(f) 66,397
Uganda (exports) ..	2,293	2,176	1,366	1,158	648	509	184
Union of South Africa ..	12,224,629	11,927,165	11,200,281	11,584,849	11,705,048	11,663,713	11,516,450
Canada ..	2,696,727	2,832,554	3,070,221	3,529,608	4,123,518	4,441,227	4,328,931
Newfoundland ..	15,354	15,751	13,583	12,252			
British Guiana ..	20,685	22,712	24,225	18,955	19,368	12,613	13,485
India ..	168,366	131,775	171,705	180,430	164,203	196,925	226,357
Malaya (e) ..	275	400	4,800	9,100	13,000	17,600	16,200
Sarawak ..	—	17	389	599	1,523	1,440	931
Australia ..	657,213	824,480	937,654	890,802	889,057	867,837	895,536
Fiji ..	94,964	82,401	94,353	93,059	104,036	103,423	95,635
New Guinea ..	—	661	59,202	86,556	93,045	(c) 81,764	(c) 94,438
New Zealand ..	128,364	119,271	112,260	93,903	84,874	76,527	75,115
Papua ..	(a)	(a)	550	202	836	(d)	(d)
<b>TOTAL ..</b>	<b>17,231,000</b>	<b>17,199,000</b>	<b>16,863,000</b>	<b>17,784,000</b>	<b>18,507,000</b>	<b>18,767,000</b>	<b>18,542,000</b>
<b>FOREIGN COUNTRIES</b>							
Finland ..	3,022	7,330	10,642	11,317	11,417	6,559	18,069
France ..	39,738	48,355	42,407	47,519	55,524	63,755	67,838
Italy ..	1,865	9,259	12,716	19,978	11,478	11,956	(a)
Portugal ..	(a)	6,687	15,754	11,799	10,385	15,465	18,358
Roumania ..	90,987	80,377	74,686	90,000	112,528	(a)	(a)
Sweden ..	85,585	91,372	75,586	71,889	80,280	78,866	70,957
Angola ..	819	551	360	434	319	201	61
Belgian Congo ..	346,971	331,313	301,445	299,774	333,853	339,415	352,308
Cameroon (French) ..	16,300	11,928	11,501	10,706	8,938	7,170	5,433
Egypt ..	3,014	2,793	2,090	3,853	7,045	10,724	14,037
Eritrea ..	2,119	3,411	3,540	2,242	2,243	1,109	(a)

(a) Information not available

(b) Exports.

(c) Including Papua.

(d) Included with New Guinea.

(e) Revised estimates.

(f) Including gold in lead concentrates exported amounting to 41 and 905 troy ounces in 1950 and 1951 respectively.

PRODUCTION OF GOLD ORE (Cont.)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Ethiopia (b) .. ..	(c) 56,176	(c) 51,528	(c) 27,382	41,595	45,102	(d) 43,200	(a) 52,849
French Equatorial Africa ..	76,069	71,535	70,185	63,723	57,260	54,997	(h) 1,961
French West Africa ..	6,945	7,009	5,562	20,512	51,821	(h) 4,807	(a) 1,948
Liberia (c) .. ..	9,016	16,506	16,998	13,797	13,183	12,110	(a) 2,058
Madagascar .. ..	6,430	3,890	1,521	2,096	1,662	1,935	(a) 868
Morocco (French) .. ..	160	—	—	—	—	119	(a) 393,429
Mozambique .. ..	7,909	5,765	5,401	4,734	2,468	997	(a) 251,869
Costa Rica (b) .. ..	4,456	1,739	(e) 1,988	(e) 1,096	(e) 284	(e) 115	(a) 460
Cuba .. ..	423	1,105	364	334	(e) 5,692	(e) 6,915	(a) 13,793
Dominican Republic .. ..	486	646	—	—	(e) 1,114	(c) 534	(a) 144,367
Guatemala .. ..	60	32	(e) 35	(e) 16	(e) 5	(e) 397	(a) 144,367
Haiti .. ..	73	41	—	—	—	—	—
Honduras .. ..	19,158	12,094	11,929	14,265	25,832	30,380	31,216
Mexico .. ..	499,301	420,500	464,739	367,612	405,549	408,122	393,429
Nicaragua .. ..	206,360	210,026	216,700	218,019	218,831	231,037	251,869
Panama .. ..	—	—	—	1,000	9,657	1,118	2,712
Salvador .. ..	11,397	21,809	10,755	20,778	27,091	27,547	(a) 1,275
United States .. ..	954,572	1,574,505	2,109,185	2,014,257	1,991,783	2,394,231	1,957,543
Argentina .. ..	3,381	8,038	(d) 8,000	(d) 8,000	(d) 8,000	(a) 32,440	(a) 135,837
Bolivia .. ..	5,857	16,701	20,108	2,642	—	—	173,678
Brazil .. ..	163,107	140,482	135,548	130,243	119,182	131,207	185,542
Chile .. ..	180,352	230,523	168,855	164,252	179,135	406,319	430,723
Colombia .. ..	506,695	437,176	383,027	335,260	385,307	—	—
Dutch Guiana .. ..	5,884	4,630	4,125	4,177	3,794	4,533	6,494
Ecuador .. ..	66,975	73,512	57,250	79,207	100,177	96,908	(a) 10,005
French Guiana .. ..	20,541	19,741	14,930	13,632	14,757	(c) 13,793	(a) 144,367
Peru .. ..	172,663	158,379	116,017	111,162	113,753	147,964	—
Uruguay .. ..	(b) 1,000	—	—	—	—	—	2,861
Venezuela .. ..	76,837	48,558	21,830	49,737	61,378	34,462	131
Burma .. ..	(g) 30	2	67	230	158	150	30,543
Formosa .. ..	592	(a)	7,750	13,115	16,607	21,820	169,499
Japan .. ..	26,749	42,825	55,171	69,060	84,556	135,033	393,600
Korea .. ..	96,452	193,000	329,000	(f) 2,098	(f) 3,408	(a) 66,835	73,104
Philippine Republic .. ..	(a)	1,055	65,030	209,225	287,838	333,991	—
Saudi Arabia .. ..	36,215	49,773	54,046	73,976	66,835	66,202	—
Turkey .. ..	(a)	(a)	(a)	(a)	10,700	(a)	(a)
* TOTAL .. ..	3,600,000	4,100,000	4,900,000	4,600,000	4,900,000	5,400,000	5,100,000
* WORLD'S TOTAL (excl. U.S.S.R.) ..	20,800,000	21,300,000	21,800,000	22,400,000	23,400,000	24,200,000	23,600,000

\* In view of the wide divergences in estimates of the production of gold in the U.S.S.R. (ranging from 2-18 million ounces) figures for that country have been omitted.

- (a) Information not available.
- (b) Annual Report of the U.S. Mint.
- (c) Exports
- (d) Estimated.
- (e) Imports into the United States.
- (f) Southern Korea only.
- (g) Average annual production during Japanese occupation.
- (h) European producers only.

**EXPORTS OF GOLD \***

(Including re-exports)

(In terms of metal)

(Fine troy ounces)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Bullion—							
Unrefined .. ..	566,000	1,164,000	2,000	14,870,000	33,367,000	18,125,000	4,935,000
Refined .. ..	2,000	89,000	129,000	469,000	848,000	157,000	2,926,000
Coin .. .. ..							421,000
Anglo-Egyptian Sudan*—							
Bullion .. .. ..	1,600	3,500	1,200	300	(a)	—	(a)
Gold Coast—							
Bullion .. .. ..	474,997	646,559	568,471	670,645	656,431	705,182	692,301
Kenya (d)*—							
Bullion .. .. ..	41,300	34,700	31,700	40,100	29,200	28,700	25,300
Nigeria—							
Bullion .. .. ..	8,021	1,984	691	41	176	15	347
Northern Rhodesia—							
Bullion .. .. ..	254	197	248	190	166	169	79
Sierra Leone—							
Bullion .. .. ..	398	222	680	3,996	2,046	2,804	2,207
Southern Rhodesia*—							
Concentrates, etc. .. ..	2,700	4,600	5,100	6,400	(a)	6,400	3,900
Bullion .. .. ..	566,326	552,519	526,876	517,135	536,011	516,361	484,354
Coin .. .. ..	1	—	—	—	—	—	—
South West Africa—							
Bullion .. .. ..	(a)	(a)	33	473	51	25	(a)
Tanganyika—							
Concentrates .. .. ..	—	60	40	—	(a)	50	400
Bullion .. .. ..	50,568	48,427	47,356	57,557	68,989	65,127	65,583
Uganda (b)—							
Bullion .. .. ..	2,293	2,176	1,366	1,158	648	509	184
Union of South Africa—							
Ore and concentrates .. ..	4,700	3,600	6,700	12,900	(a)	11,900	16,500
Bullion .. .. ..	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Coin .. .. ..							
Zanzibar*—							
Bullion .. .. ..	—	700	1,000	—	—	—	—
Canada—							
Ore, etc. .. .. ..	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Bullion .. .. ..	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Coin .. .. ..							
British West Indies—							
Trinidad and Tobago*—							
Bullion .. .. ..	20	—	110	—	(a)	(a)	(a)
British Guiana—							
Bullion .. .. ..	8,915	9,845	15,395	14,711	14,992	10,484	9,184
Aden*—							
Bullion and coin .. ..	—	—	—	—	—	1,200	(a)
India—							
Bullion .. .. ..	(c) 2,400	(c) 300	(c) 3,800	—	(c) 405	(c) 400	(c) 1,206
Coin .. .. ..	(c) 5,200	(c) 64,000	(c) 50,000	—	(c) —	(c) —	(c) —
Malaya—							
Bullion .. .. ..	(a)	1,400	—	8,900	(a)	17,800	20,700
Coin .. .. ..	(a)	—	—	19	(a)	31	—
Hong Kong*—							
Bullion .. .. ..	(a)	171,000	292,000	69	(a)	1,600	4,600
Coin .. .. ..	(a)	—	108,000	4	(a)	60	40
Palestine—							
Bullion and coin .. ..	—	—	(a)	(a)	(a)	(a)	(a)

\* Some countries record the trade of Gold by value only. In such cases the weight has been obtained by dividing this value by the official annual average price of gold per fine ounce but in no case has any account been taken of the premium. Countries for which this conversion has been effected are marked with an asterisk.

(a) Information not available.

(b) Also included with Kenya up to 1948 inclusive.

(c) Sea-borne trade only.

(d) Including Uganda up to 1948 inclusive.

EXPORTS OF GOLD (*Cont.*)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES (Cont.)</b>							
Sarawak*—							
Bullion .. . . .	(a)	—	—	900	(a)	1,400	1,000
Australia—							
Ores, etc. (b) .. . . .	5,495	1,691	5,300	13,137	5,592	8,257	(c) 7,387
Bullion .. . . .	317,000	2,198,207	355,992	232	226	22	45
Coin .. . . .	—	—	3	—	—	—	—
Fiji—							
Bullion .. . . .	72,700	68,900	134,922	105,712	104,115	103,111	93,700
New Guinea (b)—							
Bullion .. . . .	(a)	(a)	(a)	(a)	91,295	85,052	87,593
New Zealand—							
Auriferous quartz .. . . .	—	13	107	—	1,606	—	—
Bullion, etc. .. . . .	118,000	110,000	96,000	54,000	50,000	90,000	60,000
Sweepings and scrap .. . . .	642	804	1,065	1,482	1,079	1,181	636
Papua (b)—							
Bullion .. . . .	(a)	(a)	(a)	(a)	28	788	(a)
Irish Republic*—							
Bullion .. . . .	60	130	200	4,300	(a)	500	800
<b>FOREIGN COUNTRIES</b>							
Belgium-Luxemburg E.U.*—							
Bullion and scrap .. . . .	(a)	(a)	(a)	(a)	(a)	(a)	114,000
Denmark—							
Beaten, rolled or drawn..	—	600	300	300	50	1,500	(a)
France—							
Bullion and scrap .. . . .	(a)	(a)	(a)	(a)	(a)	(a)	1,393,000
Coin .. . . .	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Beaten, rolled or drawn ..	600	1,400	14,500	13,000	144,000	947,000	1,892,000
Italy—							
Bullion and scrap .. . . .	—	(a)	11,000	12,000	7,600	2,700	350
Beaten, rolled or drawn ..	—	(a)	11,000	12,000	7,600	2,700	350
Netherlands—							
Bullion .. . . .	—	(a)	(a)	(a)	800,000	1,400,000	(a)
Coin .. . . .	—	(a)	(a)	(a)	800,000	380,000	(a)
Norway—							
Coin .. . . .	—	(a)	(a)	(a)	(a)	(a)	(a)
Sweden—							
Bullion .. . . .	19,000	390,000	806,000	19,000	69,000	50,000	90,000
Coin .. . . .	—	—	500	—	—	—	—
Sweepings, etc. .. . . .	6,000	4,000	8,000	7,000	5,000	1,500	—
Switzerland—							
Bullion .. . . .	(a)	(a)	(a)	(a)	—	—	(a)
Belgian Congo—							
Bullion .. . . .	300,000	330,000	330,000	320,000	359,000	343,000	366,000
Cameroon (French)—							
Bullion .. . . .	(a)	(a)	(a)	(a)	6,400	(a)	(a)
Egypt—							
Bullion .. . . .	—	—	18,000	—	20,000	(a)	(a)
Coin .. . . .	—	—	—	—	—	(a)	(a)
Ethiopia .. . . .	56,176	51,528	27,382	(a)	(a)	16,500	(a)
French Equatorial Africa—							
Bullion .. . . .	(a)	(a)	48,000	134,900	101,400	52,000	51,000
French West Africa—							
Bullion .. . . .	100	50,000	2,000	1,000	35,000	23,000	9,000
Liberia—							
Bullion .. . . .	9,016	16,506	16,998	13,797	13,183	12,110	(a)
Madagascar—							
Bullion .. . . .	—	8,000	1,000	10	5,000	(a)	(a)

(a) Information not available.

(b) Years ended June 30 of that stated.

(c) Calendar year.

EXPORTS OF GOLD (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Mozambique—							
Bullion .. . . .	30	25,000	—	150,000	30	—	—
Costa Rica—							
Bullion .. . . .	3,000	1,000	2,000	800	1,000	(a)	(a)
Cuba—							
Ore, bullion and scrap ..	15,000	(a)	(a)	(a)	(a)	(a)	(a)
Dominican Republic—							
Bullion and scrap ..	500	700	—	—	1,000	500	450
Guatemala—							
Bullion, etc. .. . . .	70	30	30	—	5	400	—
Honduras (years ended June 30)—							
Bullion, etc. .. . . .	(a)	14,900	13,000	12,000	23,000	25,000	33,600
Mexico—							
Bullion .. . . .	116,000	66,000	75,000	77,000	221,000	141,000	(a)
Nethe lands West Indies—							
Bullion and coin .. . . .	—	12,249	64	(a)	(a)	(a)	(a)
Nicaragua—							
Concentrates .. . . .	203,000	(a)	213,454	222,627	219,139	229,206	251,160
Precipitates .. . . .	3,360		203,390	(a)	(a)	(a)	(a)
Salvador—							
Bullion, etc. .. . . .	16,526	21,798	10,755	20,778	27,000	29,000	(a)
United States—							
Ore and base bullion ..	—	261	3,450	—	2,865	(a)	(a)
Refined bullion .. . . .	5,661,385	6,298,168	5,402,975	5,342,728	2,168,808	(a)	(a)
Coin .. . . .	49,482	4,305	(a)	(a)	(a)	(a)	(a)
Argentina—							
Bullion and coin .. . . .	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Bolivia—							
Ore .. . . .	3,180	2,918	7,955	4,051	32,440	1,737	1,275
Chile—							
Ore .. . . .	(a)	(a)	(a)	—	—	(a)	(a)
Bullion .. . . .	—	157,000	—	—	(a)	(a)	(a)
Coin .. . . .	155,000	211,000	(a)	(a)	(a)	(a)	(a)
Colombia—							
Bullion .. . . .	—	9,143	(a)	(a)	(a)	(a)	(a)
Dutch Guiana—							
Bullion .. . . .	5,884	4,630	4,125	4,177	3,794	4,533	(a)
French Guiana—							
Bullion .. . . .	(a)	(a)	11,000	11,000	15,000	14,000	10,000
Peru—							
Ores, concentrates, etc... .	8,000	7,000	10,000	6,300	(a)	11,000	(a)
Bullion, etc. .. . . .	114,000	120,000	190,000	150,000	(a)	106,000	(a)
Venezuela—							
Bullion .. . . .	59,000	18,000	3,000	(a)	(a)	(a)	(a)
Saudi Arabia—							
Bullion .. . . .	(a)	(a)	(a)	(a)	(a)	10,296	(a)

(a) Information not available.

**TOTAL IMPORTS OF GOLD \***

(In terms of metal)

(Fine troy ounces)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Ore, etc. . . . .	9,700	20,100	25,200	35,400	(a)	68,000	218,000
Bullion—							
Unrefined . . . . .	483,000	655,000	697,000	996,000	1,027,000	1,578,000	2,603,000
Refined . . . . .	2,327,000	13,453,000	18,402,000	44,857,000	9,535,000	6,637,000	5,765,000
Coin . . . . .	350	158,000	157,000	2,264,000	3,000	34,000	280,000
Malta*—							
Bullion and Coin . . . . .	(a)	3,900	1,300	200	(a)	3,300	4,600
Anglo-Egyptian Sudan*—							
Bullion . . . . .	250	—	323	—	(a)	57	36
Gold Coast—							
Bullion . . . . .	—	—	—	—	966	—	274
Kenya* (e)—							
Bullion . . . . .	3,500	2,200	21,800	15,300	3,400	1,100	3,300
Southern Rhodesia*—							
Concentrates . . . . .	3,100	9,500	9,600	9,100	(a)	9,100	9,500
Coin . . . . .	—	—	—	—	—	—	—
Tanganyika Territory*—							
Bullion . . . . .	140	—	—	12	35	194	600
Uganda*—							
Bullion . . . . .	(f)	(f)	(f)	(f)	1,854	1,328	1,100
Zanzibar*—							
Bullion . . . . .	—	200	2,700	450	(a)	1,000	1,400
Canada*—							
Bullion, etc. (c) . . . . .	200	5,900	6,700	800	(a)	1,700	7,400
British West Indies—							
Jamaica*—							
Bullion . . . . .	130	130	20	70	(a)	40	(a)
Coin . . . . .	—	—	—	1	(a)	20	(a)
Trinidad and Tobago*—							
Bullion . . . . .	—	—	3,400	500	(a)	400	(a)
British Guiana*—							
Bullion . . . . .	70	30	70	—	—	—	(a)
Aden*—							
Bullion and coin . . . . .	120	20	—	—	—	—	(a)
Ceylon*—							
Bullion . . . . .	300	—	38,100	100	(a)	9,500	12,000
Cyprus*—							
Bullion . . . . .	110	640	2,300	1,210	(a)	280	360
Hong Kong*—							
Bullion . . . . .	(a)	42,000	209,000	—	(a)	60	—
Coin . . . . .	(a)	105,000	146,000	—	—	—	—
India (b)—							
Bullion . . . . .	(d)	10,210	(d)	(d)	(d)	(d)	(d)
Coin . . . . .	—	65,942	537,590	5,066	705	3,280	1,330
(d)	(d)	658	(d)	3	12	1	4
(d)	(d)	107,099	(d)	(d)	(d)	(d)	
Malaya—							
Bullion . . . . .	(a)	—	—	1,200	(a)	1,200	1,027
Palestine—							
Bullion and coin . . . . .	21,400	87,300	(a)	(a)	(a)	(a)	(a)
Australia—							
Bullion, etc. . . . .	115,000	80,000	135,846	136,133	116,380	158,891	108,913
Coin . . . . .	—	25	—	10	(a)	30	—
Fiji—							
Bullion . . . . .	—	—	15	5	8	6	—
New Zealand—							
Bullion, etc. . . . .	600	600	500	700	521	874	764
Irish Republic*—							
Bullion . . . . .	—	—	—	3,500	(a)	—	7,300

\* See note on page 121.

(a) Information not available.

(b) Includes trade by land as recorded.

(c) Gold for commercial purposes only.

(d) Sea-borne trade only.

(e) Including Uganda up to 1948 inclusive.

Included with Kenya.

IMPORTS OF GOLD (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
FOREIGN COUNTRIES*							
Belgium-Luxemburg E.U.—							
Bullion, Scrap, etc. ..	(a)	a)	(a)	(a)	(a)	(a)	449,600
Denmark—							
Beaten, rolled or drawn	2,200	32,000	14,000	9,000	10,000	17,000	(a)
Finland—							
Bullion .. ..	4,000	300	—	100	100	(a)	
Sheet and wire .. ..	—	200	100	200	(a)	30	9,000
France—							
Bullion and scrap ..	(a)	(a)	(a)	(a)	(a)	(a)	1,371,000
Coin .. ..	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Beaten, rolled or drawn	250	800	7,500	13,000	(a)	(a)	2,066,000
Italy—							
Bullion, scrap, beaten, rolled or drawn ..	—	8,100	6,700	2,700	1,463,000	902,000	36,000
Coin .. ..	—	16,200	—	60	1,178,000	1,026,000	1,274,000
Norway—							
Bullion .. ..	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Sheets and rolled ..	500	550	2,200	300	1,000	200	(a)
Sweden—							
Bullion .. ..	2,000	10,000	426,000	8,000	12,000	8,000	(a)
Coin .. ..	70	700	180	20	(a)	(a)	(a)
Sweepings, etc. ..	500	400	500	500	(a)	(a)	(a)
Switzerland—							
Bullion .. ..	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Algeria—							
Beaten, rolled or drawn	30	—	2,600	7,000	7,000	8,000	10,000
Egypt—							
Bullion .. ..	22,000	26,000	119,000	358,000	590,000	(a)	(a)
Coin .. ..	17,000	66,000	28,000	308,000	156,000	(a)	(a)
Mozambique—							
Bullion .. ..	—	57,000	93,000	103,000	129,000	82,000	82,000
Mexico—							
Bullion and coin ..	(a)	(a)	(a)	(a)	(a)	(a)	(a)
United States—							
Ore and base bullion ..	970,000	1,075,049	998,430	1,003,883	1,034,967	(a)	(a)
Refined bullion ..	1,700,000	9,848,798	54,415,919	54,254,746	21,005,995	(a)	(a)
Coin .. ..	1,200	4,346,904	(a)	(a)	(a)	(a)	(a)
Argentina—							
Bullion and coin ..	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Brazil—							
Bullion .. ..	6,300	600	100	(a)	(a)	(a)	(a)
Venezuela—							
Bullion .. ..	(a)	7,000	(a)	(a)	(a)	(a)	(a)
Iran (b)—							
Bullion .. ..	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Coin .. ..	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Iraq—							
Bullion and coin ..	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Syria and Lebanon—							
Coin .. ..	2,000	500,000	(a)	(a)	(a)	(a)	(a)
Turkey—							
Bullion and scrap ..	—	1,700	500	—	(a)	(a)	(a)

(a) Information not available.

(b) Years ended March 20 of year following that stated.

# GRAPHITE

## PRODUCTION OF GRAPHITE

(Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Kenya .. ..	3	—	—	—	—	—	—
Southern Rhodesia .. ..	6	—	—	—	—	—	—
South West Africa (crude) .. ..	1,297	1,174	1,613	1,601	2,229	1,358	2,585
Tanganyika (crude) .. ..	—	—	(b) 218	170	105	—	25
Union of South Africa .. ..	192	273	(b) 218	170	105	240	323
Canada (sales) .. ..	1,705	1,763	2,141	2,267	1,917	3,202	1,444
Ceylon (exports) .. ..	7,820	8,082	9,005	13,970	12,241	12,844	12,621
India .. ..	1,295	1,627	1,235	1,649	972	1,586	1,578
Malaya .. ..	(c) 160	—	—	—	—	—	—
Australia .. ..	112	347	303	231	124	145	133
<b>FOREIGN COUNTRIES</b>							
Austria (crude) .. ..	3,663	242	3,784	10,723	13,923	14,454	17,939
Czechoslovakia (crude) .. ..	10,803	5,027	(a)	(a)	(a)	(a)	(a)
Germany .. ..	(a)	(a)	(a)	5,076	5,016	6,459	(a)
Italy .. ..	2,240	2,552	4,085	6,637	3,948	3,794	4,415
Norway .. ..	1,097	651	2,442	1,066	2,222	2,426	3,398
Spain .. ..	2,360	500	304	262	267	307	283
Sweden .. ..	213	—	—	63	107	—	—
Egypt .. ..	150	—	—	49	—	—	—
Madagascar—							
Flake .. ..	7,481	4,356	3,853	7,563	{	5,687	9,784
Powder .. ..	1,558	1,858	1,235		3,309	4,008	5,533
Morocco (French) .. ..	258	630	433	279	71	73	128
Mozambique .. ..	—	197	124	89	108	(a)	239
Mexico .. ..	23,261	21,782	27,542	34,704	23,437	24,238	32,761
United States .. ..	4,364	4,978	3,917	8,883	5,448	5,004	6,079
Argentina .. ..	328	(a)	(a)	(a)	(a)	(a)	(a)
Brazil .. ..	471	650	6,900	7,996	547	464	(a)
Uruguay (ore) .. ..	—	—	49	—	—	—	—
Japan .. ..	(e) 2,567	(e) 8,083	(e) 10,025	(e) 12,589	5,578	3,945	4,642
Korea (Southern)—							
Flake .. ..	5,171	200	528	391	795	(a)	(a)
Other .. ..	26,724	—	2,559	14,650	39,233	(a)	(a)
<b>TOTAL*</b> .. ..	<b>120,000</b>	<b>70,000</b>	<b>94,000</b>	<b>146,000</b>	<b>142,000</b>	<b>129,000</b>	<b>138,000</b>

\*Excluding graphite produced in the U.S.S.R. and Albania.

(a) Information not available.

(b) Including 31 tons of graphite shale.

(c) Average annual production during the Japanese occupation (1942 to 1945).

(d) Bizonal area.

(e) Years ended March 31 of year following that stated.

# EXPORTS OF GRAPHITE

*(Domestic Produce)*

*(Long tons)*

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Crucibles ..	1,872	3,229	2,795	3,416	3,777	2,889	3,905
South West Africa ..	1,146	873	1,362	970	1,246	671	2,628
Tanganyika (crude) ..							25
Union of South Africa ..	(a)	371	93	138	106	(a)	(a)
Canada .. ..	1,020	1,329	1,620	1,798	1,474	2,717	1,028
Ceylon .. ..	7,820	8,082	9,005	13,970	12,241	12,844	12,621
Hong Kong (re-exports) ..	(a)	10	92	565	2,828	1,185	1,838
Australia .. ..	33	90	46	82	37	91	63
<b>FOREIGN COUNTRIES</b>							
Austria .. ..	(a)	(a)	4,188	7,204	10,301	9,644	12,696
Belgium-Luxemburg E.U. ..	(a)	(a)	(a)	904	135	62	73
Czechoslovakia .. ..	(a)	874	1,647	(c)	1,086	(a)	(a)
Denmark (d) .. ..	—	2	—	1	7	36	84
France .. ..	141	1,032	495	709	301	435	608
Germany (Federal) .. ..	(a)	(a)	(a)	992	1,977	4,088	4,818
Italy .. ..	(a)	(a)	1,669	1,953	1,597	1,444	2,025
Netherlands .. ..	(a)	(a)	(a)	179	221	366	254
Norway .. ..	1,264	1,441	2,049	936	2,161	1,872	3,589
Sweden .. ..	28	305	16	12	—	7	—
Madagascar .. ..	6,349	8,735	8,579	8,305	10,122	11,895	17,838
Morocco (French) .. ..	301	560	380	(a)	103	44	32
Mozambique .. ..	168	189	203	40	165	—	239
Mexico .. ..	23,261	21,603	27,542	34,704	23,149	25,313	34,088
United States .. ..	1,168	2,065	1,380	935	1,207	1,248	1,344
Brazil .. ..	129	91	127	82	135	(a)	(a)
Japan .. ..	(a)	(a)	(a)	(a)	(a)	139	287
Korea—							
Flake .. ..	(a)	(a)	{(b) 2,276	(a)	(a)	(a)	(a)
Other .. ..							

(a) Information not available.

(b) Imports into Japan from Korea.

(c) January to October only.

(d) Including artificial graphite.

IMPORTS OF GRAPHITE

(Less Re-exports)

(Long tons)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Natural .. ..	6,874	2,807	7,192	9,928	9,868	10,693	13,532
Artificial .. ..			124	—	17	2	10
Crucibles.. ..	—	1	3	1	2	(a)	(a)
Mauritius—							
Crucibles.. ..	(£905)	(£726)	(£471)	(£158)	6	3	(a)
Southern Rhodesia .. ..	1	33	34	18	33	71	55
Union of South Africa .. ..	818	305	1,205	568	952	548	(a)
Canada (b)—							
Unground .. ..	(£15,027)	(£23,313)	(£18,804)	(£20,323)	(£22,155)	(£23,500)	(£32,788)
Ground, including manu- factures .. ..	(£62,302)	(£85,089)	(£94,150)	(£82,799)	(£77,997)	(£108,698)	(£161,529)
Crucibles.. ..	(£25,900)	(£33,503)	(£33,721)	(£29,032)	(£34,228)	(£53,994)	(£72,982)
Newfoundland (c) .. ..	3	1	3	1	(c)	(c)	(c)
Cyprus .. ..	—	—	3	6	—	2	2
Hong Kong (total imports)	(a)	301	283	1,454	3,597	1,419	1,434
India—							
Graphite .. ..	519	488	902	733	404	667	688
Crucibles.. ..	333	223	351	368	728	214	396
Palestine—							
Crucibles .. ..	24	35	(a)	(a)	(f)	(f)	(f)
Australia .. ..	969	840	593	1,162	717	808	1,140
New Zealand £ (N.Z.) .. ..	(£3,275)	(£2,861)	(£2,813)	(a)	171	77	96
Irish Republic .. ..	38	45	33	42	26	39	50
<b>FOREIGN COUNTRIES</b>							
Austria .. ..	(a)	(a)	(a)	(a)	55	220	279
Belgium-Luxemburg E.U.							
Crude and ground .. ..	(a)	(a)	(a)	1,697	1,541	1,788	2,247
Bulgaria .. ..	60	47	(a)	(a)	(a)	(a)	(a)
Czechoslovakia—							
Graphite .. ..	(a)	35	260	(d)	399	(a)	(a)
Crucibles, etc. .. ..	(a)	18	55	(a)	(a)	(a)	(a)
Denmark—							
Graphite (e) .. ..	167	655	602	728	639	901	721
Crucibles.. ..	27	136	88	102	80	60	119
Finland (total imports)	75	248	296	131	233	214	303
France .. ..	1,974	524	4,536	4,154	4,361	3,322	5,136
Germany (Federal) .. ..	(a)	(a)	(a)	917	2,842	3,683	5,251
Italy.. ..	(a)	(a)	3,052	1,907	2,407	3,636	3,375
Netherlands (e) .. ..	(a)	(a)	(a)	415	449	1,006	1,531
Norway—							
Graphite .. ..	18	29	45	88	112	69	(a)
Crucibles, etc. .. ..	6	69	66	91	130	132	(a)
Portugal .. ..	14	56	69	50	24	97	45
Sweden .. ..	640	558	505	428	638	1,068	(a)
Yugoslavia .. ..	(a)	(a)	(a)	(a)	(a)	1,017	1,473
Algeria .. ..	65	48	48	52	15	16	11
Egypt (total imports) ..	197	61	49	172	143	163	(a)
Tunis—							
Graphite .. ..	15	1	5	9	(a)	(a)	(a)
Crucibles.. ..	31	13	12	50	(a)	(a)	(a)
Mexico—							
Graphite .. ..	72	109	126	64	(a)	(a)	(a)
Crucibles .. ..	106	151	188	50	(a)	(a)	(a)

(a) Information not available.

(b) Including Newfoundland from April 1, 1949.

(c) Years ended March 31 of year following that stated. Included with Canada from April 1, 1949.

(d) January to October only.

(e) Including artificial graphite.

(f) See " Israel " under Foreign Countries.

**IMPORTS OF GRAPHITE (Cont.)**

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
United States (b) .. ..	32,262	29,586	38,957	46,556	28,358	38,827	48,564
Argentina .. .. ..	337	239	(a)	(a)	(a)	(a)	(a)
Brazil—							
Graphite .. .. ..	51	41	112	38	7	(a)	(a)
Crucibles .. .. ..	367	182	237	110	147	(a)	(a)
Chile .. .. ..	100	89	(a)	(a)	(a)	(a)	(a)
Colombia .. .. ..	(a)	13	(a)	(a)	(a)	(a)	(a)
Peru .. .. ..	19	18	(a)	(a)	(a)	(a)	(a)
Uruguay .. .. ..	(a)	(a)	(a)	11	18	31	(a)
Israel—							
Crucibles .. .. ..	(c)	(c)	(c)	(c)	28	37	(a)
Japan .. .. ..	(a)	5,267	15,307	26,880	35,136	5,614	(a)
Turkey—							
Graphite .. .. ..	75	257	33	37	20	124	95
Crucibles, etc. .. ..	227	251	29	59	46	40	164

(a) Information not available.

(b) In addition the following amounts of artificial graphite were imported:—

Year	Long tons
1945 .. .. ..	137
1946 .. .. ..	4
1947 .. .. ..	25
1948 .. .. ..	104
1949 .. .. ..	40
1950 .. .. ..	164
1951 .. .. ..	80

c) See "Palestine" under British Countries.

# GYPSUM

## PRODUCTION OF GYPSUM

(Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Great Britain—							
Gypsum ..	528,000	738,000	848,400	1,053,600	1,086,000	1,167,400	1,237,200
Anhydrite ..	799,000	950,000	897,300	1,033,600	1,024,400	1,038,900	1,047,200
Northern Ireland ..	70	—	—	2,996	1,472	—	170
Anglo-Egyptian Sudan ..	2,073	3,015	—	—	—	—	5,573
Kenya ..	156	500	559	1,000	178	—	82
Union of South Africa (c)	65,042	65,182	78,900	82,610	87,693	115,038	120,129
Canada (b) ..	741,717	1,809,862	2,325,067	3,114,254	2,809,923	3,375,188	3,507,479
Jamaica ..	—	—	—	—	12,000	23,000	(e) 28,000
Ceylon ..	58	32	68	167	184	—	410
Cyprus (e) ..	2,600	15,000	8,000	20,000	26,000	65,000	24,000
India ..	} 90,772	76,417	{ 50,569	78,948	139,944	206,366	203,602
Pakistan ..		—		15,866	1,000	15,645	16,659
Palestine ..	7,423	14,283	(a)	(a)	(a)	(a)	22,784
Australia ..	107,173	165,482	215,435	276,416	288,580	335,484	364,347
Irish Republic ..	23,030	37,295	35,840	61,703	66,205	56,313	(a)
<b>FOREIGN COUNTRIES</b>							
Austria ..	(a)	23,633	14,858	25,959	35,617	41,632	38,896
Bulgaria (e) ..	5,000	5,000	5,000	5,000	5,000	5,000	5,000
France ..	712,565	1,718,794	2,194,524	2,218,579	2,109,309	2,149,000	(a)
Germany (Federal) (?) ..	(a)	(a)	(a)	(d) 308,000	578,000	714,000	793,000
Greece ..	—	5,069	837	571	718	807	(a)
Italy (including alabaster)	159,555	232,400	293,724	366,029	440,862	(a)	(a)
Poland ..	(a)	9,632	14,681	13,959	25,945	32,306	(a)
Portugal ..	11,502	27,243	33,333	42,165	42,380	35,464	29,519
Spain ..	561,300	641,400	741,486	783,845	728,846	(a)	743,044
Sweden ..	284	—	—	—	—	—	—
Algeria ..	21,900	28,148	37,739	32,733	(a)	(a)	(a)
Angola (f) ..	40	—	1,390	(a)	(a)	(a)	(a)
Egypt ..	46,770	77,079	71,194	93,739	(a)	(a)	(a)
Morocco (French) ..	8,600	14,896	17,012	29,660	15,181	610	—
Morocco (Spanish) ..	(e) 3,000	(e) 4,000	(e) 3,000	(e) 4,000	(e) 4,000	4,379	3,520
Tunis ..	7,510	8,842	17,371	18,828	22,000	22,700	24,000
Dominican Republic ..	(f) 3,206	(f) 11,404	13,252	7,181	17,000	—	20,903
United States ..	3,403,324	5,026,248	5,543,050	6,477,263	5,900,105	7,314,844	7,737,084
Argentina ..	90,100	(a)	(a)	(a)	(a)	(a)	(a)
Chile ..	43,222	75,467	82,604	30,501	59,351	(a)	61,046
Peru ..	37,398	42,706	40,677	45,978	36,828	23,162	16,660
Venezuela (g) ..	—	958	3,397	2,568	2,945	2,018	1,382
Japan ..	82,104	47,738	64,840	111,667	115,270	112,861	197,471
New Caledonia ..	7,904	6,643	2,662	758	16,850	15,060	15,528
Philippine Republic ..	(a)	(a)	(a)	792	2,667	2,837	393
Siam ..	(a)	(a)	(a)	(a)	152	331	77
<b>TOTAL*</b> ..	<b>7,800,000</b>	<b>12,200,000</b>	<b>14,000,000</b>	<b>16,400,000</b>	<b>16,000,000</b>	<b>18,100,000</b>	<b>19,100,000</b>

\*Excluding gypsum produced in Luxemburg, Roumania, Switzerland, U.S.S.R., Yugoslavia, Cuba, Mexico, Brazil, China, Iraq and Korea.

(a) Information not available

(b) Including "Anhydrite."

(c) Sales and shipments for the years 1945 to 1948.

(d) Bizonal area.

(e) Estimated.

(f) Exports.

(g) Production in Government quarries only.

(h) Shipments.

(i) Crude estimated on production of calcined.

# EXPORTS OF GYPSUM

*(Domestic Produce)*

(Long tons)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Calcined .. ..	1,317	2,086	1,266	7,749	16,332	22,236	12,205
Union of South Africa ..	3,612	3,591	2,825	4,998	6,007	6,430	4,959
Canada—							
Crude .. .. ..	498,779	1,329,205	1,729,455	2,336,849	2,271,979	2,651,762	2,703,871
Ground .. .. ..	—	—	—	9,637	(a)	(a)	(a)
Calcined .. .. ..	399	865	1,271	662	147	91	151
Jamaica .. .. ..	—	—	—	—	120	10,712	24,861
Cyprus—							
Crude .. .. ..	1,780	10,850	5,800	13,992	16,951	53,094	19,840
Calcined .. .. ..	655	3,642	1,601	4,330	7,030	9,465	2,471
Hong Kong (including re-exports) .. ..	(a)	113	160	333	210	1,437	1,631
Palestine—							
Calcined .. .. ..	4	1	(a)	(a)	(a)	(a)	(a)
Other .. .. ..	4	—	(a)	(a)	(a)	(a)	(a)
Australia—							
Crude .. .. ..	18,155	22,180	27,984	35,164	37,255	27,131	23,905
Irish Republic—							
Calcined .. .. ..	(a)	(a)	(a)	(a)	4,591	2,438	8,134
<b>FOREIGN COUNTRIES</b>							
Austria—							
Crude and ground .. ..	(a)	(a)	18,759	27,978	16,657	19,194	19,468
Calcined .. .. ..	(a)	(a)	679	271	1,889	7,002	4,957
Belgium-Luxemburg E.U.—							
Crude .. .. ..	6,043	(a)	(a)	1,630	233	95	771
Ground and calcined .. ..	(a)	(a)	(a)	5,663	3,881	1,613	2,476
Denmark—							
Crude and calcined .. ..	—	—	21	36	21	37	21
France—							
Crude .. .. ..	82,311	310,702	465,897	{ 311,924	290,188	367,691	411,456
Calcined .. .. ..	}			53,923	68,357	82,061	69,496
Germany (Federal)—							
Gypsum and phosphatic gypsum .. .. ..	(a)	(a)	(a)	27,675	34,481	94,660	114,082
Italy—							
Crude .. .. ..	(a)	(a)	(a)	(a)	(a)	(b)	5,171
Calcined .. .. ..	(a)	(a)	(a)	(a)	(a)	(b)	115
Netherlands (calcined) .. ..	(a)	29	186	255	2,461	3,100	3,048
Portugal—							
Crude .. .. ..	76	110	99	40	123	277	437
Sweden—							
Calcined .. .. ..	162	348	20	27	26	186	56
Switzerland—							
Ground and calcined .. ..	126	2,001	2,638	795	177	161	90
Yugoslavia—							
Crude .. .. ..	(a)	(a)	(a)	(a)	(a)	39	7,821
Calcined .. .. ..	(a)	(a)	(a)	(a)	(a)	1,119	1,811
Algeria .. .. ..	98	613	651	608	439	568	252
Angola—							
Crude .. .. ..	40	—	1,390	(a)	(a)	(a)	(a)
Egypt—							
Crude and ground .. ..	107	(a)	—	2,038	2,139	8,146	12,147
Calcined .. .. ..	47	(a)	—	351	1,076	(a)	(a)
Morocco (French) .. ..	1,471	—	—	(a)	(a)	(a)	(a)
Morocco (Spanish) .. ..	793	985	829	(a)	(a)	(a)	(a)

(a) Information not available.

(b) July to December only.

EXPORTS OF GYPSUM (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Tunis (including re-exports)—							
Calcined .. ..	75	1	39	21	(a)	(a)	(a)
Dominican Republic ..	3,206	11,404	9,473	6,386	17,925	987	12,656
Mexico—							
Crude .. ..	—	—	—	118,093	(a)	27,828	(a)
Calcined .. ..	6	23,728	108,337	45,558	82,762	(a)	(a)
United States—							
Crude and ground .. ..	953	3,635	8,676	1,254	15,685	21,141	22,362
Calcined .. ..	8,001	13,888	20,974	8,387	(a)	(a)	(a)
Argentina .. ..	2,515	1,742	(a)	(a)	(a)	(a)	(a)

(a) Information not available.

**IMPORTS OF GYPSUM**

(Less Re-exports)

(Long tons)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Crude, including alabaster ..	67,860	67,413	54,787	36,743	53,106	69,223	46,210
Calcined .. .. ..	1,407	2,590	5,018	6,642	3,587	2,330	1,537
Anglo-Egyptian Sudan ..	—	—	125	173	231	214	(a)
Kenya—							
Crude .. .. ..	(a)	(a)	(a)	525	—	470	—
Southern Rhodesia—							
Crude and calcined .. ..	3,163	2,822	3,038	2,763	4,266	6,866	6,121
South West Africa ..	11	27	19	21	18	24	(a)
Union of South Africa—							
Crude and calcined .. ..	584	715	1,144	1,111	992	527	(a)
Canada (b)—							
Crude and ground .. ..	793	3,331	7,924	921	505	757	1,518
Calcined .. .. ..	2,575	6,815	8,992	8,887	7,796	20,035	13,978
Newfoundland (c)—							
Crude and calcined .. ..	270	360	383	243	(c)	(c)	(c)
Hong Kong (total imports)	(a)	271	189	2,426	89	3,838	5,700
Palestine—							
Crude and calcined .. ..	5	93	(a)	(a)	(d)	(d)	(d)
Australia (e) .. ..	9	2	1	6	7	132	10
New Zealand—							
Crude .. .. ..	14,865	24,374	29,206	26,956	38,369	28,310	15,214
Calcined .. .. ..	4,073	1,180	6,007	4,739	9,293	8,427	7,057
Irish Republic—							
Calcined, etc. .. ..	566	431	380	395	667	1,015	651
<b>FOREIGN COUNTRIES</b>							
Belgium-Luxemburg E.U.—							
Crude .. .. ..	(a)	(a)	(a)	202,419	162,416	201,587	257,752
Ground and calcined .. ..	(a)	(a)	(a)	33,500	30,367	42,704	39,496
Czechoslovakia—							
Crude and ground .. ..	(a)	4,076	16,720	(f) 30,291	(a)	(a)	(a)
Calcined .. .. ..	(a)	6,452	14,980	(f) 15,255	(a)	(a)	(a)
Denmark—							
Crude .. .. ..	1,686	20,845	21,690	25,786	14,663	35,684	32,713
Calcined .. .. ..	367	5,232	10,167	11,820	31,663	4,970	4,235
Finland (total imports)—							
Crude .. .. ..	16	5,129	22,728	24,597	22,389	31,907	41,207
Calcined .. .. ..	516	3,758	1,674	4,594	8,338	15,006	18,463
France—							
Crude and calcined .. ..	3,032	3,326	5,678	1,052	346	279	391
Germany (Federal)—							
Gypsum and phosphatic gypsum .. .. ..	(a)	(a)	(a)	52	53	904	178
Iceland .. .. ..	84	31	(a)	(a)	115	16	29
Netherlands—							
Crude .. .. ..	{ (a)	{ 14,264	28,342	22,692	21,293	29,499	28,119
Calcined .. .. ..	{ (a)	{ 15,368	15,450	21,229	24,356	28,865	31,117
Ground .. .. ..	{ (a)	{ 47,018	50,779	8,489	8,158	8,613	8,865

(a) Information not available.

(b) Including Newfoundland from April 1, 1949.

(c) Years ended March 31 of year following that stated. Included with Canada from April 1, 1949.

(d) See "Israel" under Foreign Countries.

(e) Years ended June 30 of that stated up to 1949 inclusive.

(f) January to October only.

## IMPORTS OF GYPSUM (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Norway—							
Crude .. .. ..	2,041	15,931	15,966	15,567	21,132	20,058	
Ground .. .. ..	231	2,834	2,174	2,336	2,975	2,973	} 29,964
Portugal—							
Crude .. .. ..	4,616	8,100	6,205	5,172	7,972	2,838	
Calcined .. .. ..	3	9	12	9	8	7	5,496 13
Sweden—							
Crude .. .. ..	1,613	63,129	59,200	73,741	43,438	72,880	
Calcined .. .. ..	1,907	7,207	11,189	10,647	8,538	10,827	64,141 13,173
Switzerland—							
Ground and calcined ..	30	27	91	193	105	181	210
Algeria—							
Calcined .. .. ..	89	93	149	149	741	2,100	1,955
Egypt—							
Crude and ground ..	—	—	21	522	984	1,143	
Calcined .. .. ..	415	(b) 639	612	902	859	(a)	(a)
Morocco (French) ..	119	697	1,207	(a)	(a)	(a)	(a)
Morocco (Spanish) ..	93	128	85	(a)	(a)	(a)	(a)
Mozambique—							
Crude .. .. ..	456	648	976	1,767	2,431	186	
Calcined .. .. ..	171	32	70	104	85	41	1,713 52
Tunis—							
Calcined .. .. ..	9	20	21	16	39	(a)	(a)
Costa Rica .. .. ..	20	28	(a)	26	(a)	(a)	(a)
Cuba (total imports) ..	1,982	(a)	(a)	1,820	2,762	(a)	(a)
United States—							
Crude .. .. ..	454,252	1,301,018	1,925,937	2,552,865	2,315,472	2,848,750	3,078,640
Ground .. .. ..	206	316	426	361	547	639	514
Calcined .. .. ..	60	228	116	10	187	212	269
Argentina .. .. ..	23	63	(a)	(a)	(a)	(a)	(a)
Brazil—							
Crude .. .. ..	227	252	200	155	141	(a)	(a)
Ground .. .. ..	154	161	290	179	150	(a)	(a)
Chile .. .. ..	25	12	(a)	(a)	(a)	(a)	(a)
Colombia—							
Ground .. .. ..	256	1,116	(a)	55	548	151	(a)
Peru—							
Crude .. .. ..	15	11	(a)	(a)	(a)	(a)	(a)
Calcined .. .. ..	10	13	(a)	(a)	(a)	(a)	(a)
Uruguay—							
Ground .. .. ..	8,737	8,433	15,771	5,754	13,913	13,442	(a)
Venezuela .. .. ..	360	107	641	1,043	(a)	(a)	(a)
Israel—							
Crude .. .. ..	(c)	(c)	(c)	(c)	839	480	
Calcined .. .. ..	(c)	(c)	(c)	(c)	25	96	(a)
Japan .. .. ..	1,193	—	269	(a)	(a)	(a)	12,090 (a)
Syria and Lebanon ..							

(a) Information not available.

(b) Total imports.

(c) See "Palestine" under British Countries.

# IRON AND STEEL

## PRODUCTION OF IRON ORE (including Manganese Iron Ore)

[Long tons]

Producing Country	ORE										Estimated Iron Content						
	1945	1946	1947	1948	1949	1950	1951	1945	1946	1947	1948	1949	1950	1951			
<b>BRITISH COUNTRIES</b>																	
United Kingdom (b)	11,060,900	13,089,200	13,395,700	12,935,800	14,647,100	4,096,000	3,518,000	3,217,000	3,927,000	4,019,000	3,861,000	4,394,000	—	—	—		
Northern Rhodesia (c)	1,504	1,721	1,721	1,721	1,721	40	80	84	750	1,111	—	—	—	—	—		
Iterra Leone (d)	688,023	985,553	1,073,814	1,071,788	394,000	510,000	438,000	378,000	580,000	644,000	613,000	613,000	—	—	—		
Southern Rhodesia	(c) 282	50,972	56,1026	56,1026	56,1026	—	—	—	160	17,250	29,100	32,400	29,000	29,000	29,000		
Union of South Africa	1,445,428	1,445,428	1,445,428	1,445,428	1,445,428	1,445,428	1,445,428	1,445,428	1,445,428	1,445,428	1,445,428	1,445,428	1,445,428	1,445,428	1,445,428		
Canada of New Zealand	931,879	1,437,779	1,437,779	1,437,779	1,437,779	3,281,836	3,218,983	4,228,741	560,000	760,000	940,000	777,000	1,805,000	1,770,000	2,326,000		
Newfoundland	1,015,788	1,383,503	1,713,720	1,041,682	1,041,682	59,181	169,374	180,884	503,000	688,000	751,000	777,000	1,440,000	1,440,000	1,440,000		
Hong Kong	967,062	1,217,112	1,443,410	1,443,410	2,498,459	2,808,522	2,988,194	3,686,651	1,450,000	1,540,000	1,600,000	1,680,000	1,800,000	1,800,000	1,800,000		
India	(a) 261	1,818,216	888	641	880	4,042,005	1,460,231	2,364,699	2,428,723	1,010,000	1,210,000	1,420,000	1,224,000	1,020,000	1,417,800	1,457,000	
Malaya	13,269,371	1,818,216	1,845,529	6,1295	4,776	4,452	3,642	2,495	2,500	3,000	2,500	3,000	1,900	1,700	1,400	1,100	
Australia	6,067	7,408	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
New Zealand (e)	20,566,000	20,800,000	22,038,000	23,279,000	24,467,000	28,493,000	—	—	—	—	—	—	—	—	—	—	
<b>TOTAL</b>	21,600,000	20,566,000	20,800,000	22,038,000	23,279,000	24,467,000	28,493,000	—	—	—	—	—	—	—	—	—	
<b>FOREIGN COUNTRIES</b>																	
Austria	313,900	452,897	870,881	1,178,342	1,464,121	1,830,046	2,382,246	(e)	155,000	300,000	353,000	450,000	571,000	740,000	740,000	740,000	
Belgium	28,300	42,173	59,377	90,144	1,43,956	43,935	78,000	10,000	11,600	20,000	23,000	15,000	15,400	27,000	27,000	27,000	
Czechoslovakia	272,000	1,098,000	1,346,000	1,404,500	1,450,000	1,550,000	2,150,000	2,180,000	86,000	330,000	420,000	420,000	435,000	465,500	519,000	519,000	
France	15,975,855	18,422,877	22,686,661	30,382,000	31,542,000	34,652,000	2,312,000	4,942,000	6,000,000	7,446,000	10,310,000	10,310,000	9,830,000	11,550,000	11,550,000	11,550,000	
Germany—	(a) 3,843,023	7,160,676	8,967,900	10,711,380	12,719,000	(e)	930,000	1,017,000	1,880,000	2,397,000	2,893,000	3,419,000	3,419,000	3,419,000	3,419,000	3,419,000	
Federal Republic	(a) 15,000	279,000	300,000	301,000	344	344	461,000	461,000	55,829	(a)	(a)	(a)	(a)	(a)	(a)	(a)	
Russian Zone	47,000	131,000	240,300	313,000	\$94,000	362,000	(c) 400,000	400,000	84,000	120,000	130,000	140,000	140,000	160,000	160,000	160,000	
Greece	—	—	—	—	54,000	447,000	540,000	540,000	590,000	590,000	590,000	590,000	590,000	590,000	590,000	590,000	
Hungary	—	—	—	—	3,457,557	4,071,984	3,784,368	5,856,977	5,856,977	\$98,000	860,000	980,000	1,024,000	1,118,000	1,164,000	1,164,000	1,164,000
Italy	132,116	147,107	225,585	349,573	511,711	511,711	511,711	511,711	75,900	150,000	220,000	220,000	220,000	220,000	220,000	220,000	220,000
Luxembourg	1,388,973	2,211,421	1,980,703	3,446,621	196,151	270,944	239,705	328,876	49,000	173,000	173,000	173,000	173,000	211,000	211,000	211,000	211,000
Norway	104,000	339,224	666,487	649,000	688,000	700,000	887,000	887,000	36,000	170,000	170,000	170,000	170,000	230,000	260,000	260,000	260,000

- For detailed figures see page 137.

(b) In addition bog ore and iron

1945

1946 1947

1948 1347

(c) Used mainly or entirely for

(d) Marketable ore only. Washed and treated.

(d) Marketable ore only. Washed fines are excluded.

(e) Estimate

PRODUCTION OF IRON ORE (Cont.)

Producing Country	ORE						Estimated Iron Content							
	1945	1946	1947	1948	1949	1950	1951	1945	1946	1947	1948	1949	1950	1951
<b>Foreign Countries (Cont.)</b>														
Portugal ..	—	49	—	159	217	—	21,045	—	25	80	108	—	—	10,523
Romania (b)	..	1,152	868	119,000	1,199,000	1,206,000	319,000	389,000	47,000	54,000	144,000	175,000	212,000	212,000
Spain ..	..	3,467	534	1,570,994	1,496,662	2,085,580	2,276,932	520,000	710,000	670,000	820,000	943,000	1,025,000	1,025,000
Sweden ..	..	6,758	750	8,754,067	13,077,266	13,512,054	13,386,062	15,147,929	2,398,000	4,238,000	5,479,000	8,075,000	8,292,000	9,089,000
Switzerland ..	..	17,161	52,454	63,734	85,400	89,000	54,000	86,400	9,000	28,000	31,000	42,000	42,000	
U.S.S.R. (b)	..	20,000	22,000	26,000,000	31,000,000	35,000,000	44,000,000	50,000,000	50,000,000	50,000,000	50,000,000	50,000,000	50,000,000	50,000,000
Yugoslavia ..	..	393,000	1,553,448	1,841,964	2,497,400	2,532,200	812,813	572,170	572,170	885,000	978,000	978,000	978,000	978,000
Algeria ..	..	1,183,350	1,644,850	—	388	212	61	2,778,100	620,000	620,000	1,350,000	1,370,000	1,445,000	1,445,000
Egypt ..	..	—	6	—	—	—	—	—	—	—	—	—	—	—
Liberia ..	..	102	122,327	153,841	296,500	316,001	541,123	50	57,000	70,000	133,000	158,000	144,000	144,000
Morocco (French)	..	703,700	806,800	888,300	886,281	878,754	937,666	912,415	430,000	450,000	500,000	550,000	620,000	620,000
Tunis ..	..	130,358	180,800	337,310	685,100	700,700	745,900	908,200	68,000	94,000	200,000	373,000	403,000	485,000
Cuba ..	..	—	—	36,755	22,558	11,265	11,279	—	—	—	12,500	7,800	3,900	4,400
Mexico ..	..	278,082	271,095	327,195	332,000	357,000	413,000	450,000	168,079	172,399	222,484	225,459	242,679	281,000
United States (c)	..	89,736,084	94,140,051	102,200,045	85,900,300	99,016,429	117,536,900	146,000,900	36,000,000	47,000,000	51,000,000	43,000,000	49,000,000	58,000,000
Argentina ..	..	636	636	636	636	636	636	636	400	400	400	400	400	400
Brazil ..	..	639,933	572,316	601,351	1,546,844	1,857,529	1,986,000	1,986,000	—	—	390,000	1,050,000	1,250,000	1,350,000
Chile ..	..	272,531	1,158,462	1,710,111	2,668,125	2,699,593	2,906,591	3,024,204	420,000	420,000	170,300	728,000	1,087,000	1,655,000
Venezuela ..	..	—	—	(a)	(a)	(a)	185,169	1,349,559	—	—	—	1,637,000	1,743,000	1,930,000
China ..	..	31,000	—	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
French Indo-China ..	..	7,800	—	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Korea (d) ..	..	1,398,000	548,792	491,151	549,896	781,574	912,619	1,081,944	3,200	270,000	250,000	280,000	484,000	573,000
Japan ..	..	819,798	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)
Philippine Republic ..	..	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)
Portuguese India ..	..	—	—	—	—	—	—	—	—	—	—	—	—	—
Spain ..	..	123,283	110,438	143,320	165,170	214,598	228,902	6,400	429,357	(a)	(a)	4,800	2,400	4,000
Turkey ..	..	—	—	—	—	—	—	15,127	74,000	66,000	74,000	100,000	143,000	111,000
New Caledonia ..	..	—	—	—	—	—	—	—	—	—	—	128,000	128,000	8,600
Total ..	..	135,000,000	133,000,000	166,000,000	195,000,000	197,000,000	221,000,000	260,000,000	285,000,000	—	—	—	—	—
World's Total ..	..	157,000,000	154,000,000	187,000,000	217,000,000	220,000,000	246,000,000	285,000,000	—	—	—	—	—	—

(a) Information not available.

(b) Estimated.

(c) Usable ore.

(d) Including shipments of manganeseiferous iron ore up to 35 per cent. Mn.

(e) Including iron sand as follows (long tons):

(f) Southern Korea only.

1945—267,110; 1946—8,641

1947—2,551;

1948—2,460;

1949—32,559;

1950—99,940;

1951—210,545.

## DETAILS OF PRODUCTION OF IRON ORE IN CERTAIN COUNTRIES

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
West Coast hematite ..	405,800	379,100	368,600	325,200	350,100	342,700	347,400
Jurassic ironstones—							
Lower lias ..	2,688,500	2,660,500	2,615,800	3,167,200	3,207,100	3,127,700	3,250,800
Middle lias ..	3,171,900	2,343,400	2,003,800	2,537,400	2,665,600	2,557,600	3,393,400
Inferior oolite ..	7,759,300	6,657,900	5,984,200	6,967,000	7,071,200	6,804,300	7,558,200
Coal measure ironstones ..	6,800	5,600	2,200	200	300	200	—
Other iron ore (hematite, limonite, etc.) ..	142,600	126,300	116,300	92,200	102,400	103,300	97,300
Union of South Africa—							
Hematite ..	824,829	899,838	1,105,800	1,101,854	1,161,543	1,101,560	(a)
Siliceous hematite ..							
Magnetite ..							
Carbonate ..	5,042	2,717	—	—	527	—	(a)
Canada (b)—							
Siderite (sintered) ..	22,644	29,324	37,979	43,496	60,353	68,905	(a)
Hematite ..	462,000	552,000	508,000	(a)	(a)	(a)	(a)
Newfoundland—							
Hematite ..	486,000	888,000	1,206,000	(a)	(a)	(a)	(a)
Hematite ..	967,062	(a)	(a)	(a)	(a)	(a)	(a)
<b>FOREIGN COUNTRIES</b>							
France—							
Phosphoric ..	7,253,695	15,195,689	17,295,104	21,196,614	29,060,314	27,807,440	32,292,401
Medium phosphoric ..	208,568	611,468	860,561	1,256,801	1,594,978	1,540,670	2,131,842
Non-phosphoric ..	128,685	168,698	267,212	243,246	276,312	193,653	228,582
Italy—							
Iron ore ..	(a)	129,538	222,368	534,661	512,616	435,138	507,217
Manganiferous iron ore ..	(a)	17,869	20,217	23,050	28,040	22,828	23,782
Luxembourg—							
Siliceous iron ore ..	728,920	1,287,706	1,143,433	1,375,086	1,535,401	1,477,261	1,877,341
Calcareous iron ore ..	589,915	802,210	698,762	1,794,503	2,403,628	2,221,572	3,499,369
Ferruginous limestone ..	64,838	121,505	118,508	175,998	132,955	85,535	159,567
Poland—							
Hematite ..	(a)	{ 7,500 21,578 35,944 293,747 30,455	9,190	(a)	(a)	(a)	(a)
Magnetite ..			39,052	(a)	(a)	(a)	(a)
Siderite ..			9,243	(a)	(a)	(a)	(a)
Limonite ..			38,094	(a)	(a)	(a)	(a)
Argillaceous iron ore ..			376,928	(a)	(a)	(a)	(a)
Bog iron ore ..			23,980	(a)	(a)	(a)	(a)
Portugal—							
Hematite ..	—	49	—	159	217	—	21,045
Magnetite ..	—	—	—	—	—	—	—
Sweden—							
Manganiferous iron ore ..	67,656	130,538	84,465	90,482	113,964	50,096	(a)
Other iron ore ..	3,799,878	6,628,212	8,669,602	12,986,784	13,398,090	13,345,966	(a)
By phosphorus content (c)—							
Under 0.006 %	570,139	492,460	496,611	522,682	566,187	671,284	(a)
0.006 % to under 0.04 %	1,021,255	1,669,400	1,840,918	2,095,515	2,049,273	2,344,547	(a)
0.04 % to under 0.1 %	141,056	113,465	121,640	78,933	68,217	74,797	(a)
0.1 % to under 0.7 %	1,319,140	2,204,305	2,896,585	4,305,110	4,605,595	4,796,404	(a)
0.7 % to under 1 % ..	465,268	765,104	792,445	1,037,628	976,459	1,016,174	(a)
1 % and over ..	350,676	1,514,016	2,605,868	5,037,398	5,246,323	4,492,856	(a)
Algeria—							
Non-phosphoric ..	1,183,850	1,644,850	1,531,448	1,841,964	2,497,400	2,532,200	2,779,100
Tunis—							
Non-phosphoric ..	130,358	180,800	397,310	685,100	700,700	745,900	908,200

(a) Information not available.

(b) Shipments. These figures do not agree with those on page 135 which refer to actual production.

(c) Calculated on a basis of 50 % Fe content.

DETAILS OF PRODUCTION OF IRON ORE (Cont.)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
<b>United States—</b>							
Ore containing less than 5% Mn—							
Hematite* .. ..	81,294,688	65,728,172	84,535,465	90,686,138	76,262,577	87,157,960	101,541,000
Magnetite* .. ..	5,620,810	3,920,986	6,811,876	7,661,207	6,593,277	7,697,029	11,388,000
Limonite .. ..	942,910	686,402	1,201,408	2,176,149	1,545,595	2,615,402	3,007,000
Siderite .. ..	545	650	48	—	—	—	—
Pyrite cinder and sinter	517,440	506,903	542,723	479,998	535,998	574,969	569,000
Ore containing 5 to under 10 % Mn .. ..	1,257,613	955,977	933,001	1,070,110	939,492	868,150	936,000
Ore containing 10 to under 35 % Mn .. ..	102,078	89,722	115,530	126,823	23,361	102,919	95,000

\* A small quantity of hematite is included with magnetite, and a small quantity of magnetite with hematite.

### EXPORTS OF IRON ORE

*(Domestic Produce)*

*(Long tons)*

Exporting Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom ..	434	792	1,053	601	355	585	779
Sierra Leone ..	780,884	603,945	618,750	926,370	974,050	1,142,621	1,184,735
Union of South Africa ..	3	4	—	—	—	—	22,075
Canada (f) ..	688,835	1,022,550	1,562,479	955,604	2,277,053	1,988,817	2,880,149
Newfoundland ..	1,006,429	1,250,031	1,258,020	1,731,828	(g)	(g)	(g)
Hong Kong ..	(a)	(a)	(a)	—	48,535	171,718	171,362
India ..	—	—	20	—	4,300	55,322	197,005
Malaya ..	—	(a)	3	—	69,539	462,431	520,899
Australia ..	5	4	14	40	1	—	—
<b>Irish Republic—</b>							
Bog ore ..	5,224	2,619	2,141	1,613	(a)	(a)	(a)
Burnt pyrites ..	16,026	7,996	4,325	15,291	12,489	33,983	26,402
<b>FOREIGN COUNTRIES</b>							
Austria ..	(a)	(a)	34,436	2,792	—	57,360	177,853
Belgium-Luxemburg E.U.	485	2,560	22,637	438,022	292,167	101,601	200,160
Czechoslovakia ..	(a)	48,251	15,730	(b) 126,589	(a)	(a)	(a)
Finland ..	1	479	—	—	—	—	816
France ..	1,643,500	5,344,790	6,493,478	6,210,922	7,120,329	7,425,791	9,682,472
Germany (Federal) ..	(a)	(a)	(a)	231	5,830	51,259	75,223
Greece ..	—	12,385	40,458	48,935	21,500	40,564	84,920
Italy—							
Iron ore ..	(a)	(a)	274	4,407	60	9,182	69,473
Burnt iron pyrites ..	(a)	(a)	14,169	281,120	309,746	497,295	411,353
Netherlands—							
Iron ore ..	—	—	—	72,030	66,357	57,521	(a)
Burnt iron pyrites ..	(a)	99,527	97,651	221,941	193,849	244,337	318,787
Norway—							
Iron ore ..	42,877	4,938	50,358	180,093	200,313	278,563	264,830
Burnt iron pyrites ..	1,181	3,891	11,846	23,539	36,505	31,912	61,103
Portugal ..	—	1,084	509	10	3	1	(a)
Spain ..	256,625	776,476	718,269	804,418	973,917	920,742	1,525,465
Sweden—							
Iron ore ..	1,209,510	5,231,688	8,369,916	11,335,971	12,581,280	12,744,488	14,760,143
Burnt iron pyrites ..	(a)	60,321	16,079	122,866	17,271	113,314	244,987
Switzerland ..	11,693	78,667	69,454	122,097	90,861	53,370	98,525
Yugoslavia ..	(a)	(a)	(a)	(a)	(a)	333,047	276,679
Algeria ..	1,343,531	1,560,759	1,523,741	2,157,320	2,598,290	2,433,678	2,796,408
Liberia ..	—	—	—	—	—	—	170,0,0
Morocco (French) ..	6,889	93,500	176,370	200,089	356,539	308,913	544,404
Morocco (Spanish) ..	703,633	806,723	888,401	(d) 723,652	(d) 645,490	(d) 713,833	(d) 692,925
Tunis (c) ..	1,336	172,477	351,848	739,926	726,943	690,177	896,000
Cuba ..	162	(a)	(a)	34,498	10,599	12,400	12,400
Mexico ..	44,105	9,661	64,347	157,197	170,918	189,032	172,524
United States ..	2,063,125	1,505,771	2,806,894	3,080,666	2,424,775	2,549,704	4,295,938
Brazil ..	295,256	63,396	193,630	589,824	664,905	876,067	(a)
Chile ..	214,070	1,165,100	1,719,409	2,583,542	2,633,047	2,554,901	2,644,169
Venezuela (h) ..	—	—	—	—	—	—	635,416
China ..	(e) 14,763	—	—	192,790	(a)	(a)	(a)
Korea (e) ..	122,042	(a)	(a)	(a)	(a)	(a)	(a)
Manchuria (e) ..	4,921	(a)	(a)	(a)	(a)	(a)	(a)
Philippine Republic (e) ..	—	—	—	21,606	(a)	(a)	(a)
Portuguese India ..	—	—	13	5,335	48,781	(a)	(a)
New Caledonia ..	—	—	—	—	—	4,985	2,923

(a) Information not available.

(b) January to October only.

(c) Including re-exports.

(d) Exports via the Port of Melilla.

(e) Imports into Japan from the country indicated during years ended March 31 of that stated.

(f) Including Newfoundland from April 1, 1949.

(g) Included with Canada from April 1, 1949.

(h) Imports into the United States.

IMPORTS OF IRON ORE

*(Less Re-exports)*

*(Long tons)*

Importing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom .. .	4,068,218	6,594,556	6,797,205	8,674,896	8,692,572	8,391,533	8,747,480
Canada .. .	3,339,167	2,037,212	3,521,919	3,839,431	2,247,531	2,741,560	3,420,909
Trinidad and Tobago .. .	50	—	39	1,519	365	207	533
India .. .	—	—	—	23	8	5,302	2,916
Australia .. .	—	—	—	—	—	174	576
Irish Republic .. .	—	65	—	387	—	—	—
<b>FOREIGN COUNTRIES</b>							
Austria—							
Iron ore .. .	(a)	(a)	30,263	136,331	268,956	194,666	193,151
Burnt pyrites .. .	(a)	(a)	24,632	277,502	305,344	388,111	342,553
Belgium-Luxemburg E.U.							
Iron ore .. .	} 1,816,149	5,889,794	6,676,383	8,602,386	{ 8,926,738	8,123,841	10,569,420
Burnt iron pyrites .. .							
Czechoslovakia—							
Iron ore .. .	(a)	1,276,875	1,813,924	b 1,570,635	(a)	(a)	(a)
Burnt pyrites .. .	(a)	(a)	55,506	(b) 20,297	(a)	(a)	(a)
Denmark .. .	—	294	2,273	1,906	1,854	1,102	2,413
Finland (c) .. .	35,325	79,837	77,768	149,032	109,219	91,947	176,908
France .. .	49,894	96,714	185,707	251,852	389,533	165,340	315,251
Germany (Federal) .. .	(a)	(a)	(a)	2,390,786	4,446,739	4,793,335	7,580,102
Hungary (including burnt pyrites) .. .	(a)	122,852	569,514	(a)	(a)	(a)	—
Italy .. .	(a)	(a)	17,591	25,957	109,433	180,959	395,657
Netherlands .. .	(a)	210,455	477,403	741,352	705,653	799,231	987,873
Norway .. .	4,027	31,177	34,846	37,583	38,656	15,696	817
Poland .. .	228,970	964,430	1,181,378	1,590,827	(a)	(a)	(a)
Spain .. .	76,782	105,448	133,623	148,464	220,090	234,958	224,047
Sweden .. .	3	907	909	498	455	484	(a)
Switzerland (d) .. .	36,709	86,227	52,301	69,103	37,378	60,335	95,889
Algeria .. .	10	1,719	4,057	—	(a)	(a)	986
Tunis .. .	—	97	787	—	(a)	(a)	(a)
United States .. .	1,193,711	2,746,600	4,889,326	6,086,070	7,394,569	8,215,865	10,145,415
Japan .. .	(e) 141,726	—	—	522,798	1,535,453	1,438,206	3,040,010

(a) Information not available.

(b) January to October only.

(c) Total imports.

(d) Including chrome ore, pyrites, burnt pyrites, etc. (mainly pyrites).

(e) Year ended March 31 of year following that stated.

PRODUCTION OF PIC-IRON AND FERRO-ALLOYS\*

(Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom .. .	7,107,400	7,761,200	7,784,600	9,276,400	9,498,500	9,632,900	9,668,800
Southern Rhodesia .. .	—	—	—	16,434	27,268	33,453	31,641
Union of South Africa .. .	546,879	551,161	632,053	640,803	697,322	721,339	791,840
Canada .. .	1,740,706	1,380,039	1,955,331	2,105,780	2,104,087	2,230,018	2,503,196
India .. .	1,405,042	1,438,054	1,435,396	1,464,623	1,610,822	1,680,481	1,823,946
Australia (b) .. .	1,159,483	932,576	1,186,657	1,258,804	1,060,346	1,111,651	1,335,244
<b>TOTAL</b> .. .	<b>11,959,000</b>	<b>12,064,000</b>	<b>12,994,000</b>	<b>14,763,000</b>	<b>14,998,000</b>	<b>15,409,800</b>	<b>16,154,700</b>
<b>FOREIGN COUNTRIES</b>							
Austria .. .	99,946	56,950	274,109	603,527	824,517	869,145	1,032,862
Belgium .. .	722,978	2,126,703	2,772,293	3,866,937	3,690,076	3,636,420	4,770,705
Czechoslovakia .. .	567,000	945,000	1,400,000	(c)1,624,000	(c)1,853,000	(c)2,020,000	(c)2,120,000
Finland .. .	36,222	75,871	62,147	91,110	99,619	63,259	99,919
France .. .	1,178,235	(d)3,389,493	(d)4,808,548	(d)6,454,956	(d)8,213,135	d7,638,292	(d)8,611,726
Germany—							
Federal Republic .. .	(a)	2,050,511	2,228,200	4,589,360	7,027,400	9,323,263	10,528,000
Russian Zone .. .	(a)	127,000	137,000	179,000	288,000	332,000	336,000
Hungary .. .	43,000	157,800	298,800	(c) 395,000	(c) 420,000	(c) 500,000	(c) 600,000
Italy .. .	73,964	201,305	377,877	517,763	437,970	563,827	1,032,735
Luxembourg .. .	313,000	1,343,400	1,789,300	2,852,741	2,334,616	2,459,418	3,107,207
Netherlands .. .	24,600	184,200	285,600	434,500	427,300	447,049	515,486
Norway .. .	50,190	133,271	162,709	211,328	229,920	222,923	241,064
Poland .. .	(f) 227,000	714,274	853,426	(e)1,189,000	(e)1,343,000	(e)1,464,000	(e)1,552,000
Roumania (c) .. .	(e) 53,011	54,000	90,000	188,000	270,000	330,000	344,000
Saar .. .	(a)	242,577	642,594	1,116,460	1,557,065	1,657,205	2,332,197
Spain .. .	481,739	500,022	510,351	528,214	614,204	655,966	654,760
Sweden .. .	772,905	707,975	713,125	790,894	846,174	823,848	890,128
Switzerland .. .	4,000	13,230	14,400	35,000	31,000	33,000	43,000
U.S.S.R. .. .	8,800,000	9,900,000	11,300,000	13,800,000	16,400,000	19,100,000	21,800,000
Yugoslavia .. .	11,000	83,000	160,000	170,000	190,000	209,000	244,000
Mexico .. .	214,874	277,785	332,201	278,617	350,141	240,430	196,951
United States .. .	49,034,847	41,531,095	53,676,178	55,278,178	49,032,844	59,285,992	64,686,199
Brazil .. .	255,803	364,867	473,333	543,098	500,192	717,519	759,830
Chile .. .	6,739	(a)	11,030	14,210	18,413	107,750	236,000
China .. .	22,200	1,305	(a)	(a)	(c) 190,000	(c) 830,000	(c)1,100,000
Japan .. .	965,000	208,440	361,153	822,520	1,576,894	2,262,437	3,176,600
Turkey .. .	68,426	76,670	97,464	100,419	114,862	109,462	111,691
<b>TOTAL</b> .. .	<b>66,000,000</b>	<b>66,000,000</b>	<b>84,000,000</b>	<b>97,000,000</b>	<b>98,000,000</b>	<b>116,000,000</b>	<b>131,000,000</b>
<b>WORLD'S TOTAL..</b>	<b>78,000,000</b>	<b>78,000,000</b>	<b>97,000,000</b>	<b>111,000,000</b>	<b>113,000,000</b>	<b>131,000,000</b>	<b>147,000,000</b>

\* For details see page 142.

(a) Information not available.

(b) Years ended June 30 of that stated.

(c) Estimated.

(d) Excluding electric furnace ferro-alloys.

(e) United States Bureau of Mines.

(f) February to December only.

## DETAILS OF PRODUCTION OF PIG-IRON AND FERRO-ALLOYS IN CERTAIN COUNTRIES

(Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Hematite .. ..	1,076,200	1,121,000	1,116,500	1,366,400	1,437,300	1,476,800	1,333,000
Basic .. ..	4,883,700	5,288,300	5,183,300	6,255,500	6,248,200	6,478,000	6,674,700
Foundry .. ..	964,000	1,134,500	1,281,800	1,395,600	1,555,300	1,466,500	1,417,100
Forge .. ..	51,900	65,900	70,300	92,800	87,400	60,500	69,500
Castings .. ..	300	1,400	1,000	2,600	2,300	3,000	2,200
Spiegeleisen (b) ..	26,600	35,300	28,700	31,500	28,800	18,100	28,800
Ferro-manganese (b) ..	104,700	114,800	103,000	132,000	139,200	130,000	143,500
Other ferro-alloys (c) —							
Tungsten (d) ..	2,700	2,000	3,100	2,600	2,000	1,700	
Molybdenum (d) ..	800	600	1,100	1,200	1,400	1,600	
Vanadium (d) ..	200	200	300	300	200	300	
Ferro-chrome ..	6,500	7,400	6,800	9,700	9,800	9,900	
Refined ferro-manganese ..	3,600	4,100	3,800	5,300	6,400	6,000	
Ferro-phosphorus ..	—	500	1,100	1,100	1,100	900	
Ferro-silicon ..	6,000	6,500	6,300	7,500	5,500	4,600	
Canada—							
Basic .. ..	1,268,040	989,995	1,417,191	1,555,012	1,598,508	1,574,500	1,775,617
Foundry .. ..	177,004	135,021	209,475	193,077	192,650	212,735	254,817
Malleable .. ..	142,410	130,566	125,877	149,893	132,490	281,623	248,718
Ferro-alloys .. ..	153,252	124,457	202,788	207,798	180,439	161,160	224,044
India—							
Basic .. ..	1,108,979	1,083,096	972,434	1,048,487	1,100,286	1,274,069	1,420,950
Foundry .. ..	247,165	263,642	347,219	356,398	427,575	290,451	287,209
Direct castings .. ..	40,207	75,705	97,622	51,959	19,478	97,594	91,881
Ferro-alloys .. ..	8,691	15,611	18,121	7,779	63,483	18,367	23,906
<b>FOREIGN COUNTRIES</b>							
Belgium—							
Basic .. ..	612,402	1,980,804	2,592,764	3,605,582	3,509,329	3,508,173	4,549,220
Forge .. ..	15,777	36,130	44,427	59,888	16,864	10,865	
Foundry .. ..	91,403	97,200	123,144	183,171	149,935	106,251	
Ferro-alloys .. ..	3,396	12,569	11,958	18,296	13,948	11,131	
Finland—							
Pig-iron .. ..	34,464	75,537	61,932	90,321	98,511	63,259	99,919
Ferro-alloys .. ..	1,758	334	215	789	1,108	—	—
France—							
Phosphoric (over 1% P)—							
Basic .. ..	880,253	2,695,624	3,754,281	5,072,903	6,582,499	6,178,876	6,880,126
Foundry .. ..	88,043	204,075	291,646	393,018	369,120	281,576	347,504
Semi-phosphoric (from 0.12% to 1% P)—							
Foundry .. ..	20,887	{ 23,687	45,146	129,497	222,228	275,933	360,071
Open hearth, basic .. ..		{ 651	22,790	9,983	13,234	46,332	47,188
Hematite (less than 0.12% P)—							
Foundry .. ..	77,463	128,724	173,624	210,082	242,976	218,619	196,318
Open hearth .. ..	77,537	229,656	299,608	319,752	337,931	193,401	262,291
Bessemer .. ..							
Other pig-iron .. ..	—	(e) 62,053	(c) 109,267	(e) 162,919	(e) 216,615	(e) 171,733	(e) 259,817
Spiegeleisen .. ..	13,140	(f) 28,792	(f) 78,650	(f) 91,657	(f) 145,520	(f) 164,128	(f) 146,169
Ferro-manganese .. ..	3,593	(f) 16,231	(f) 33,536	(f) 64,245	(f) 83,012	(f) 107,694	(f) 112,242
Ferro-silicon .. ..	11,720	—	—	—	—	—	—
Other ferro-alloys .. ..	4,599	(g)	(g)	(g)	(g)	(g)	(g)

(a) Information not available.

(c) Excluded from totals on page 141.

(e) Including "other ferro-alloys."

(g) Included with "other pig-iron."

(b) Blast furnace ferro-alloys.

(d) Metal content.

(f) Excluding electric furnace ferro-alloys.

DETAILS OF PRODUCTION OF PIG-IRON AND FERRO-ALLOYS (Cont.)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Germany (Federal)—							
Hematite .. .	(a)	70,000	125,000	200,000	317,000	402,000	402,000
Malleable .. .	(a)	15,000	15,000	68,000	108,000	156,000	217,000
Basic .. .	(a)	1,457,00	1,291,000	2,943,000	4,593,000	5,755,000	6,419,000
Foundry .. .	(a)	243,000	247,000	382,000	511,000	732,000	776,000
Siegerland Special .. .	(a)	13,000	9,000	25,000	40,000	66,000	86,000
Stahleisen .. .	(a)	206,000	501,000	855,000	1,299,000	1,966,000	2,220,000
Spiegeleisen .. .	(a)	18,000	7,000	54,000	65,000	85,000	106,000
Other pig-iron .. .	(a)	20,000	17,000	20,000	37,000	69,000	193,000
Ferro-manganese .. .	(a)	6,000	—	7,000	31,000	63,000	72,000
Ferro-silicon .. .	(a)	4,000	18,000	28,000	26,000	30,000	37,000
Italy—							
Pig-iron .. .	60,960	173,903	312,983	442,267	386,639	495,812	937,570
Spiegeleisen .. .	3,504	11,673	19,066	20,680	17,603	13,442	(a)
Ferro-manganese .. .	1,750	7,603	20,312	17,854	14,720	15,228	(a)
Ferro-silicon .. .	3,598	1,438	9,035	17,550	12,167	17,267	(a)
Ferro-silico-manganese .. .	1,915	2,657	6,201	7,273	2,711	8,552	(a)
Ferro-chrome .. .	1,043	62	1,078	1,226	1,312	1,163	(a)
Ferro-titanium .. .	13	12	40	61	79	85	(a)
Ferro-tungsten .. .	—	9	91	48	18	43	(a)
Ferro-vanadium .. .	16	—	—	—	8	6	(a)
Ferro-molybdenum .. .	—	9	7	78	132	133	(a)
Ferro-silico-aluminum .. .	—	288	522	322	295	414	(a)
Other ferro-alloys .. .	734	3,733	8,542	10,404	2,286	11,682	(a)
Luxembourg—							
Basic .. .	298,000	1,343,400	1,788,300	2,542,462	2,323,304	2,454,030	3,107,207
Foundry .. .	15,000	—	1,000	40,279	11,312	5,388	—
Norway—							
Pig-iron .. .	33,336	71,907	73,424	62,403	60,712	62,407	53,207
Ferro-silicon .. .	15,735	26,030	36,309	43,771	63,592	62,866	67,402
Other ferro-alloys .. .	3,119	35,334	52,976	105,154	105,616	97,650	120,455
Poland—							
Open hearth .. .	606,795	664,443	(a)	(a)	(a)	(a)	(a)
Foundry .. .	61,536	136,888	(a)	(a)	(a)	(a)	(a)
Phosphoric .. .	(a)	1,016	(a)	(a)	(a)	(a)	(a)
Hematite .. .	21,705	(a)	(a)	(a)	(a)	(a)	(a)
Spiegeleisen .. .	10,744	12,478	11,599	(a)	(a)	(a)	(a)
Ferro-alloys .. .							
Saar—							
Basic .. .	(a)	226,615	596,422	1,011,933	1,436,680	1,553,124	2,154,999
Foundry—							
Hematite .. .	(a)	—	1,561	18,127	30,521	17,657	30,624
Phosphoric .. .	(a)	—	34,593	62,097	41,247	52,270	116,124
Other pig-iron and ferro-alloys .. .	(a)	15,962	10,018	24,303	48,617	34,154	30,450
Spain—							
Pig-iron .. .	471,333	483,307	495,355	513,319	599,949	641,829	635,663
Ferro-manganese .. .	6,567	11,822	10,098	9,909	8,799	8,456	11,763
Ferro-silicon .. .	3,803	4,783	4,783	4,878	5,362	5,681	6,933
Ferro-tungsten .. .	36	110	115	108	94	70	35
Ferro-chrome .. .	(a)	(a)	(a)	(a)	(a)	176	163
Ferro-silico-manganese .. .	(a)	(a)	(a)	(a)	(a)	647	203
Sweden—							
Open hearth, acid .. .	158,799	138,972	119,647	131,489			
do. basic .. .	237,916	173,622	191,027	206,466			
Bessemer, acid .. .	15,038	12,419	9,250	13,173			
do. basic .. .	211,384	173,795	200,372	200,024			
Foundry-hematite .. .	28,787	43,507	35,223	64,921	798,141	772,330	837,818
do. phosphoric .. .	55,158	93,170	101,226	106,753			
do. other .. .	1,469	2,683	3,784	3,388			
Forge .. .	30,405	24,462	12,934	15,254			
Castings .. .	10,376	12,890	13,364	12,893			

(a) Information not available.

DETAILS OF PRODUCTION OF PIG-IRON AND FERRO-ALLOYS (Cont.)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Sweden—continued							
Spiegeleisen .. .	290	579	650	—	129	320	1,268
Ferro-manganese .. .	2,693	3,935	4,878	6,989	10,294	9,322	9,314
Ferro-silicon .. .	7,356	8,339	6,259	11,902	14,186	14,108	13,862
Ferro-silico-manganese .. .	4,468	3,734	2,982	3,708	4,489	5,431	2,879
Ferro-chrome .. .	7,652	13,252	9,068	10,778	14,648	16,851	18,761
Ferro-titanium .. .	38	5	42	37	56	53	25
Ferro-tungsten .. .	343	898	1,686	1,482	1,525	1,217	815
Ferro-molybdenum .. .	178	420	329	295	574	578	680
Ferro-vanadium .. .	10	39	91	185	158	133	139
Other ferro-alloys .. .	189	145	26	42	51	68	(a)
Metallic silicon etc. .. .	167	—	287	1,113	1,910	3,429	(a)
Silico-chrome .. .	237	1,009	—	—	13	8	(a)
Metallic chrome .. .	—	—	—	2	—	—	(a)
<b>United States—</b>							
Basic .. .	35,595,520	30,113,978	40,004,235	41,352,735	36,522,639	44,536,108	48,404,026
Bessemer .. .	7,370,994	5,296,798	6,412,685	6,903,152	6,303,050	7,223,757	8,076,745
Low phosphorus .. .	280,413	149,119	295,641	343,237	269,214	299,480	281,004
Foundry .. .	2,007,935	2,273,157	2,636,969	2,472,777	2,235,636	2,505,578	2,723,773
Malleable .. .	2,098,282	1,955,612	2,566,743	2,313,086	2,151,282	2,840,217	3,003,008
Other pig-iron .. .	167,543	192,404	163,113	235,742	207,966	261,742	256,335
Ferro - manganese and spiegeleisen .. .	630,427	482,197	714,933	718,762	602,705	693,643	773,040
Ferro-silicon .. .	730,222	927,804	716,943	752,129	595,823	749,703	820,612
Other ferro-alloys .. .	153,511	140,026	164,916	186,558	144,529	175,764	347,656
<b>Japan—</b>							
Pig-iron .. .	945,000	195,260	349,300	795,262	1,524,228	2,197,645	3,077,700
Ferro-chrome .. .				146			
Ferro-manganese .. .				17,872			
Ferro-molybdenum .. .				—			
Ferro-phosphorus .. .				541			
Ferro-silicon .. .	20,468	13,180	11,853	7,320	52,666	64,792	98,900
Ferro-titanium .. .				18			
Ferro-tungsten .. .				337			
Ferro-vanadium .. .				—			
Other ferro-alloys .. .				1,015			

(a) Information not available.

PRODUCTION OF STEEL INGOTS AND CASTINGS\*

(Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom .. .	11,824,400	12,695,300	12,724,500	14,876,600	15,552,900	16,292,700	15,638,500
Southern Rhodesia .. .	—	—	—	8,988	19,287	22,838	27,321
Union of South Africa (g) ..	525,400	498,926	588,304	669,375	719,018	743,125	933,131
Canada .. .	2,569,578	2,077,932	2,630,315	2,857,572	2,848,551	3,021,049	3,185,144
India .. .	1,353,495	1,293,291	1,255,849	1,255,989	1,352,696	1,437,858	1,499,703
Australia (b) .. .	1,395,065	1,089,237	1,341,601	1,380,195	1,213,627	1,255,050	1,476,173
<b>TOTAL</b> .. .	<b>17,668,000</b>	<b>17,654,000</b>	<b>18,541,000</b>	<b>21,049,000</b>	<b>21,706,000</b>	<b>22,772,600</b>	<b>22,721,700</b>
<b>FOREIGN COUNTRIES</b>							
Austria .. .	168,528	184,054	350,972	637,943	821,397	931,636	1,011,559
Belgium .. .	737,328	2,260,299	2,836,365	3,858,050	3,788,322	3,717,743	4,924,953
Czechoslovakia .. .	933,000	1,642,000	2,250,000	(d) 2,608,000	(d) 2,718,000	(d) 2,963,000	(d) 3,260,000
Finland .. .	79,134	81,903	61,137	96,703	107,310	100,757	130,086
France .. .	1,634,745	4,338,485	5,642,278	7,121,387	9,007,390	8,515,212	9,679,536
Germany—							
Federal Republic .. .	{ (a)	2,511,000	3,012,000	5,473,000	9,011,000	11,929,719	13,293,000
Russian Zone .. .	{ (a)	200,000	250,000	327,000	593,000	979,000	1,527,000
Hungary .. .	126,400	347,300	587,400	750,000	835,000	1,006,000	1,215,000
Italy .. .	388,521	1,135,078	1,676,918	2,091,583	2,023,035	2,325,119	3,014,594
Luxemburg .. .	255,000	1,274,500	1,686,000	2,414,105	2,235,977	2,411,984	3,028,421
Netherlands .. .	13,000	135,800	204,000	320,000	430,000	482,000	545,500
Norway .. .	36,600	57,600	65,100	72,700	76,200	79,800	86,200
Poland .. .	(c) 493,700	1,200,167	1,554,180	1,924,000	2,267,000	2,475,000	2,748,000
Roumania .. .	(f) 115,870	155,000	180,000	(d) 335,000	(d) 452,000	(d) 549,000	(d) 636,000
Saar .. .	(a)	286,233	696,979	1,208,307	1,729,551	1,868,327	2,561,575
Spain .. .	566,856	630,259	598,071	614,204	708,263	805,309	806,246
Sweden .. .	1,184,440	1,183,773	1,171,897	1,237,066	1,348,735	1,414,146	1,480,238
Switzerland .. .	106,100	33,500	91,000	118,000	122,000	128,000	142,000
U.S.S.R. (h) .. .	10,800,000	13,100,000	14,300,000	18,300,000	22,900,000	26,900,000	30,800,000
Yugoslavia (d) .. .	66,000	200,000	305,000	361,000	395,000	421,000	427,400
Mexico .. .	189,000	246,800	316,450	265,298	339,692	215,107	445,916
United States (e) .. .	71,162,186	59,466,718	75,798,278	79,143,277	69,623,371	86,460,781	93,928,436
Brazil .. .	202,683	337,202	380,859	475,455	595,889	767,155	828,485
China (d) .. .	(a)	(a)	(a)	(a)	190,000	800,000	1,140,000
Japan .. .	2,055,000	555,529	926,466	1,686,762	3,062,268	4,771,633	6,399,100
Turkey .. .	63,174	78,632	91,100	100,119	101,367	89,351	133,270
<b>TOTAL</b> .. .	<b>93,000,000</b>	<b>91,000,000</b>	<b>114,000,000</b>	<b>132,000,000</b>	<b>135,000,000</b>	<b>163,000,000</b>	<b>184,000,000</b>
<b>WORLD'S TOTAL</b> .. .	<b>110,700,000</b>	<b>108,700,000</b>	<b>132,600,000</b>	<b>153,000,000</b>	<b>157,000,000</b>	<b>186,000,000</b>	<b>207,000,000</b>

\* For details see page 146.

(a) Information not available.

(b) Years ended June 30 of that stated.

(c) February to December only.

(d) Estimated.

(e) Excluding steel castings which were produced by companies not manufacturing steel ingots.

(f) U.S. Bureau of Mines.

(g) Excluding steel castings for which the amounts produced for sale were 59,464 tons and 57,753 tons in 1950 and 1951 respectively.

(h) Revised.

DETAILS OF PRODUCTION OF STEEL INCOTS AND CASTINGS IN CERTAIN COUNTRIES

(Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Ingots and castings—							
Open hearth, acid	1,159,100	1,228,600	1,228,800	1,398,300	1,367,000	1,310,700	1,259,400
do. basic	9,025,700	9,900,600	9,869,900	11,589,300	12,230,000	12,981,200	12,277,400
Bessemer, acid	170,700	209,800	207,900	218,300	226,400	247,800	241,400
do. basic	687,000	723,800	678,200	786,200	818,800	845,700	862,100
Ingots, electric ..	361,400	345,000	425,700	526,100	543,700	528,800	574,800
Castings, electric ..	180,600	134,300	150,000	180,800	196,000	207,600	244,500
All other ingots and castings ..	239,900	153,200	164,000	177,600	171,000	170,900	178,900
Southern Rhodesia—							
Ingots .. ..	—	—	—	8,003	18,242	21,678	26,125
Castings .. ..	—	—	—	985	1,045	1,160	1,196
Canada—							
Ingots—							
Open hearth, basic ..	2,142,730	1,694,606	2,177,294	2,340,130	2,400,032	2,474,859	2,605,245
do. electric ..	319,010	315,876	371,616	416,176	363,920	469,847	471,653
Casting—							
Open hearth, basic ..	27,871	21,934	21,518	30,394	25,599	20,079	28,110
Bessemer .. ..	842	536	662	353	71	207	246
Electric .. ..	79,125	44,980	59,225	70,519	58,929	56,057	79,890
India—							
Ingots—							
Open hearth, basic ..	1,198,639	1,160,347	1,134,519	1,140,567	1,225,813	1,307,518	1,387,618
do. acid ..	68,811	63,420	50,629	44,542	50,126	47,684	37,243
Electric .. ..	66,360	52,607	52,730	49,018	53,304	58,614	53,270
Castings .. ..	19,685	16,917	17,971	21,862	23,453	24,038	21,572
<b>FOREIGN COUNTRIES</b>							
Belgium—							
Ingots, open hearth ..	157,276	355,722	378,181	465,303	430,945	363,338	(b) 601,063
do. Bessemer, basic ..	542,603	1,835,752	2,349,232	3,247,487	3,212,876	3,243,932	4,196,725
do. electric .. ..	8,809	19,379	48,679	79,071	78,871	66,185	127,165
Castings .. ..	28,640	49,446	60,273	66,188	65,630	44,288	(c)
France—							
Ingots and castings—							
Bessemer, acid ..	32,397	54,264	58,617	70,467	103,660	73,879	75,442
do. basic .. ..	750,253	2,258,523	3,091,164	4,196,335	5,562,293	5,363,258	5,746,954
Open hearth, acid ..	701	—	1,357	—	1,793	—	6,214
do. basic .. ..	623,280	1,592,223	1,994,599	2,302,878	2,713,322	2,547,001	3,093,607
Crucible .. ..	3,384	3,246	4,249	4,268	2,649	2,119	3,686
Electric .. ..	224,730	430,229	492,292	547,439	623,673	528,955	753,633
Of which—							
Ingots .. ..	1,513,163	4,196,479	5,480,873	6,929,211	8,742,976	8,288,339	9,450,718
Castings .. ..	121,582	142,006	161,405	192,176	264,414	226,873	228,818
Germany (Federal)—							
Ingots—							
Open hearth .. ..	(a)	1,154,000	1,738,000	2,780,000	4,733,000	6,418,000	6,958,000
Bessemer, basic ..	(a)	1,277,000	1,153,000	2,469,000	3,993,000	4,968,000	5,597,000
Electric .. ..	(a)	19,000	46,000	105,000	128,000	214,000	307,000
Other .. ..	(a)	7,000	15,000	25,000	29,000	27,000	(d) 47,000
Castings—							
Open hearth .. ..	(a)	19,000	25,000	38,000	58,000	138,000	179,000
Bessemer .. ..	(a)	21,000	20,000	30,000	33,000	81,000	105,000
Electric .. ..	(a)	10,000	13,000	22,000	32,000	73,000	100,000
Other .. ..	(a)	4,000	2,000	4,000	5,000	11,000	(e)
Italy—							
Ingots .. ..	360,338	1,077,299	1,599,638	2,011,491	1,945,573	2,239,242	2,916,630
Castings .. ..	28,183	57,779	77,280	80,092	77,462	85,877	97,964

(a) Information not available.

(b) Including castings.

(c) Included with ingots.

(d) Including "other castings".

(e) Included with "other ingots".

**DETAILS OF PRODUCTION OF STEEL INGOTS AND CASTINGS (Cont.)**

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Luxemburg—							
Open hearth .. ..	—	1,000	1,000	267	59	—	2,958,858
Bessemer, basic .. ..	254,000	1,262,700	1,660,400	2,363,930	2,191,107	2,347,441	69,563
Electric .. ..	1,000	10,800	24,600	49,908	44,811	64,543	—
Norway—							
Ingots .. ..	32,200	49,600	56,700	64,300	67,900	71,000	77,200
Castings .. ..	4,400	8,000	8,400	8,400	8,300	8,800	9,000
Poland—							
Ingots .. ..	(a)	1,180,845	(a)	(a)	(a)	(a)	(a)
Castings .. ..	(a)	19,322	(a)	(a)	(a)	(a)	(a)
Saar—							
Ingots—							
Open hearth .. ..	(a)	82,087	169,684	290,913	416,060	437,205	553,118
Bessemer basic .. ..	(a)	199,109	512,907	882,256	1,267,884	1,385,420	1,937,479
Electric .. ..	(a)	1,447	8,492	20,510	25,524	23,555	46,766
Castings—							
Open hearth .. ..	(a)	286	658	1,696	2,066	2,430	2,904
Bessemer acid .. ..	(a)	1,518	2,098	3,303	3,280	2,768	3,793
Electric .. ..	(a)	1,786	3,140	9,629	14,737	16,949	17,515
Spain—							
Open hearth and Bessemer	527,137	572,655	550,557	561,175	657,135	718,479	707,735
Electric .. ..	39,719	57,604	47,514	53,029	51,128	86,830	98,511
Sweden—							
Open hearth, acid .. ..	174,782	182,450	179,081	180,043	203,661	198,884	211,038
do. basic .. ..	527,298	501,062	473,047	486,618	472,946	496,145	494,249
Bessemer, acid .. ..	17,953	21,493	23,567	27,563	27,317	27,857	28,236
do. basic .. ..	109,038	92,362	122,097	117,782	129,654	115,628	143,076
Electric .. ..	355,368	386,406	374,105	425,060	515,157	575,632	603,639
United States—							
Ingots—							
Open hearth, acid .. ..	632,123	418,175	482,149	479,494	364,604	425,362	540,169
do. basic .. ..	63,389,125	53,624,948	67,984,704	70,178,624	62,221,385	76,429,590	82,423,536
Bessemer .. ..	3,844,035	2,971,194	3,779,056	3,788,547	3,523,800	4,048,712	4,366,916
Crucible .. ..	20	2,213,450	3,286,177	4,440,724	3,292,033	5,292,419	6,288,720
Electric .. ..	3,019,356						
Castings (b)—							
Open hearth, acid .. ..	144,418	117,238	111,177	78,814	87,801	111,118	155,430
do. basic .. ..	66,122	46,747	59,284	102,494	48,355	54,027	65,256
Electric .. ..	66,987	74,964	95,729	74,580	85,393	99,553	88,409
Japan—							
Open hearth .. ..	.. ..	2,055,000	{ 161,650	474,944	1,141,851	2,386,900	3,838,400
Electric .. ..	.. ..		{ 393,879	451,522	544,911	599,000	740,500
Other .. ..	.. ..	—	—	—	—	75,800	191,300

(a) Information not available.

(b) Excluding steel castings which were produced by companies not manufacturing steel ingots.

EXPORTS OF PIG-IRON, FERRO-ALLOYS, STEEL INGOTS AND CASTINGS, ETC.

(Domestic Produce)

(Long tons)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Pig-iron—							
Forge and foundry ..	1,038	30,757	41,750	1,072	3,459	15,490	3,641
Refined ..	(a)	(a)	(a)	429	6,401	16,574	11,986
Other ..	—	1,352	771	3	21	3,355	340
Spiegeleisen and ferro-manganese ..	31,729	58,636	9,069	3,236	9,267	2,530	1,437
Ferro-tungsten ..	159	277	960	1,082	911	1,171	394
Other ferro-alloys ..	1,131	981	795	788	1,034	1,546	1,029
Iron and steel ingots ..	—	25	23	95	134	84	130
Blooms, billets and slabs—							
Iron .. ..	—	12	285	7	18	29	7
Steel .. ..	575	3,059	3,240	3,862	2,602	5,856	4,407
Special steel .. ..	7	1,505	144	1,734	210	761	721
Old and scrap (c) ..	207	607	8,072	3,158	1,545	6,310	2,378
Southern Rhodesia—							
Pig-iron .. ..	—	—	—	2,792	4,490	6,135	8,162
Union of South Africa—							
Pig-iron, etc. .. ..	5,134	3,457	1,705	881	287	17,701	3,219
British West Indies—							
Trinidad and Tobago—							
Old and scrap .. ..	4	—	109	2,275	4,373	3,000	600
Canada—							
Pig-iron .. ..	19,512	838	1,317	591	11,166	173,686	199,675
Spiegeleisen .. ..	3,004	792	747	645	500	316	—
Ferro-chrome .. ..	(b)	5,604	24,762	20,103	16,204	29,389	39,046
Ferro-manganese .. ..	(b)	29,005	65,554	66,517	31,507	23,724	60,275
Ferro-silicon .. ..	56,673	42,161	54,949	55,095	59,310	53,271	69,262
Other ferro-alloys .. ..	62,754	7,529	9,334	7,083	6,146	2,655	1,466
Billets, ingots and blooms .. ..	40,074	70,818	75,920	31,940	60,853	152,196	34,855
Old and scrap .. ..	25,410	10,852	2,732	4,655	35,692	55,909	35,539
Tinplate scrap .. ..	17,318	22,999	24,961	22,359	19,688	21,483	23,266
Hong Kong (including re-exports)—							
Pig-iron .. ..	(a)	(a)	(a)	25	42	34	34
Special steel .. ..	(a)	(a)	(a)	51	347	602	1,624
Old and scrap .. ..	(a)	(a)	(a)	27,261	13,647	39,576	57,564
India—							
Pig-iron .. ..	67,417	8,367	1,730	39,751	68,142	30,402	51,427
Ferro-manganese .. ..	—	10,900	—	—	—	—	—
Old and scrap .. ..	—	—	—	53	263	—	32,868
Malaya (including exports)—							
Pig-iron .. ..	(a)	2	252	3,160	125	93	332
Scrap .. ..	(a)	444	1,461	53,074	50,531	19,556	38,878
Palestine—							
Old and scrap .. ..	6	(a)	(a)	(a)	(a)	(a)	(a)
Australia—							
Pig-iron .. ..	4,827	54,054	103,602	61,311	17,705	11,054	5,812
Ferro-alloys .. ..	—	152	87	113	8	124	82
Ingots, blooms, billets, etc. .. ..	52,360	116,663	44,018	10,583	9,382	3,859	1,580
Old and scrap .. ..	30	19,698	10,469	14,445	9,569	(a)	(a)
Irish Republic—							
Old and scrap .. ..	3,081	20,021	10,001	12,779	10,461	7,569	8,082

(a) Information not available.

(b) Included, if any, with "other ferro-alloys."

(c) Excluding ships intended for breaking up as follows (long tons):—1946—9,342; 1947—4,400; 1948—10,528; 1949—12,496; 1950—4,542; 1951—314.

## EXPORTS OF PIG-IRON, FERRO-ALLOYS, STEEL INGOTS AND CASTINGS, ETC. (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES</b>							
Austria—							
Pig-iron .. ..	(a)	(a)	80,277	220,100	331,344	410,546	354,367
Iron ingots and bars ..	(a)	(a)	(a)	(a)	3,410	3,687	37
Steel ingots and bars ..	(a)	(a)	(a)	(a)	16,330	20,184	25,593
Scrap .. ..	(a)	(a)	71,922	50,560	19,332	2,667	2,382
Belgium-Luxemburg E.U.—							
Pig-iron .. ..	(a)	(a)	6,848	52,753	21,359	26,357	40,252
Ferro-alloys .. ..	(a)	(a)	(a)	1,112	128	268	73
Crude iron ingots ..	(a)	(a)	(a)		3,102	12,318	3,051
Steel ingots .. ..	(a)	(a)	(a)				27,758
Steel blooms and billets ..	(a)	(a)	72,121	193,327	395,014	280,496	391,171
Special steel .. ..	(a)	(a)	1,629	15,890	507	700	11,216
Old and scrap .. ..	(a)	(a)	(a)	22,036	17,229	32,686	10,315
Czechoslovakia—							
Ferro-alloys .. ..		527	344	—	(a)	(a)	(a)
Billets of cast iron ..		468	—	—	(a)	(a)	(a)
Billets, blooms and bars of puddled iron ..	(a)	2,676	3,991	(b) 2,898	(a)	(a)	(a)
Old and scrap .. ..		—	239	(b) 623	(a)	(a)	(a)
Denmark—							
Old and scrap .. ..	15,762	44,436	50,030	61,780	15,375	29,295	9,308
Finland—							
Pig-iron .. ..	3,919	11,202	7,206	11,314	13,200	22,384	13,447
Ferro-alloys .. ..	—	398	12	—	424	150	265
Old and scrap .. ..	20	100	1	8	7	3	552
France—							
Pig-iron .. ..	535	18,754	12,061	87,570	193,061	284,400	323,062
Spiegeleisen .. ..	—	10	—	1,801	5,984	17,642	9,818
Ferro-manganese .. ..	17	334	951	102	172	34,378	28,827
Ferro-silicon .. ..	183	905	2,080				
Ferro-chrome .. ..	1	39	37		1,473	1,107	6,149
Other ferro-alloys .. ..	217	219	260				16,749
Ingots .. ..	1	218	2,396		2,192	2,177	3,061
Blooms and billets, forged or rolled .. ..	2,660	2,555	3,764	20,496	158,910	454,956	285,788
Tool steel .. ..	152	618	1,705	(a)	(a)	(a)	(a)
Machine iron or steel .. ..	6	9,256	13,925	(a)	(a)	(a)	(a)
Other special steel .. ..	108	776	8,522	(a)	(a)	(a)	(a)
Old, filings and scrap .. ..	79	6,982	71,386	58,410	177,529	457,603	158,737
Germany (Federal)—							
Pig-iron .. ..	(a)	(a)	(a)	61,888	90,301	466,565	453,823
Ferro-manganese .. ..				—	36	510	
Ferro-silicon, etc. .. ..				18	—	85	
Other ferro-alloys .. ..	(a)	(a)	(a)	112	603	2,056	1,536
Rough blooms, bars, ingots, etc. .. ..				4,994	15,676	93,797	26,818
Old and scrap .. ..	(a)	a)	(a)	548,072	2,432,096	2,545,531	721,537
Greece—							
Scrap .. ..	—	—	689	4,389	2,373	66	14,038
Italy—							
Pig-iron .. ..	—	(a)	1	11	301	16	1
Ferro-alloys .. ..	—	7	298	2,746	3,496	3,244	16,700
Steel ingots, blooms and sheet bar .. ..	(a)	(a)	135	17	50	395	1
Scrap .. ..	(a)	(a)	—	3,316	169	1,157	55
Netherlands—							
Pig-iron and ferro-alloys .. ..	(a)	114,182	160,165	274,947	231,006	252,225	239,084
Ingots, blooms and billets .. ..		6,668	7,873	2,446	6,871	14,782	8,269
Old and scrap .. ..		13,113	58,919	40,288	25,964	151,967	30,308

(a) Information not available.

(b) January to October only.

## EXPORTS OF PIG-IRON, FERRO-ALLOYS, STEEL INGOTS AND CASTINGS, ETC. (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Norway—							
Pig-iron—electric ..	6,372	43,909	47,214	36,135	19,098	26,095	39,665
Ferro-chrome ..	623	4,492	11,486	15,464	14,559	16,152	21,624
Ferro-manganese ..	162	13,178	31,761	58,133	52,879	82,178	79,161
Ferro-silicon ..	12,777	21,109	32,973	34,964	40,329	52,805	49,343
Ferro-silico-manganese ..	729	2,258	3,817	9,411	8,022	19,183	22,482
Other ferro-alloys ..	—	—	—	20	46	665	(a)
Steel ingots ..	4	177	106	9	28	3	(a)
Old and scrap ..	5,011	23,811	5,915	352	129	1,187	238
Poland—							
Pig-iron and ferro-alloys ..	(a)	(a)	44,662	(a)	(a)	(a)	(a)
Portugal—							
Old and scrap ..	13,887	18,633	12,301	23,576	14,193	17,311	209
Spain—							
Pig-iron ..	2,872	2,866	5,569	5,388	20,216	647	39,504
Iron and steel ingots and blooms ..	28	44	27	1	13	7	9
Old and scrap ..	5	38	5	1	—	38	—
Sweden—							
Pig-iron ..	4,256	16,795	16,137	19,544	30,835	68,208	66,657
Sponge iron ..	203	2,916	2,510	4,670	4,356	8,517	14,073
Ferro-manganese ..	271	287	1,326	117	725	981	369
Spiegeleisen ..	—	107	114	—	—	—	—
Ferro-silicon ..	249	779	468	1,134	1,234	5,653	4,794
Ferro-silico-manganese ..	380	48	53	20	203	878	220
Ferro-chrome ..	177	1,952	3,650	271	1,079	4,624	5,150
Ferro-tungsten ..	5	288	1,024	704	759	758	347
Other ferro-alloys ..	9	234	289	224	290	442	800
Steel ingots ..	—	—	—	—	—	19	9,196
Steel blooms ..	—	98	148	98	—	137	—
Tool steel ..	133	420	426	519	325	436	688
Other special steel ..	442	1,227	1,251	1,670	1,924	2,553	2,607
Old, filings and scrap ..	530	2,279	3,715	3,088	2,975	4,381	4,697
Switzerland—							
Ferro-chrome and ferro-silicon ..	2	77	540	1,728	1,569	1,289	3,724
Old, filings and scrap ..	—	19,218	10,883	3,602	998	30,781	5,852
Yugoslavia—							
Ferro-chrome ..	(a)	(a)	(a)	(a)	(a)	{	3,206
Ferro-manganese ..							1,321
Ferro-silico-manganese ..							846
Ferro-silicon ..							1,283
Other ferro-alloys ..							475
Algeria—							845
Old, filings and scrap ..	9	114	16,201	19,644	2,413	63,731	78,805
Egypt (including re-exports) —						167	
Scrap ..	—	1,029	—	20	216	106	(a)
Morocco (French)—							
Old and scrap ..	19	169	4,445	(a)	(a)	(a)	(a)
Tunis—							
Scrap ..	(a)	(a)	(a)	(a)	46,773	24,202	(a)
Cuba—							
Old and scrap ..	4,525	(a)	(a)	34,636	12,344	(a)	(a)
Mexico—							
Ferro-alloys ..	380	22	—	—	—	1	(a)
Ingots ..	2,549	15,116	11,315	—	—	3	(a)

(a) Information not available.

## EXPORTS OF PIG-IRON, FERRO-ALLOYS, STEEL INGOTS AND CASTINGS, ETC. (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
United States—							
Pig-iron .. . .	81,221	85,388	35,895	6,279	72,597	6,083	5,853
Ferro-manganese and spiegeleisen .. . .	2,883	9,342	18,280	17,630	5,917	841	641
Ferro-chrome .. . .	1,313	2,241	2,751	6,030	1,964	309	214
Ferro-molybdenum .. . .	789	331	425	531	426	526	662
Ferro-vanadium .. . .	76	50	80	107	87	37	55
Ferro-silicon .. . .	972	2,824	1,212	2,211	2,281	1,771	2,478
Ferro-tungsten .. . .	385	81	37	560	277	149	127
Ferro-titanium .. . .	664	491	455	429	160	153	157
Other ferro-alloys .. . .	604	1,291	2,079	47,474	4,791	38,283	49,391
Steel ingots, slabs, blooms, billets and sheet bars .. . .	181,916	404,048	438,584	195,840	185,147	53,347	119,003
Old and scrap .. . .	70,767	121,665	146,675	183,322	262,280	186,406	196,344
Tin plate scrap and waste .. . .	12,648	6,831	21,218	29,246	41,865	55,309	56,765
Brazil—							
Pig-iron .. . .	16,567	22,650	28,999	64,169	11,456	—	(a)
Ferro-manganese .. . .	2,047	2	—	49	177	(a)	(a)
Ferro-nickel .. . .	111	—	15	—	—	(a)	(a)
Ferro-silicon .. . .	329	6	—	1,019	672	(a)	(a)
Chile—							
Ferro-manganese .. . .	5	1,841	3,592	4,885	6,533	4,178	6,445
Ingots .. . .	1,385	354	3,440	349	—	(a)	(a)
Colombia—							
Old and scrap .. . .	2,363	(a)	(a)	(a)	(a)	(a)	(a)
China—							
Pig-iron .. . .	(a)	1,968	—	(a)	(a)	(a)	(a)
Iran (b)—							
Ingots, old and scrap .. . .	(a)	54	2	(a)	(a)	(a)	(a)
Japan—							
Ferro-chrome .. . .	—	—	—	520	1,252	{	1,319
Ferro-manganese .. . .	—	—	—	—	—	2,496	251
Ferro-silicon .. . .	—	—	—	(a)	(a)	451	3,630
Other ferro-alloys .. . .	—	—	—	95,665	116,924	1,913	(a)
Scrap .. . .	(a)	(a)	(a)	—	—	(a)	1,902
Korea—							
Pig-iron (c) .. . .	31,495	(a)	7,449	(a)	(a)	(a)	(a)
Manchuria—							
Pig-iron (c) .. . .	17,715	(a)	(a)	(a)	(a)	(a)	(a)
Syria and Lebanon—							
Old and scrap .. . .	4	205	(a)	(a)	(a)	(a)	(a)
Turkey—							
Ingots and blocks .. . .	621	4,906	27,031	2,710	738	—	23,319
Ferro-Alloys .. . .	(a)	—	(a)	(a)	(a)	(a)	1,968
Old and scrap .. . .	—	—	4,164	2,784	1,130	2,658	20,686

(a) Information not available.

(b) Years ended March 20 of the year following that stated. Including re-exports.

(c) Imports into Japan from the country indicated.

IMPORTS OF PIG-IRON, FERRO-ALLOYS, STEEL INGOTS AND CASTINGS, ETC.  
 (Less Re-exports)  
 (Long tons)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Pig-iron—							
Charcoal .. ..	12	7	—	3,426	40	411	1,143
Forge and foundry .. ..	—	492	1,414	1,483	—	6,269	5,481
Hematite .. ..	3,646	—	2,465	37,373	110,827	25,300	53,282
Basic .. ..	104,213	18,245	5,874	15,574	148,931	159,454	237,785
Other pig-iron .. ..	—	950	1,126	1,500	2,021	3,149	3,440
Spiegeleisen and ferro-manganese .. ..	(c) 25	150	1,685	—	—	485	1,167
Ferro-silicon .. ..	32,213	33,144	46,102	58,832	65,148	65,608	64,136
Ferro-chrome .. ..	2,999	3,683	20,815	15,773	10,054	12,117	22,279
Other ferro-alloys .. ..	11,168	7,706	9,581	11,794	9,125	11,246	13,074
Iron and steel ingots .. ..	36,417	74,809	111,767	19,180	8,188	419	—
Blooms, billets, slabs—							
Iron .. .. ..	—	5	71	37	112	47	2
Steel .. .. ..	79,694	299,569	201,224	162,388	299,200	160,751	102,657
Special steel—							
Ingots, blooms and billets .. .. ..	505	101	2,512	11,816	1,701	152	1,301
Old and scrap (b) .. .. ..	178,287	443,028	378,588	857,621	2,097,162	1,958,310	589,429
Anglo-Egyptian Sudan—							
Pig-iron .. .. ..	31	40	—	100	—	—	(a) 5,677
Crude iron and steel .. .. ..	966	1,902	4,120	3,402	5,358	5,022	
Kenya—							
Pig-iron .. .. ..	(a)	(a)	(a)	379	1,000	300	201
Ingots, blooms, etc. .. .. ..	(a)	(a)	(a)	19	—	1	6
Mauritius—							
Pig-iron .. .. ..	43	21	10	17	20	25	20
Northern Rhodesia—							
Pig, ingots, etc. .. .. ..	393	676	199	1,760	4,116	5,484	6,580
Southern Rhodesia—							
Pig, ingots, etc. .. .. ..	3,947	2,859	1,710	2,436	1,070	297	698
Tool and drill steel .. .. ..	431	815	670	651	480	425	269
South West Africa—							
Pig-iron .. .. ..	—	1	18	46	1	107	(a)
Tanganyika—							
Pig-iron .. .. ..	(a)	(a)	(a)	105	330	189	356
Ferro-alloys .. .. ..	(a)	(a)	(a)	(a)	(a)	20	76
Ingots, blooms, etc. .. .. ..	(a)	(a)	(a)	12	21	2	1
Union of South Africa—							
Pig-iron and steel ingots .. .. ..	25,320	1,644	571	630	610	656	(a)
Ferro-silicon .. .. ..	1	234	92	9	171	11	(a)
Ferro-manganese .. .. ..	126	5	1	29	83	18	(a)
Other ferro-alloys .. .. ..	221	298	300	452	203	78	(a)
Tool and drill steel .. .. ..	1,384	1,422	1,538	1,326	1,146	2,487	1,916
British West Indies—							
Jamaica—							
Pig-iron .. .. ..	—	—	—	—	120	—	—
Trinidad and Tobago—							
Pig-iron .. .. ..	— 1 } .. .. ..	1	—	{ — 10	22	6	(a)
Ingots, etc. .. .. ..	— 1 }	1	—	{ — 1	1	3	(a)

(a) Information not available.

(b) Excluding ships intended for breaking up as follows :—

Year	Long tons
1945 .. .. ..	2,000
1946 .. .. ..	Nil
1947 .. .. ..	41,505
1948 .. .. ..	75,640
1949 .. .. ..	43,886
1950 .. .. ..	124,890
1951 .. .. ..	52,511

(c) Excess of re-exports.

## IMPORTS OF PIG-IRON, FERRO-ALLOYS, STEEL INGOTS AND CASTINGS, ETC. (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951	
<b>BRITISH COUNTRIES (Cont.)</b>								
Canada (b)—								
Pig-iron .. . . .	6,776	10,826	7,940	6,587	18,331	26,454	19,299	
Sponge iron .. . . .	4	50	—	—	—	9	39	
Ferro-alloys .. . . .	1,998	2,571	2,611	2,386	2,605	4,228	5,789	
Ingots, blooms and billets .. . . .	36,256	4,645	7,889	46,911	53,633	22,918	106,157	
Scrap .. . . .	52,496	175,137	167,439	281,944	254,353	163,525	95,953	
Newfoundland (c)—								
Pig-iron and ferro-alloys .. . . .	244	359	70	186	(c)	(c)	(c)	
Ceylon—	.. . . .	10	549	1,210	124	1,107	707	1,482
Cyprus—	.. . . .	40	13	52	421	655	1,788	132
Pig-iron .. . . .	(d)	114	445	300	123	305	(d) 1,075	(d) 2,076
Hong Kong (total imports)—								
Pig-iron .. . . .	(a)	(a)	(a)	419	1,618	1,493	241	
Special steel .. . . .	(a)	(a)	(a)	72	124	522	673	
Old and scrap .. . . .	(a)	(a)	(a)	9,998	6,474	3,194	9,440	
India—								
Pig-iron .. . . .	—	—	100	294	23	322	14	
Ingots, blooms and billets .. . . .	79,466	10,638	411	321	11,912	70,857	33,322	
Tool steel .. . . .	22	80	186	51	344	155	227	
Ferro-alloys .. . . .	4,955	1,893	918	854	2,100	1,111	3,718	
Old and scrap .. . . .	(e) 3,096	(e) 8,449	(e) 18,542	(e) 7,241	7,029	11,664	3,861	
Malaya (total imports)—								
Pig-iron .. . . .	(a)	60	1,565	632	726	3,565	13,668	
Scrap .. . . .	(a)	12	52	718	2,466	6,032	2,209	
Palestine—								
Pig-iron .. . . .	929	1,521	(a)	(a)	(f)	(f)	(f)	
Old and scrap .. . . .	143	(a)	(a)	(a)	(f)	(f)	(f)	
Australia—								
Pig-iron .. . . .	—	—	10	400	1,020	12,119	11,438	
Ferro-manganese .. . . .	786	{ 739	144	59	709	339	80	
Other ferro-alloys .. . . .		{ 329	1,225	896	3,490	486	1,345	
Ingots and billets of high grade carbon alloy steels .. . . .	—	6	8	6	585	754	220	
Ingots, blooms, billets, etc. .. . . .	20	73	27	79	187	(e) 1,172	1,163	
Scrap .. . . .	94	15	1,216	(d) 228	(d) 1,156	(e) 1,665	470	
New Zealand—								
Pig-iron .. . . .	5,853	7,510	7,974	16,237	8,117	14,298	6,709	
Billets and blooms .. . . .	139	774	2,908	7,326	2,394	4,736	4,249	
Special steel .. . . .	206	270	555	331	1,224	1,565	644	
Irish Republic—								
Pig-iron .. . . .	1,597	3,264	2,345	3,586	3,989	8,687	3,788	
Crude forgings and castings .. . . .	143	365	216	220	303	125	103	
Old and scrap .. . . .	89	949	1,635	185	1,747	1,832	—	

(a) Information not available.

(b) Including Newfoundland from April 1, 1949.

(c) Years ended March 31 following that stated. Included with Canada from April 1, 1949.

(d) Excess of re-exports.

(e) Total imports.

(f) See " Israel " under Foreign Countries.

## IMPORTS OF PIG-IRON, FERRO-ALLOYS, STEEL INGOTS AND CASTINGS, ETC. (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES</b>							
Austria—							
Pig-iron .. ..	(a)	(a)	982	836	2,071	2,411	2,041
Ferro-manganese .. ..	(a)	(a)	1,119	1,913	3,379	5,413	4,444
Ferro-silicon .. ..	(a)	(a)	496	1,107	2,001	2,717	3,289
Other ferro-alloys .. ..	(a)	(a)	1,034	2,640	4,494	6,399	4,713
Scrap .. ..	(a)	(a)	129	19,178	42,826	70,438	58,968
Belgium-Luxemburg E.U.—							
Pig-iron .. ..	5,303	(a)	69,721	69,293	91,000	82,295	117,217
Ferro-alloys .. ..	(a)	(a)	(a)	84,982	67,876	58,745	99,426
Crude iron ingots .. ..	(a)	(a)	(a)	98	118	90	95
Steel ingots .. ..	(a)	(a)	(a)	99	110	1,336	
Blooms and billets .. ..	(a)	(a)	(a)	2,759	3,075	1,908	4,221
Special steel .. ..	(a)	(a)	3,270	5,450	5,398	8,845	8,204
Old and scrap .. ..	(a)	(a)	(a)	352,515	325,061	388,790	259,073
Bulgaria—							
Pig-iron .. ..	4,949	10,286	(a)	(a)	(a)	(a)	(a)
Old and scrap .. ..	2	149	(a)	(a)	(a)	(a)	(a)
Czechoslovakia—							
Pig-iron—							
Foundry .. ..		3,334	5,136	(b) 49,682	(a)	(a)	(a)
For refining or puddling .. ..		821	1,615	(b) 266	(a)	(a)	(a)
Other ferro-alloys .. ..		3,061	12,135	(b) 9,907	(a)	(a)	(a)
Ingots .. ..	(a)	8	—	(b) —	(a)	(a)	(a)
Billets, blooms, bars of puddled iron .. ..		10	62	(b) 72	(a)	(a)	(a)
Old and scrap .. ..		298	85,057	(b) 135,968	(a)	(a)	(a)
Denmark—							
Pig-iron .. ..	10,349	40,720	34,404	22,217	36,173	52,821	54,937
Ferro-alloys .. ..	247	5,029	9,477	6,988	11,745	5,324	6,666
Old and scrap .. ..	573	417	2,750	2,769	3,050	3,214	1,658
Finland (total imports)—							
Pig-iron .. ..	689	2,193	15,366	18,667	23,128	7,788	7,399
Billets .. ..	1,486	1,778	10,712	18,619	19,463	13,929	33,272
Ferro-manganese and spiegeleisen .. ..	471	904	1,197	1,618	1,030	696	1,637
Other ferro-alloys .. ..	453	159	920	1,493	1,787	950	1,230
Old and scrap .. ..	10,324	11,085	63,331	62,631	33,301	13,385	4,118
France—							
Pig-iron—hematite .. ..	177	16,236	7,416	16,766	10,328	7,860	10,860
do. other .. ..	2	13,377	2,671	671	13	2,116	3,682
Spiegeleisen .. ..	1,928	17,698	67	12,048	2,568	2,406	1,890
Ferro-manganese .. ..	1,987	11,930	11,905	244	148	102	153
Ferro-silicon .. ..	96	1,898	1,500				
Ferro-chrome .. ..	507	134	832	960	552	1,681	31
Other ferro-alloys .. ..	4	3	515				
Ingots .. ..	12	1,783	702	1,675	10,339	1,993	5,039
Blooms and billets, rolled or forged .. ..	78,114	16,622	45,218	33,172	2,412	23,423	67,168
Tool steel .. ..	37	531	1,172	(a)	(a)	(a)	(a)
Machine iron or steel .. ..	4,500	18,942	5,000	(a)	(a)	(a)	(a)
Other special steel .. ..	827	7,272	9,108	(a)	(a)	(a)	(a)
Old, filings and scrap .. ..	2,085	21,612	38,320	42,001	14,264	3,501	5,999
Germany (Federal)—							
Pig-iron .. ..						—	11,200
Ferro-manganese .. ..						2,365	3,427
Ferro-silicon, etc. .. ..						13,849	7,341
Other ferro-alloys .. ..						5,426	8,225
Rough blooms, ingots, bars, etc. .. ..						69	3,526
Old and scrap .. ..						916	121
Greece—							
Pig-iron .. ..	63	1,779	3,439	6,452	10,307	15,441	11,125

(a) Information not available.

(b) January to October only.

## IMPORTS OF PIG-IRON, FERRO-ALLOYS, STEEL INGOTS AND CASTINGS, ETC. (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Italy—							
Pig-iron .. ..	(a)	(a)	150,742	130,238	206,811	206,010	140,547
Spiegeleisen .. ..	—	—	197	58	—	1,537	3,329
Ferro-chrome .. ..	—	116	81	524	1,534	1,924	907
Ferro-manganese .. ..	—	1,066	199	4,719	2,939	1,696	219
Ferro-molybdenum .. ..	—	75	27	61	26	85	78
Other ferro-alloys .. ..	—	—	367	705	369	299	192
Steel ingots .. ..	(a)	(a)	743	32,000	24,784	61,884	28,563
Steel blooms and sheet bar .. ..	(a)	(a)	1,763	2,060	2,514	47,312	98,871
Old and scrap .. ..	(a)	(a)	73,460	128,034	383,802	495,083	673,368
Netherlands—							
Pig-iron .. ..	—	(a)	2,376	1,649	996	2,696	8,302
Ferro-alloys .. ..	—	—	—	—	3,601	5,169	6,518
Ingots, blooms, billets, etc. .. ..	(a)	804	737	1,511	1,819	3,701	4,008
Old and scrap .. ..	(a)	6,074	10,521	1,705	1,154	3,181	2,294
Norway—							
Pig-iron .. ..	2,129	1,520	1,337	1,533	1,770	3,796	(a)
Ferro-tungsten and ferro-vanadium .. ..	5	10	35	56	2	19	(a)
Other ferro-alloys .. ..	355	57	34	87	6	20	(a)
Ingots .. ..	—	180	66	102	314	29	(a)
Alloyed steel .. ..	381	707	931	1,355	1,455	(a)	(a)
Old and scrap .. ..	614	2,568	2,881	4,097	31,918	6,735	4,817
Poland—							
Pig-iron .. ..	—	822	—	—	(a)	(a)	(a)
Old and scrap .. ..	—	10,135	—	52,485	(a)	(a)	(a)
Portugal—							
Iron and steel ingots .. ..	4,185	9,408	16,389	15,247	13,248	11,797	14,007
Old and scrap .. ..	342	9,656	1,812	1,162	1,909	837	1,414
Spain—							
Pig-iron .. ..	288	127	1	—	228	25	2,738
Ferro-manganese .. ..	5	1	11	—	36	2	3,476
Other ferro-alloys .. ..	82	403	264	143	697	1,147	280
Special steel .. ..	473	839	802	2,108	1,549	1,906	1,208
Old and scrap .. ..	22,469	28,664	13,787	33,325	47,105	80,270	47,726
Sweden—							
Pig-iron .. ..	17,155	89,625	138,607	98,644	93,597	100,368	72,934
Spiegeleisen .. ..	1,000	6,257	607	—	20	128	2,325
Ferro-manganese .. ..	1,952	5,362	583	2,073	1,866	2,258	(a)
Ferro-chrome .. ..	16	725	1,116	2,140	2,255	2,035	(a)
Ferro-silicon and ferro-silico-manganese .. ..	380	1,591	737	968	690	401	218
Ferro-tungsten .. ..	—	20	—	5	24	72	(a)
Other ferro-alloys .. ..	67	375	559	273	495	411	(a)
Tool steel .. ..	—	19	17	16	8	1	(a)
Old, filings and scrap .. ..	19,130	69,797	64,881	93,357	147,463	172,830	77,391
Switzerland—							
Pig-iron, steel billets, blooms, etc. .. ..	41,828	111,037	109,365	143,043	55,396	85,745	91,158
Ferro-chrome and ferro-silicon .. ..	127	2,260	2,769	4,434	1,321	1,280	8,037
Old, filings and scrap .. ..	341	8,533	60,916	60,792	53,013	4,950	1,890
Yugoslavia—							
Pig-iron .. ..	—	(a)	(a)	(a)	(a)	23,712	20,374
Ferro-alloys .. ..	—	—	—	—	—	206	207
Scrap .. ..	—	—	—	—	—	67,746	12,963
Algeria—							
Pig-iron .. ..	417	475	1,586	2,531	1,748	1,555	1,282
Spiegeleisen and ferro-alloys .. ..	304	99	98	221	291	171	456
Ingots, blooms and billets .. ..	4	170	224	112	3,310	13,777	18,540
Tool and special steel .. ..	54	31	225	(a)	(a)	(a)	(a)
Machine iron and steel .. ..	(a)	(a)	2,888	(a)	(a)	(a)	(a)
Old, filings and scrap .. ..	767	1,214	840	1,173	3,507	281	523

(a) Information not available.

## IMPORTS OF PIG-IRON, FERRO-ALLOYS, STEEL INCOTS AND CASTINGS, ETC. (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
FOREIGN COUNTRIES (Cont.)							
Egypt—							
Pig-iron and spiegeleisen .. .	2,041	377	2,755	1,636	4,543	12,911	(a)
Ferro-alloys .. .	4	9	11	268	545	244	(a)
Ingots, billets, etc. .. .	25	20	12	514	1,190	5,588	(a)
Special steel .. .	635	1,534	586	1,739	1,228	1,906	(a)
Scrap (total imports) .. .	423	903	3,755	3,700	3,875	2,203	(a)
Madagascar—							
Blooms, billets, etc. .. .	2,309	1,922	3,202	7,213	(a)	(a)	(a)
Morocco (French)—							
Pig-iron .. .	672	539	1,052	(a)	(a)	(a)	(a)
Ferro-alloys .. .	41	42	46	(a)	(a)	(a)	(a)
Scrap, etc. .. .	1,518	5,086	6,218	(a)	(a)	(a)	(a)
Morocco (Spanish)—							
Ingots .. .	21	38	11	(a)	(a)	(a)	(a)
Tunis—							
Pig-iron .. .	10	51	314	96	127	(a)	(a)
Steel ingots and billets .. .	6,401	5,617	7,127	9,116	(a)	(a)	(a)
Tool steel .. .	(a)	(a)	(a)	—	(a)	(a)	(a)
Old and scrap .. .	1	2	2	(a)	(a)	(a)	(a)
Cuba (total imports)—							
Iron ingots .. .	1,170	(a)	(a)	106	271	(a)	(a)
Mexico—							
Pig-iron .. .	298	2	(a)	(a)	(a)	(a)	(a)
Ferro-manganese .. .	790	474	1,307	1,337	(a)	(a)	(a)
Other ferro-alloys .. .	1,059	732	915	845	(a)	(a)	(a)
Steel ingots, blooms and billets .. .	1,821	385	(a)	(a)	(a)	(a)	(a)
Scrap .. .	20,771	44,317	(a)	(a)	(a)	(a)	(a)
United States—							
Pig-iron .. .	19,137	12,581	29,129	195,269	89,110	710,683	952,244
Spiegeleisen .. .	2,809	321	—	—	1,553	7,737	—
Ferro-chrome .. .	5,742	1,303	9,535	8,052	6,577	19,315	24,368
Ferro-manganese .. .	31,715	28,687	72,596	87,697	58,048	96,691	106,932
Ferro-silicon .. .	20,595	11,248	12,374	6,557	6,641	13,162	26,323
Ferro-titanium .. .	—	3	40	25	34	116	222
Ferro-tungsten .. .	—	—	—	—	28	785	901
Sponge iron .. .	79	1,194	1,040	2,838	3,099	6,733	11,445
Bar-iron, slabs, blooms, etc. .. .	5,719	361	223	170	316	345	625
Steel ingots, blooms, etc. .. .	1,477	758	1,352	20,790	46,706	161,178	124,665
Scrap .. .	41,313	26,989	32,314	370,600	977,154	621,589	320,624
Tin plate scrap .. .	18,072	24,530	30,797	41,084	41,028	42,394	51,571
Argentina—							
Pig-iron .. .	21,310	33,816	64,087	111,856	80,961	91,824	69,646
Ferro-manganese .. .	2,405	1,677	1,679	2,222	1,722	2,217	2,394
Ferro-silicon .. .	1,077	1,955	2,007	2,084	1,155	1,140	2,348
Ingots .. .	21,999	50,969	54,572	45,664	62,574	160,984	177,680
Old and scrap .. .	702	1,468	26,185	43,365	88,150	61,756	17,790
Brazil (total imports)—							
Pig-iron, etc. .. .	4,792	7,120	7,855	993	1,694	(a)	(a)
Ferro-manganese .. .	52	16	2	49	55	(a)	(a)
Ferro-silicon .. .	614	982	712	93	565	(a)	(a)
Special steel .. .	222	674	270	221	882	(a)	(a)
Filings .. .	61	44	52	45	28	(a)	(a)
Chile—							
Ingots .. .	3,251	970	693	1,116	1,076	305	(a)
Ferro-chrome .. .	11	22	22	—	(a)	(a)	(a)
Ferro-manganese .. .	496	201	257	132	(a)	(a)	(a)
Ferro-silicon .. .	194	47	342	387	156	853	1,331
Old and scrap .. .	5,207	1,391	(a)	(a)	(a)	(a)	(a)
Colombia—							
Pig-iron .. .	3,600	795	(a)	(a)	1,261	1,793	(a)
Scrap .. .	90	691	(a)	(a)	(a)	(a)	(a)

(a) Information not available.

## IMPORTS OF PIG-IRON, FERRO-ALLOYS, STEEL INGOTS AND CASTINGS, ETC. (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Peru—							
Pig-iron .. ..	1,724	1,305	(a)	(a)	(a)	(a)	(a)
Ferro-alloys .. ..	36	42	(a)	(a)	(a)	(a)	(a)
Uruguay—							
Ingots .. ..	(a)	10,781	12,282	7,741	6,332	11,222	(a)
Ferro-manganese .. ..	(a)	(a)	(a)	172	133	66	(a)
Ferro-silicon .. ..	(a)	(a)	(a)	37	231	116	(a)
Other ferro-alloys .. ..	(a)	(a)	(a)	15	(a)	14	(a)
Iran (b)—							
Ingots, etc., old and scrap .. ..	(a)	3,638	6,278	(a)	(a)	(a)	(a)
Israel—							
Pig-iron .. ..	(c)	(c)	(c)	(c)	2,561	2,450	(a)
Ferro-alloys .. ..	(c)	(c)	(c)	(c)	9	3	(a)
Japan—							
Pig-iron .. ..	54,131	1,968	8,276	10,802	135,844	(a)	42,396
Ferro-manganese .. ..	—	—	—	—	—	(a)	1,272
Ferro-silicon .. ..	—	—	—	—	—	(a)	
Steel ingots .. ..	1,972	—	—	—	—	(a)	
Old and scrap .. ..	984	—	124	—	—	(a)	211
Syria and Lebanon—							
Old and scrap .. ..	2,171	651	(u)	(a)	(a)	(a)	(a)
Turkey—							
Iron ingots and blocks .. ..	—	—	210	—	—	—	9
Ferro-alloys .. ..	783	405	79	661	659	413	103
Steel ingots and blocks .. ..	1	2	41	1	—	—	—
Special steel .. ..	25	310	172	400	600	951	2,878
Old and scrap .. ..	131	8	42	55	16	5	13

(a) Information not available.

(b) Years ended March 20 of year following that stated. Total imports.

(c) See "Palestine" under British Countries.

**LEAD**  
**PRODUCTION OF LEAD ORE**  
*(In terms of metal)*  
*(Long tons)*

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Great Britain .. .	2,866	2,763	3,177	2,394	2,465	3,288	4,847
Nigeria .. .	—	—	71	269	28	12	4
Northern Rhodesia (b) .. .	1,720	8,239	15,640	13,020	13,945	13,685	13,970
Southern Rhodesia .. .	—	—	(c) 12,400	—	81	—	—
South West Africa .. .	—	—	—	33,068	37,785	33,151	38,611
Tanganyika .. .	—	5	—	—	—	(f) 676	(f) 1,621
Uganda .. .	—	—	5	10	54	30	4
Union of South Africa .. .	183	150	131	160	165	593	882
Canada (d) .. .	154,908	158,024	144,346	149,331	142,656	147,944	136,161
Newfoundland .. .	24,920	24,816	20,788	19,745	—	—	—
Burma .. .	(a)	—	22	(e)	(e)	(e)	(e)
India (g) .. .	20	200	400	430	650	1,040	1,300
Australia .. .	164,741	183,835	196,623	216,955	213,491	219,176	224,799
<b>TOTAL</b> .. .	<b>349,400</b>	<b>378,000</b>	<b>393,000</b>	<b>435,000</b>	<b>411,000</b>	<b>419,600</b>	<b>422,200</b>
<b>FOREIGN COUNTRIES</b>							
Austria .. .	(a)	1,100	1,619	3,427	4,606	4,530	4,861
Finland .. .	87	153	185	71	128	140	213
France .. .	4,775	8,165	7,377	7,524	9,846	12,234	(a)
Germany (Federal) .. .	(g) 15,000	15,275	15,693	24,087	40,298	44,230	49,581
Greece .. .	540	433	921	1,284	1,154	(a)	2,722
Italy .. .	2,300	13,700	23,600	30,000	34,418	37,841	38,126
Norway .. .	10	26	139	261	296	224	407
Poland .. .	(a)	(b) 10,743	(b) 12,559	(g) 17,000	(g) 17,000	(g) 20,000	(g) 20,000
Portugal .. .	260	369	371	625	734	1,290	1,595
Roumania .. .	3,310	3,173	3,440	(a)	(a)	(a)	(a)
Spain .. .	(g) 27,900	(g) 37,200	29,963	26,860	30,597	38,833	40,167
Sweden .. .	19,780	20,844	20,529	23,207	23,523	22,315	14,800
U.S.S.R. (smelter) (h) .. .	70,000	83,000	105,000	107,000	135,000	170,000	210,000
Yugoslavia .. .	(g) 20,000	43,000	51,000	55,000	71,000	84,676	77,506
Algeria .. .	560	860	1,120	1,030	1,118	1,379	2,785
Belgian Congo .. .	—	—	659	394	177	—	—
French Equatorial Africa .. .	3,027	2,800	2,600	2,560	719	1,785	2,466
Morocco (French) .. .	10,934	10,862	21,060	27,790	36,483	47,452	67,107
Morocco (Spanish) (f) .. .	160	200	55	110	95	220	420
Tunis .. .	6,301	8,518	12,224	13,011	14,700	18,961	20,910
Guatemala (b) .. .	113	129	108	(a)	67	267	(a)
Honduras .. .	(a)	(a)	(a)	125	391	275	446

(a) Information not available.

(b) Smelter.

(c) Including ore sorted from dumps.

(d) Amount estimated as recoverable.

(e) Included under Foreign Countries.

(f) Exports.

(g) Estimated.

(h) Revised estimates.

PRODUCTION OF LEAD ORE (*Cont.*)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Mexico (b) .. ..	202,072	137,930	219,611	190,264	217,277	234,318	221,907
United States (b) .. ..	348,956	299,531	343,054	348,639	365,989	384,667	346,575
Argentina (estimated) (c) ..	18,000	18,000	20,000	21,000	18,000	23,000	23,600
Bolivia (exports) .. ..	9,358	8,301	11,131	25,205	25,895	30,684	30,076
Chile .. .. ..	53	(a)	3,311	6,125	2,814	669	(a)
Ecuador .. .. ..	(a)	366	170	265	372	221	(a)
Peru .. .. ..	52,816	43,815	53,948	47,771	64,325	61,137	81,048
Burma .. .. ..	(d)	(d)	(d)	35	(a)	1,098	5,815
French Indo-China .. ..	3	—	—	—	—	—	—
Iran (estimated) .. ..	(a)	(a)	(a)	(a)	(a)	2,000	(a)
Japan .. .. ..	4,586	4,182	5,738	6,578	8,964	10,724	12,472
Korea (Southern) .. ..	2,063	—	886	256	141	130	130
Philippine Republic .. ..	(a)	4	7	71	541	865	479
Siam .. .. ..	(a)	(a)	(a)	(a)	180	680	1,300
Turkey .. .. ..	(a)	(a)	(a)	(a)	570	190	740
<b>TOTAL .. ..</b>	<b>825,000</b>	<b>778,000</b>	<b>985,000</b>	<b>991,000</b>	<b>1,131,000</b>	<b>1,259,000</b>	<b>1,293,000</b>
<b>WORLD'S TOTAL ..</b>	<b>1,182,000</b>	<b>1,156,000</b>	<b>1,378,000</b>	<b>1,426,000</b>	<b>1,541,000</b>	<b>1,679,000</b>	<b>1,715,000</b>

(a) Information not available.

(b) Amount estimated as recoverable.

(c) American Bureau of Metal Statistics.

(d) Included under British Countries.

METAL PRODUCTION OF LEAD

(Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom (b)	2,700	2,500	2,800	2,200	2,100	3,000	4,100
Northern Rhodesia	1,720	8,239	15,640	13,020	13,945	13,685	13,970
South West Africa	—	—	63	80	—	—	—
Canada	145,628	147,986	144,643	142,879	130,490	151,806	145,279
India	106	—	190	625	593	626	859
Australia (d)	155,852	149,747	187,985	189,662	184,374	198,593	198,774
<b>TOTAL</b>	<b>305,900</b>	<b>307,800</b>	<b>351,400</b>	<b>348,500</b>	<b>331,500</b>	<b>367,700</b>	<b>363,000</b>
<b>FOREIGN COUNTRIES</b>							
Austria (c)	1,252	4,405	3,511	9,201	9,426	10,738	10,971
Belgium (c)	6,240	21,239	39,526	62,507	77,580	61,113	69,530
Czechoslovakia	(a)	2,989	4,390	5,680	(a)	(a)	(a)
France	2,721	31,494	28,757	34,154	56,632	60,269	47,218
Germany (Federal)	(a)	(c) 17,916	(c) 23,971	(c) 48,602	(e) 53,689	(e) 65,567	74,862
Greece	700	1,109	1,569	3,419	4,019	3,324	5,261
Italy	2,785	13,789	17,266	25,327	28,011	36,877	35,431
Poland	(a)	10,743	12,559	16,607	(b) 17,100	(b) 20,000	(b) 20,000
Portugal	(a)	256	316	229	299	582	713
Roumania	3,310	3,173	3,440	(a)	(a)	(a)	(a)
Spain	27,507	29,195	31,617	21,708	32,499	34,321	41,183
Sweden	12,303	11,046	9,083	6,129	10,587	16,417	9,335
U.S.S.R. (g)	70,000	83,000	105,000	107,000	135,000	170,000	210,000
Yugoslavia	(a)	33,000	39,000	48,000	56,000	56,301	59,119
Morocco (French)	—	—	—	—	—	—	18,100
Tunis	6,912	7,370	12,391	17,675	19,190	23,164	22,544
Guatemala	113	129	108	(a)	67	267	(a)
Mexico	197,902	165,889	190,489	191,456	225,660	217,362	185,535
United States (f)	395,953	301,874	393,703	357,359	424,877	450,937	370,204
Argentina	20,843	20,682	21,071	21,139	17,752	18,700	23,700
Peru	40,930	37,484	32,961	34,187	36,650	31,451	43,593
Burma	—	—	—	7,400	846	—	148
China	558	(a)	(a)	(a)	(a)	(a)	(a)
Japan	14,30	3,968	6,071	6,862	7,476	9,826	10,570
Korea (Southern)	2,063	—	196	295	98	(a)	(a)
<b>TOTAL (g)</b>	<b>820,000</b>	<b>800,000</b>	<b>977,000</b>	<b>1,030,000</b>	<b>1,223,000</b>	<b>1,295,000</b>	<b>1,268,000</b>
<b>WORLD'S TOTAL (g)</b>	<b>1,136,000</b>	<b>1,108,000</b>	<b>1,328,000</b>	<b>1,378,000</b>	<b>1,555,000</b>	<b>1,663,000</b>	<b>1,631,000</b>

(a) Information not available.

(b) Estimated.

(c) Including secondary metal.

(d) Includes lead in base bullion as follows:

Year	Long tons
1945	—
1946	12,288
1947	29,437
1948	30,165

Year	Long tons
1949	32,621
1950	37,021
1951	31,872

(e) Revised. Figures now refer to primary production only.

(f) In addition the recovery of secondary lead was as follows:

Year	Long tons
1945	324,142
1946	350,703
1947	457,116
1948	446,492

Year	Long tons
1949	368,021
1950	430,603
1951	462,598

(g) Revised estimates.

EXPORTS OF LEAD, ETC.

*(Domestic Produce)*

*(Long tons)*

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
BRITISH COUNTRIES							
United Kingdom—							
Ore .. .. ..	14	77	—	2	—	(a)	(a)
Pig-lead .. .. ..	6,217	814	438	714	770	448	1,126
Sheets and pipes .. .. ..	3,956	1,635	1,240	2,093	1,604	2,428	2,399
White lead .. .. ..	3,314	2,806	1,076	2,921	2,483	4,846	4,133
Litharge, red lead, etc. .. .. ..	6,436	5,239	2,675	5,684	3,276	6,067	4,802
Northern Rhodesia—							
Pig, bar and ingot .. .. ..	1,965	6,095	13,662	13,189	12,347	12,379	11,568
South West Africa—							
Copper-lead-vanadate ores and concentrates (f) .. .. ..	—	—	—	67,671	79,440	72,761	82,564
Pig-lead .. .. ..	—	—	—	80	—	—	(a)
Tanganyika—							
Ore .. .. ..	—	5	7	—	—	—	1,093
Union of South Africa—							
Pig, ingot and sheets .. .. ..	18	14	139	461	151	144	(a)
Canada (b)—							
Ore (Pb content) .. .. ..	6,995	5,363	6,005	5,006	17,760	17,210	17,543
Pig-lead, etc. .. .. ..	95,796	92,955	111,576	92,645	101,369	102,828	94,407
Scrap .. .. ..	(a)	(a)	(a)	(a)	1,702	1,602	1,269
Pipes and tubes .. .. ..	(a)	(a)	(a)	(a)	242	85	62
White lead .. .. ..	351	366	309	1,586	524	926	2,576
Newfoundland (c)—							
Concentrates .. .. ..	39,151	36,518	35,525	37,137	(c)	(c)	(c)
Burma—							
Pig-lead and refined lead .. .. ..	(a)	(d) 1,893	(a)	(a)	(a)	(a)	(a)
Hong Kong (including re-exports)—							
Bars, sheets, pipes etc. .. .. ..	(a)	63	61	782	692	294	1,030
India—							
Pig-lead .. .. ..	—	—	—	—	—	—	—
Malaya (including re-exports)—							
Pig-lead .. .. ..	(a)	67	2,435	1,844	732	1,602	1,111
Sheets and pipes .. .. ..	(a)	—	1	3	3	8	9
Australia—							
Ores and concentrates (Pb content) .. .. ..	(e) 33,544	(e) 8,965	(e) 18,554	(e) 16,416	5,615	7,926	14,490
Matte (Pb content) .. .. ..	—	150	2,001	49	2	—	—
Pig-lead .. .. ..	87,590	{ 93,136	141,372	116,744	104,719	125,630	106,180
Base bullion .. .. ..		{ 9,095	30,399	27,843	37,734	34,074	31,780
Scrap .. .. ..	(a)	(a)	286	4,646	2,536	39	2
Sheets and pipes .. .. ..	216	264	1,248	457	331	434	845
White lead .. .. ..	191	166	229	348	442	623	781
Irish Republic—							
Ore .. .. ..	263	155	100	207	371	502	1,573
FOREIGN COUNTRIES							
Austria—							
Pig-lead, alloys etc. .. .. ..	(a)	(a)	(a)	(a)	{ 2,913	2,291	1,614
Scrap .. .. ..	(a)	(a)	(a)	(a)	{ 22	34	—
Red and white lead etc. .. .. ..					{ 121	604	16
Belgium-Luxemburg E.U.—							
Pig-lead .. .. ..	(a)	(a)	(a)	43,703	47,427	44,887	46,756
Scrap .. .. ..	(a)	(a)	(a)	62	105	70	148
Sheets, bars, pipes and wire .. .. ..	(a)	(a)	(a)	4,230	3,453	6,796	7,913
Red and white lead, etc. .. .. ..	(a)	(a)	(a)	3,540	3,273	5,029	2,860

(a) Information not available.

(b) Including Newfoundland from April 1, 1949.

(c) Years ended March 31 following that stated. Included with Canada from April 1, 1949.

(d) February to September only.

(e) Years ended June 30 of year stated.

(f) For copper and vanadium contents see under appropriate headings. Also includes some zinc.

EXPORTS OF LEAD, ETC. (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Bulgaria—							
Ore and concentrates ..	11,183	9,599	11,135	(a)	(a)	(a)	(a)
Czechoslovakia—							
Ore .. ..	(a)	{ —	617	(b)	(a)	(a)	(a)
Pig-lead, ashes, scrap and alloys .. ..		{ 5 60	69	(b) 10	303	(a) (a)	(a)
Red and white lead, etc. .. ..			(b)	—	(a) (a)	(a)	(a)
Denmark—							
Pig-lead .. ..	17	518	1,026	2,604	2,978	5,205	5,640
Scrap .. ..	—	107	64	459	372	698	338
Sheets and pipes .. ..	—	—	26	8	9	13	59
France—							
Ore, matte and slag ..	—	1,047	1,615	114	1,338	2,211	753
Pig-lead, including argen- tiferous and antimonial ..	51	38	896	1,433	17,085	20,927	2,846
Scrap .. ..	—	429	—	40	158	40	22
Bars, sheets, alloys ..	164	289	383	657	1,374	887	1,378
Red and white lead, etc. ..	73	152	322	332	1,018	1,309	1,710
Germany (Federal)—							
Ore .. ..	(a)	(a)	(a)	{ 1,639 7 5	886 55,995 110	10 57,827 1,500	— 18,426 4,099
Pig-lead, alloys and scrap .. ..					5	2,072	6,944
Sheets, pipes, wire, etc. .. ..							10,436
Red and white lead .. ..							
Greece—							
Pig-lead .. ..	(a)	(a)	149	323	71	—	363
Italy—							
Ore .. ..	—	1,378	3,012	6,289	4,362	3,081	5,433
Pig-lead, scrap and alloys .. ..	—	994	217	24,551	3,002	692	1,041
Red and white lead .. ..	(a)	(a)	(a)	(a)	(a)	242	443
Netherlands—							
Pig-lead .. ..	(a)	{ 1,444 491 103 27	545 1,589 168 166	1,421 3,768 529 105	1,816 2,261 436 380	1,512 2,239 560 742	1,907 4,299 287 698
Scrap .. ..							
Sheets and wire .. ..							
Red and white lead .. ..							
Norway—							
Ore .. ..	187	—	196	420	544	395	(a)
Pig-lead .. ..	—	201	119	15	105	29	(a)
Scrap .. ..	20	608	930	1,598	549	755	(a)
Portugal—							
Ore .. ..	—	—	6	217	49	—	(a)
Pig-lead, etc. .. ..	3	4	60	15	—	28	23
Red and white lead .. ..	16	11	656	10	(a)	11	21
Spain—							
Ore .. ..	6	31	—	1	—	—	—
Pig-lead and scrap .. ..	1,446	1,374	5,247	8,601	2,815	12,631	15,913
Sheets, wire, etc. .. ..	336	192	352	424	403	582	1,115
Sweden—							
Ore .. ..	14,216	17,444	18,071	23,237	10,536	14,725	10,987
Pig-lead and scrap .. ..	1,331	1,674	1,713	546	1,696	3,757	662
Sheets and pipes .. ..	74	131	—	15	30	31	39
Red and white lead, etc. .. ..	105	115	40	133	207	111	99
Switzerland—							
Ores, etc. .. ..	—	14	17	162	176	648	839
Pig-lead, scrap, etc. .. ..	—	—	11	23	143	259	349
Sheets and pipes .. ..	—	—	154	13	25	2	16
Yugoslavia—							
Concentrates .. ..	(a)	(a)	(a)	(a)	(a)	5,869	—
Pig-lead .. ..	(a)	(a)	(a)	(a)	(a)	52,571	50,899
Algeria—							
Ore .. ..	695	185	2,731	2,542	1,343	2,893	3,081
Pig lead .. ..	{ 329	536	{ 165 1,147	95 1,324	232 1,194	72 1,442	65 2,670
Scrap .. ..							
Red and white lead .. ..	2	—	130	195	—	9	3
Belgian Congo—							
Ore .. ..	13	10	104	—	(a)	—	—

(a) Information not available.

(b) January to October only.

## EXPORTS OF LEAD, ETC. (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
French Equatorial Africa—							
Ore .. ..	6,909	1,292	13,726	10,012	5,285	3,740	984
Morocco (French)—							
Ore, matte and slag ..	11,810	22,243	18,897	8,563	55,900	55,035	52,653
Scrap, etc. ..	—	292	929	(a)	(a)	12,213	14,357
Morocco (Spanish)—							
Ore .. ..	243	295	80	(a)	(a)	(a)	(a)
Tunis (including re-exports)							
Ore .. ..	—	27	28	6	296	(a)	(a)
Pig-lead and bars ..	5,669	6,337	9,793	13,705	18,600	21,000	(a)
Mexico—							
Ores and concentrates ..	1,454	377	8,352	14,402	20,988	6,322	8,666
Pig-lead, refined ..	164,472	125,585	170,771	211,982	185,831	257,153	175,584
Base bullion ..	6,523	37	185	8,770			
Pig-lead, antimonial ..	15,951	1,919	5,689	11,009			
Pb content (b) .. ..	179,658	165,207	184,411	176,499	175,712	241,178	(a)
United States—							
Ore, mattes and base bullion (Pb content) ..	—	89	—	8	1,443	119	498
Pig-lead, bars, etc. ..	1,256	533	1,351	356	866	2,442	1,144
Scrap .. ..	—	—	—	—	667	1,407	530
Sheets and pipes ..	1,064	867	1,680	849	690	316	972
Red and white lead, etc.	7,600	3,969	2,555	2,018	2,766	2,657	2,134
Argentina—							
Ore .. ..	8,366	—	(a)	(a)	(a)	(a)	(a)
Ingots, bars and sheets ..	36	1	(a)	(a)	(a)	(a)	(a)
Bolivia—							
Ore, etc. (Pb content) ..	9,358	8,301	11,131	25,205	25,895	30,684	30,076
Chile—							
Ores and concentrates ..	—	—	10	—	(a)	(a)	(a)
Ecuador—							
Concentrates .. ..	159	367	394	501	287	(a)	(a)
Peru—							
Ore and concentrates (Pb content) .. ..	13,334	6,743	12,365	7,857	16,771	28,248	(a)
Pig-lead (Pb content) .. ..	37,098	34,925	25,581	37,396	35,393	30,795	(a)
Scrap (Pb content) .. ..	1,345	1,655	416	370	309	271	(a)
Iran—							
Ore .. ..	(a)	(a)	(a)	837	504	(c) 3,500	(a)
Japan—							
Refined lead .. ..	(a)	—	—	—	24	(a)	233
Sheets and plates .. ..	—	—	10,826	4,922	(a)	6,811	(a)
Tubes .. ..	(a)	—	—	—	(a)	—	—
Turkey—							
Ore .. ..	—	—	—	—	492	—	953
Ingots .. ..	(a)	(a)	(a)	(a)	(a)	—	224
Old and scrap .. ..	(a)	(a)	(a)	(a)	(a)	(a)	148

(a) Information not available.

(b) Total metal content of all lead products including the above items and *not* additional.

(c) Estimated.

IMPORTS OF LEAD, ETC.

(Less Re-exports)

(Long tons)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Ore and concentrates ..	—	56	107	219	64	(a)	(a)
Pig-lead .. ..	165,360	153,952	197,149	160,865	186,395	171,686	175,196
Scrap, incl. alloys ..	(a)	2,675	1,729	1,053	1,910	2,559	1,294
Sheets and pipes ..	—	—	1,270	373	—	—	3
White lead ..	—	—	—	2	—	—	—
Litharge, red lead, etc. ..	—	—	—	—	50	—	164
Anglo-Egyptian Sudan—							
Unwrought incl. scrap ..	11	13	8	7	16	(d)	(a)
White lead .. ..	1	55	145	—	1	(a)	(a)
Gold Coast—							
Bars, sheets, etc. ..	140	231	380	184	350	514	162
Kenya (e)—							
Bars, sheets, pipes, etc. ..	120	31	53	64	17	25	36
Mauritius—							
Pig-lead, sheets, pipes, etc. .. ..	44	(a)	3	(a)	23	28	13
Nigeria—							
Bars and sheets .. ..	70	27	156	84	169	135	153
Northern Rhodesia—							
Sheets and foil, etc. ..	1	1	1	5	31	59	30
White lead .. ..	2	1	—	—	—	5	11
Sierra Leone—							
Bars and sheets .. ..	9	3	6	7	5	16	8
Southern Rhodesia—							
Pig-lead, bars, sheets and foil .. ..	79	135	159	139	142	242	397
Red and white lead, etc. ..	(a)	38	90	204	71	28	52
South West Africa—							
Bars, sheets and pipes ..	4	4	17	16	28	17	(a)
Red and white lead, etc. ..	1	8	10	10	8	1	(a)
Tanganyika—							
Bars, sheets and pipes, etc. ..	2	4	3	7	8	8	3
Uganda—							
Bars, sheets, pipes, etc. .. ..	(f)	(f)	(f)	(f)	3	5	30
Union of South Africa—							
Pig-lead and bars .. ..	7,763	6,270	7,297	8,355	7,120	11,620	14,196
Sheets and pipes .. ..	—	54	26	21	104	40	(a)
Foil .. ..	6	(d) 10	3	1	2	1	(a)
Litharge, red and white lead .. ..	1,968	1,378	1,072	1,432	1,022	834	(a)
British West Indies—							
Jamaica—							
Pig-lead, etc. .. ..	(£221)	(£228)	58	30	104	56	56
Trinidad and Tobago—							
Pig-lead .. ..	14	—	—	(d) 27	(d) 72	14	(a)
Red and white lead, etc. ..	40	125	75	140	475	61	99
Canada (b)—							
Pig-lead and scrap .. ..	24	34	8	68	2,317	1,257	(d) 78
Bars, sheets and pipes .. ..	13	7	7	4	6	17	2
White lead, red lead and litharge .. ..	1,661	1,126	349	253	304	727	594
Newfoundland (c)—							
Bars, pipes and sheets .. ..	87	106	103	39	(c)	(c)	(c)

(a) Information not available.

(b) Including Newfoundland from April 1, 1949.

(c) Years ended March 31 of year following that stated. Included with Canada from April 1, 1949.

(d) Excess of re-exports.

(e) Including Uganda up to 1948 inclusive.

(f) Included with Kenya.

## IMPORTS OF LEAD, ETC. (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES (Cont.)</b>							
Aden—							
Ore .. .. ..	—	1	11	—	—	—	—
Ceylon—							
Pig-lead .. .. ..	—	25	11	30	22	19	13
Sheets and pipes .. ..	10	152	7	23	6	33	25
Tea-lead .. .. ..	1,784	54	—	—	4	—	2
Cyprus—							
Sheets and pipes .. ..	4	19	26	6	10	18	122
Hong Kong (total imports)—							
Bars, sheets, pipes, etc.	(a)	103	68	596	368	235	1,120
India—							
Ore .. .. ..	5	75	808	714	6	31	214
Pig-lead, bars, etc. .. ..	7,821	4,125	5,111	8,534	6,180	14,814	7,680
Sheets, pipes and tubes .. ..	14,586	554	742	101	430	207	177
Tea-lead .. .. ..	—	—	—	—	—	71	4
Lead (government stores)	420	944	—	—	(a)	(a)	(a)
Litharge, red and white lead, etc. .. ..	17	5	125	5	40	277	17
Malaya (total imports)—							
Pig-lead .. .. ..	(a)	232	3	35	198	43	142
Pipes and sheets .. ..	(a)	23	11	69	46	70	136
Palestine—							
Pig-lead, sheets pipes, etc. .. .. ..	84	145	(a)	(a)	(b)	(b)	(b)
Australia—							
Sheets and pipes, etc.	—	—	1	—	5	19	19
Litharge, red and white lead, etc. (c) .. ..	—	130	98	49	216	95	(d) 471
Fiji—							
Pig-lead and sheet .. ..	33	15	19	10	17	20	87
New Zealand—							
Pig-lead and bars .. ..	2,223	3,360	2,951	3,781	937	633	1,306
Sheets and pipes .. ..	346	84	159	105	63	126	34
White lead .. .. ..	522	444	102	206	675	361	407
Irish Republic—							
Pig-lead .. .. ..	140	116	649	524	844	1,445	1,174
Sheets and pipes .. ..	384	166	770	1,423	587	687	1,103
Red and white lead, etc. .. ..	303	460	320	530	433	427	521
<b>FOREIGN COUNTRIES</b>							
Austria— ..							
Ore .. .. ..	(a)	(a)	3,543	3,366	2,835	2,953	2,933
Pig-lead, alloys, etc. .. ..	(a)	(a)	(a)	(a)	3,998	1,620	6,645
Scrap .. .. ..	(a)	(a)	(a)	(a)	257	218	31
Belgium-Luxemburg E.U.—							
Ore .. .. ..	7,636	28,625	71,319	87,547	97,499	81,754	96,761
Pig-lead .. .. ..	(a)	(a)	(a)	{ 19,450	20,489	32,130	27,061
Scrap .. .. ..	(a)	(a)	(a)	3,402	10,930	3,158	7,423
Sheets, bars, pipes and wire .. .. ..	(a)	(a)	(a)	2	—	30	—
Red and white lead, etc. .. ..	(a)	(a)	(a)	238	442	898	765
Bulgaria—							
Pig-lead and scrap .. ..	8	1	{ (a)	(a)	(a)	(a)	(a)
Tubes, wire, etc. .. ..	1	—	9	(a)	(a)	(a)	(a)
Red and white lead, etc. .. ..	15	—	—	—	—	—	—

(a) Information not available.

(b) See "Israel" under Foreign Countries.

(c) Years ended June 30 of that stated.

(d) Calendar year.

## IMPORTS OF LEAD, ETC. (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Czechoslovakia—							
Ore .. . . .			3,620	(c) 3,471	(a)	(a)	(a)
Pig-lead, ashes, scrap and alloys .. . . .	(a)	5,943	19,228	(c) 12,625	(a)	(a)	(a)
Sheets, plates, pipes, wire, etc. .. . . .		— 77	79 (c) 13	(a) 435	(a)	(a)	(a)
Red and white lead, etc. .. . . .		171					
Denmark—							
Pig-lead .. . . .	3,485	6,201	4,162	5,959	9,342	15,976	15,396
Scrap .. . . .	56	1,630	1,119	3,387	1,361	1,736	3,853
Sheets, pipes and wire .. . . .	21	199	93	31	61	28	54
Red and white lead .. . . .	137	983	429	693	505	1,009	865
Finland (total imports)—							
Pig-lead .. . . .	1,929	2,686	5,300	2,539	4,960	5,667	6,149
Scrap .. . . .	—	—	—	1	—	—	219
Sheets, pipes, wire, etc. .. . . .		127	732	464	432	631	1,110
Red and white lead, etc. .. . . .	173	168	777	618	896	1,648	2,562
France—							
Ore, (b) .. . . .	20,626	42,088	69,975	51,908	27,436	43,414	49,767
Pig-lead, including argen- tiferous and antimonial .. . . .	19,516	41,231	50,645	35,906	22,685	29,106	37,443
Scrap .. . . .	76	1,110	2,166	3,520	1,706	1,448	3,484
Sheets, etc. .. . . .	—	114	255	366	16	8	145
Red and white lead, etc. .. . . .	233	168	1,096	1,865	476	754	3,866
Germany—							
Ore .. . . . .					2,322	29,173	39,310
Pig-lead, scrap and alloys .. . . . .	(a)	(a)	(a)	{ 881 297 22	1,327 32 148	3,791 2 142	7,077 — 11
Sheets, pipes, wire, etc. .. . . . .							
Red and white lead, etc. .. . . . .							
Iceland—							
Pig-lead .. . . . .	80	18	(a)	(a)	18	9	10
Red and white lead .. . . . .	41	23	(a)	(a)	5	14	43
Italy—							
Ore .. . . . .	—	—	—	53	574	1	2,321
Pig-lead, scrap and alloys .. . . . .	246	276	7,654	10,740	10,003	8,768	8,816
Netherlands—							
Ore .. . . . .			58	1,656	2,071	5,273	9,356
Pig-lead .. . . . .			{ 20,953 104	26,000 201	20,130 70	36,904 32	29,221 86
Scrap .. . . . .							327
Sheets and wire .. . . . .			46	1,238	—	7	1,819
Red and white lead .. . . . .			1,292	3,021	4,095	5,714	6,591
Norway—							
Pig-lead .. . . . .	1,634	5,152	4,101	4,855	5,929	7,488	7,397
Bars and sheets .. . . . .	230	677	903	672	1,007	892	994
Tubes, wire, etc. .. . . . .	129	344	254	330	462	331	(a)
Red and white lead .. . . . .	365	200	570	507	760	749	(a)
Portugal—							
Pig-lead, alloys, etc. .. . . . .	326	2,816	2,404	2,865	2,031	1,434	1,535
Red and white lead, etc. .. . . . .	497	662	596	462	(a)	162	201
Spain—							
Ore .. . . . .	315	295	206	8	—	549	10
Pig-lead and scrap .. . . . .	84	74	68	125	130	197	1,258
Sweden—							
Pig-lead .. . . . .	1,369	18,353	17,483	13,458	10,933	11,996	16,804
Scrap .. . . . .	136	334	635	247	389	420	(a)
Sheets and pipes .. . . . .	95	1,311	2,066	1,100	1,075	1,737	(a)
Red and white lead .. . . . .	1,677	2,102	2,349	2,478	1,782	4,235	(a)

(a) Information not available.

(b) Including matte and slag up to 1947 inclusive.

(c) January to October only.

## IMPORTS OF LEAD, ETC. (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Switzerland—							
Ores, etc. . . .	6	26	1	—	—	—	—
Pig-lead, scrap, etc.	1,158	21,015	13,681	14,976	16,082	19,299	14,376
Sheets, pipes, wire, etc.	142	640	650	369	302	668	604
Red and white lead	50	492	180	733	594	829	1,001
Algeria—							
Ore, matte and slags	81	22	228	27	29	24	24
Pig-lead . . . .	1,643	3,209	4,471	4,430	2,691	2,705	2,837
Scrap . . . .				39	35	50	23
Red and white lead, etc.	157	105	128	165	198	200	213
Egypt—							
Pig-lead and scrap	54	100	81	81	345	17	(a)
Sheets, pipes, wire, etc.	83	151	436	471	739	283	(a)
Red and white lead	811	514	45	482	398	(a)	(a)
Madagascar—							
Pig-lead, bars and sheets	120	16	21	104	(a)	(a)	(a)
Red and white lead	25	12	12	42	(a)	(a)	(a)
Morocco (French)—							
Pig-lead, sheets and wire	161	121	205	(a)	(a)	(a)	(a)
Mozambique—							
Bars, sheets and wire	11	14	33	21	40	38	90
Tunis—							
Ore, matte and slag	156	1,401	1,566	4,938	5,566	(a)	(a)
Pig-lead, bars and scrap	26	163	30	—	(a)	(a)	(a)
Sheets, etc. . . .	9	74	—	284	(a)	(a)	(a)
Red and white lead, etc.	—	—	—	1	(a)	(a)	(a)
Cuba (total imports)—							
Pig-lead . . . .	379	(a)	(a)	310	231	(a)	(a)
Sheets, pipes and wire . . .	39	(a)	(a)	378	265	(a)	(a)
Mexico—							
Pig-lead . . . .	31	41	26	25	(a)	(a)	(a)
Sheets and pipes . . .	27	37	449	210	(a)	(a)	(a)
Red and white lead . . .	158	182	(a)	(a)	(a)	(a)	(a)
United States—							
Ore, matte and flue dust (Pb content) . . . .	68,476	25,785	42,540	30,273	109,179	86,206	29,155
Bullion and base bullion (Pb content) . . . .	18	72	1,584	9,785	1,014	1,196	41
Pig-lead and bars (Pb content) . . . .	198,492	92,931	141,703	218,648	243,248	387,826	159,729
Scrap (Pb content) . . .	2,543	2,267	14,173	25,716	12,505	20,264	7,060
Sheets, pipes, wire, etc.	16	21	60	161	158	185	228
Red and white lead, etc.	17	73	421	1,382	271	992	4,194
Argentina—							
Ore . . . .	6,069	4,742	—	—	—	—	—
Pig-lead . . . .	1	2	—	—	—	—	—
Sheets and plates . . .	7	—	—	(a)	(a)	(a)	(a)
Tubes and wire . . .	—	1	—	—	—	—	—
Red and white lead . . .	536	539	—	—	—	—	—
Brazil (total imports)—							
Pig-lead . . . .	14,321	23,466	12,617	4,676	15,001	19,426	(a)
Sheets and pipes . . .	53	343	464	204	376	(a)	(a)
Red and white lead . . .	505	366	304	618	990	(a)	(a)
Chile—							
Pig-lead . . . .	790	1,928	1,822	1,163	998	1,499	886
Bars and sheets . . .	176	250	(a)	(a)	(a)	(a)	(a)
Red and white lead . . .	114	122	(a)	(a)	(a)	(a)	(a)
Colombia—							
Ingots, bars, tubes and alloys . . . .	548	373	(a)	(a)	448	773	(a)
Red and white lead . . .	98	7	(a)	(a)	116	69	(a)

(a) Information not available.

## IMPORTS OF LEAD, ETC. (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Peru—							
Pig-lead, sheets, etc. ..	14	22	(a)	(a)	(a)	(a)	(a)
Red and white lead ..	76	63	(a)	5	(a)	(a)	(a)
Uruguay—							
Pig-lead .. .. ..	1,659	1,897	1,694	1,721	615	2,860	(a)
Red and white lead, etc.	(a)	(a)	(a)	50	29	23	(a)
Venezuela—							
Pig-lead .. .. ..	638	187	78	546	(a)	(a)	(a)
Red and white lead ..	50	75	84	95	(a)	(a)	(a)
China—							
Pig-lead .. .. ..	(a)	{	593	1,011	686	(a)	(a)
Scrap .. .. ..			685	(a)	(a)	(a)	(a)
Red and white lead, etc.			250	221	195	(a)	(a)
Iran (total imports) (b)—							
Ingots, sheets and wire	(a)	565	152	4	12	82	(a)
Israel—							
Pig-lead .. .. ..	(c)	(c)	(c)	(c)	{	105	201
Sheets and pipes .. ..						91	45
Red lead .. .. ..						166	90
Japan—							
Ore .. .. ..	(a)	(a)	(a)	503	(a)	36	569
Pig-lead .. .. ..						12,932	(a)
Ingots and sheets						2,480	
Syria and Lebanon—							
Pipes .. .. ..	119	215	(a)	(a)	(a)	(a)	(a)
Red and white lead ..	15	51					
Turkey—	72	180					
Pig-lead and bars ..	899	1,350	886	623	684	2,038	320
Tubes and wire ..	51	47	136	23	95	200	119
Red and white lead ..	561	295	214	329	191	682	351

(a) Information not available.

(b) Years ended March 20 of year following that stated.

(c) See " Palestine " under British Countries.

**MAGNESITE**  
**PRODUCTION OF MAGNESITE**  
 (Long tons)

Producing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom— Dead-burnt (d) .. ..	28,600	34,400	22,300	30,800	42,500	39,600	48,300
Kenya— Crude .. .. ..	14	60	40	—	10	178	—
Southern Rhodesia— Crude .. .. ..	4,211	3,763	5,238	5,632	7,519	8,479	14,580
Tanganyika— Crude .. .. ..	—	—	—	—	—	82	2,673
Union of South Africa— Crude .. .. ..	6,967	6,893	8,282	10,492	10,321	11,596	18,477
Canada— Calcinated Magnesitic Dolomite (b) .. ..	£287,325	£289,055	£289,723	£393,972	£408,843	£565,092	£831,111
Cyprus (exports)— Crude .. .. ..	283	3	30	1	20	20	20
India— Crude .. .. ..	28,338	44,677	51,536	48,327	90,564	52,859	117,071
Australia— Crude .. .. ..	23,082	22,033	36,811	32,442	33,590	35,392	39,134
New Zealand— Crude .. .. ..	111	374	362	540	559	341	580
<b>FOREIGN COUNTRIES</b>							
Austria— Crude .. .. ..	93,448	95,744	219,622	405,126	519,444	542,065	654,339
Caustic (c) .. .. ..	9,551	20,008	31,044	52,536	76,784	73,385	76,468
Dead-burnt (c) .. ..	20,531	33,807	94,379	131,337	176,576	179,588	211,813
Bricks (c) .. .. ..	(a)	26,727	56,859	110,644	107,315	110,054	132,697
Germany (Federal) .. ..	(a)	(a)	(a)	(a)	(a)	1,290	(a)
Greece— Crude .. .. ..	1,630	715	21,447	11,021	16,820	25,841	59,917
Calcined (c) .. .. ..	620	—	7,987	2,837	1,996	9,435	25,656
Italy— Crude .. .. ..	486	603	1,644	986	723	(a)	(a)
Norway— Crude .. .. ..	1,717	1,155	1,683	1,712	1,090	1,821	1,430
Calcined (c) .. .. ..	582	458	647	979	528	844	480
Bricks (c) .. .. ..	405	331	209	170	219	64	200
Spain .. .. ..	7,500	10,594	5,309	9,741	6,585	9,637	15,613
Yugoslavia— Crude .. .. ..	(a)	40,000	15,000	51,000	86,000	58,333	88,495
Egypt .. .. ..	49	—	—	—	—	—	—
Mexico (exports)— Crude and calcined .. ..	—	4,545	(a)	(a)	(a)	(a)	(a)
United States— Crude .. .. ..	300,412	289,860	335,708	(a)	256,531	383,386	598,363
Caustic (sales) (c) .. ..	38,634	40,338	23,956	29,651	29,022	37,006	44,626
Dead-burnt (sales) (c) ..	227,676	218,595	281,179	294,704	223,562	299,500	385,890
Venezuela— Crude .. .. ..	5,500	2,707	2,933	1,870	—	1,379	—
Turkey— Crude .. .. ..	758	98	846	3,353	6,269	443	497
Crude .. .. ..	136	98	846	3,353	6,269	443	497

Magnesite is also produced in Czechoslovakia, the U.S.S.R., Korea and Manchuria.

(a) Information not available.

(b) Including brucite.

(c) Derived from crude shown, and *not* additional. The United States does, however, include some from other sources, e.g., sea-water, brucite, dolomite, etc.

(d) Magnesia extracted from sea-water.

EXPORTS OF MAGNESITE, ETC.

*(Domestic Produce)*

*(Long tons)*

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Magnesium and alloys ..	7	371	104	277	1,126	387	420
Magnesium compounds ..	3,999	9,663	8,834	9,947	8,572	10,469	13,415
Southern Rhodesia—							
Crude and calcined ..	3,851	4,444	4,973	5,552	3,742	2,964	11,668
Tanganyika—							
Magnesite ..	—	—	—	—	—	82	2,673
Union of South Africa—							
Crude and calcined ..	—	—	54	—	—	255	304
Canada—							
Basic refractory materials ..	1,384	2,234	4,346	3,890	1,819	2,323	4,377
Cyprus—							
Crude .. .. ..	283	3	30	1	20	20	20
India—							
Magnesite .. .. ..	3,141	6,662	17,025	14,171	37,099	17,047	49,085
Chloride .. .. ..	151	1,921	3,928	2,167	2,905	1,653	1,986
Australia—							
Crude and calcined .. ..	—	—	39	354	—	36	64
Sulphate .. .. ..	(b)	—	(b)	449	(b)	387	155
<b>FOREIGN COUNTRIES</b>							
Austria—							
Crude .. .. ..	(a)	(a)	{ 133 7,817 30,332 44,799	—	78	214	420
Caustic .. .. ..				15,037	32,944	48,490	61,452
Dead-burnt .. .. ..				53,379	78,693	69,242	82,417
Bricks .. .. ..				67,490	88,157	93,906	103,156
Belgium-Luxemburg E.U.—							
Crude .. .. ..	(a)	(a)	{ 1,040 2 14 11 144	162	379	431	431
Calcined .. .. ..				2	24	263	20
Carbonate .. .. ..				7	2	—	—
Chloride .. .. ..				137	18	57	57
Sulphate .. .. ..				117	203	—	214
Czechoslovakia—							
Crude .. .. ..	(a)	(a)	{ 232 8,086 2,843	(c) —	(a) (a) (a) (a)	(a) (a) (a) (a)	(a) (a) (a) (a)
Calcined .. .. ..				29,894	32,038	—	—
Bricks .. .. ..				8,625	12,784	—	—
Chloride, oxide and sulphate .. .. ..				—	10	(a) (a) (a) (a)	(a) (a) (a) (a)
France—							
Magnesium and alloys ..	—	558	10	6	2	95	735
Magnesium compounds ..				10,044	10,602	4,303	8,773
Germany—							
Crude and calcined .. ..	(a)	(a)	{ 15 — 774 4,321	20	108	260	260
Carbonate, oxide, etc. .. ..				36	428	356	356
Chloride .. .. ..				8,436	12,050	16,047	16,047
Sulphate .. .. ..				18,570	17,177	22,297	22,297
Greece—							
Crude .. .. ..	—	—	42	2,473	787	1,977	18,368
Caustic .. .. ..	—	—	3,051	298	78	4,443	22,378
Dead-burnt .. .. ..	—	—	310	—	—	—	—
Italy—							
Magnesium metal .. ..	(a)	(a)	170	111	171	(a) (a)	(a) (a)
Crude .. .. ..				6	14	3	39
Netherlands—							
Calcinced .. .. ..	(a)	(a)	2,229	7,334	9,456	7,475	18,898
Sulphate .. .. ..				(a)	(a)	(a)	551

(a) Information not available.

(b) Years ended June 30 of that stated.

(c) January to October only.

EXPORTS OF MAGNESITE, ETC. (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Norway—							
Crude .. .. ..	25	9	26	—	38	—	(a)
Bricks .. .. ..	412	274	158	165	149	83	(a)
Sweden—							
Crude and calcined ..	—	45	72	46	28	10	—
Yugoslavia—							
Crude .. .. ..	(a)	(a)	(a)	(a)	(a)	661	16,283
Ground and dead-burnt	(a)	(a)	(a)	(a)	(a)	15,820	18,781
Mexico—							
Crude and calcined ..	—	4,545	(a)	(a)	—	—	(a)
United States—							
Magnesium metal ..	588	185	281	245	386	523	513
Oxide and manufactures	8,153	15,225	(a)	(a)	(a)	(a)	(a)
Bricks, etc. .. ..	8,256	11,832	11,538	8,943	(a)	(a)	(a)
Peru—							
Sulphate .. ..	694	427	423	373	476	595	(a)
Korea—							
Crude and calcined ..	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Turkey—							
Crude .. .. ..	—	—	—	—	1,966	3,149	591
						321	—
							11

(a) Information not available.

**IMPORTS OF MAGNESITE, ETC.**

(Less Re-exports)

(Long tons)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Crude and calcined ..	3,189	1,427	28,961	34,599	28,563	21,648	22,967
Magnesium and alloys ..	1,084	—	—	—	87	(a)	(a)
Chloride ..	109	898	3,368	7,068	8,738	5,868	8,401
Other salts ..	—	6	(d) 8	461	(d) 1	369	2,045
Union of South Africa—							
Carbonate and sulphate ..	4,669	3,817	4,644	4,998	3,273	3,320	(a)
Chloride ..	16	233	143	294	186	227	(a)
Canada—							
Calcined and dead-burnt ..	4,007	4,429	8,338	6,887	4,182	5,337	5,821
Carbonate ..	258	331	488	620	882	1,498	1,051
Sulphate ..	2,272	3,092	2,596	2,497	2,485	2,494	2,737
Bricks ..	(£68,571)	(£102,200)	(£115,395)	(£107,052)	(£129,434)	(£136,294)	(£167,124)
Other salts ..	330	616	378	440	383	549	853
India—							
Chloride ..	..	—	—	2	1	1	—
Sulphate ..	..	21	27	61	1	2	—
Other salts ..	..	205	781	300	503	621	252
Palestine—							
Sulphate ..	..	—	184	(a)	(a)	(a)	(a)
Australia—							
Crude and calcined ..	(a)	(b)	28	(b) 32	(b) 93	77	844
Oxide ..	33	33	22	66	71	86	81
Carbonate ..	120	149	152	307	169	228	237
Chloride ..	31	21	139	207	149	94	444
Sulphate ..	183	300	905	108	103	445	330
New Zealand—							
Sulphate ..	..	229	369	414	328	290	270
Irish Republic—							
Magnesium salts ..	..	221	447	400	348	353	507
<b>FOREIGN COUNTRIES</b>							
Austria—							
Sulphate ..	..	(a)	(a)	3,774	7,457	5,197	6,077
Chloride ..	..	(a)	(a)	223	1,307	2,007	2,492
Belgium-Luxemburg E.U.—							
Crude ..	..				1,893	1,845	3,085
Calcined ..	..				1,410	579	479
Bricks ..	..				(a)	(a)	8,818
Magnesium ..	..	(a)	(a)	a)	43	190	(a)
Carbonate ..	..				276	144	412
Chloride ..	..				478	466	652
Sulphate ..	..				1,457	1,748	1,697
Bulgaria—							
Crude ..	..	—	4	(a)	(a)	(a)	(a)
Sulphate ..	..	15	28	(a)	(a)	(a)	(a)
Czechoslovakia—							
Calcined ..	..			437	1,232	(c) 757	(a)
Bricks ..	..			311	6,601	(c) 2,437	(a)
Chloride ..	..			255	1,538	(c) 1,461	(a)
Oxide, impure ..	..			60	178	(c) 471	(a)
Sulphate ..	..			65	1,587	(c) —	(a)
Denmark—							
Crude ..	..	458	1,134	2,123	2,662	1,311	1,592
Chloride ..	..	291	972	1,859	1,857	382	994
Oxide ..	..	6	172	212	444	334	358
Sulphate ..	..	149	379	293	447	427	521

(a) Information not available.

(b) Year ended June 30 of that stated.

(c) January to October only.

(d) Excess of re-exports.

## IMPORTS OF MAGNESITE, ETC. (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Finland (total imports)—							
Crude and calcined ..	—	701	695	1,357	955	1,475	1,189
Oxide ..	3	27	23	12	13	15	68
Carbonate ..	19	46	96	162	298	72	292
Chloride ..	30	317	539	678	767	1,300	1,207
Sulphate ..	—	36	109	77	26	144	246
France—							
Crude ..	482	2,018	2,987	(a)	(a)	(a)	(a)
Calcined ..	1,459	1,989	13,269	17,306	16,923	11,843	16,187
Magnesium and alloys ..	2	55	34	15	—	—	82
Carbonate ..	5	263	578	303	194	329	494
Chloride ..	1	1	46	1	—	22	232
Sulphate ..	69	474	—	—	—	520	1,115
Germany (Federal)—							
Crude ..	(a)	(a)	(a)	28,464	48,644	86,820	109,316
Caustic ..							
Dead-burnt ..							
Hungary—							
Crude and calcined ..	(a)	4,425	13,458	(a)	(a)	(a)	(a)
Italy—							
Magnesium metal ..	(a)	—	47	23	25	(a)	(a)
Crude ..	(a)	(a)	2,064	1,971	822	1,306	5,385
Caustic ..	(a)	(a)	4,017	5,185	7,748	8,017	7,574
Chloride ..	(a)	(a)	(a)	—	2,181	980	867
Sulphate ..	(a)	(a)	(a)	500	904	2,367	2,536
Netherlands—							
Crude ..	(a)	{	302	1,183	558	418	819
Calcined ..			4,306	15,142	10,140	12,981	21,406
Sulphate ..			597	757	1,775	5,094	7,860
Chloride ..	(a)	(a)	(a)	(a)	4,254	3,650	3,778
Norway—							
Calcinced ..	327	568	1,278	2,058	1,110	783	1,013
Bricks ..	—	—	—	—	—	—	(a)
Chloride ..	67	809	562	919	869	3,390	(a)
Portugal—							
Crude and calcined ..	79	104	89	87	170	55	129
Carbonate ..	46	75	68	163	74	63	102
Chloride ..	29	27	32	50	49	44	(a)
Oxide ..	6	5	12	5	13	8	(a)
Sulphate ..	700	1,018	443	804	698	729	1,098
Sweden—							
Crude and calcined ..	1,133	3,174	2,727	2,720	2,616	2,212	2,080
Bricks ..	1,805	8,260	7,508	10,402	11,192	11,364	(a)
Chloride ..	302	1,359	1,493	1,729	1,673	1,579	(a)
Switzerland—							
Calcinced ..	167	—	—	—	—	—	—
Yugoslavia—							
Calcinced and ground ..	(a)	(a)	(a)	(a)	(a)	7,273	7,149
Bricks ..	(a)	(a)	(a)	(a)	(a)	4,460	1,681
Algeria—							
Calcinced ..	14	2	2	8	13	9	8
Belgian Congo—							
Calcinced ..	85	128	571	(a)	(a)	470	(a)
Sulphate ..	585	820	628	(a)	(a)	732	(a)
Chloride ..	(a)	—	1	(a)	(a)	106	(a)
Egypt—							
Sulphate ..	148	888	343	393	447	(a)	(a)
Cuba (total imports)—							
Calcinced ..	201	(a)	(a)	7	78	(a)	(a)
Carbonate ..	97	(a)	(a)	103	36	(a)	(a)

(a) Information not available.

## IMPORTS OF MAGNESITE, ETC. (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Mexico—							
Crude .. . . .	1,153	1,759	2,740	2,285	(a)	(a)	(a)
Calcined .. . . .	20	23	(a)	(a)	(a)	(a)	(a)
Sulphate .. . . .	210	164	(a)	(a)	(a)	(a)	(a)
United States—							
Crude .. . . .	—	1	—	86	—	8	—
Calcined .. . . .	397	394	470	823	1,324	1,898	3,743
Dead-burnt .. . . .	4,916	1,673	1,560	2,716	2,206	12,607	25,701
Oxide .. . . .	—	45	—	—	—	—	—
Carbonate, precipitated	59	129	122	252	171	209	173
Chloride .. . . .	1	34	2	5	5	7	2
Sulphate (incl. Kieserite)	—	—	—	—	409	3,187	2,631
Argentina—							
Carbonate .. . . .	170	149	(a)	(a)	(a)	(a)	(a)
Chloride .. . . .	—	102					
Oxide .. . . .	6	8					
Sulphate and chlorate .. . . .	10	20					
Brazil (total imports)—							
Oxide .. . . .	191	38	55	209	134	(a)	(a)
Sulphate .. . . .	292	198	401	147	44	(a)	(a)
Chile—							
Crude .. . . .	95	16	(a)	(a)	(a)	(a)	(a)
Calcined .. . . .	1,065	1,005					
Chloride .. . . .	4	8					
Carbonate, oxide, etc. .. . . .	4	7					
Sulphate .. . . .	825	500					
Colombia—							
Calcined .. . . .	24	36	(a)	(a)	(a)	(a)	(a)
Carbonate .. . . .	17	4					
Chloride .. . . .	1	4					
Sulphate .. . . .	170	71					
Peru—							
Oxide and carbonate .. . . .	678	412	(a)	53	(a)	(a)	(a)
Salts .. . . .	15	30	(a)	(a)	(a)	(a)	(a)
Venezuela—							
Sulphate .. . . .	57	119	114	112	(a)	(a)	(a)
Japan—							
Crude and calcined .. . . .	(a)	4,023	4,024	21,726	(a)	19,033	(a)
Syria and Lebanon—							
Ground and calcined .. . . .	9	—	(a)	(a)	(a)	(a)	(a)
Chloride .. . . .	15	10					
Oxide .. . . .	10	4					
Sulphate .. . . .	71	194					
Turkey—							
Calcined .. . . .	5	—	—	5	12	29	—
Carbonate, chloride, etc. .. . . .	94	31	26	170	123	209	131
Oxide .. . . .	14	5	11	6	4	21	11
Sulphate .. . . .	1	9	90	30	43	197	155

(a) Information not available.

**MANGANESE**  
**PRODUCTION OF MANGANESE ORE**  
(Long tons)

Producing Country						Estimated Manganese Content								
	1945	1946	1947	1948	1949	1950	1951	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>														
Great Britain (b)	11,299	765,300	588,919	629,973	741,069	711,366	806,080	3,400	306,000	328,000	380,000	370,000	370,000	420,000
Cold Coast (exports)	701,750	—	—	3,898	3,975	1,723	1,260	(a)	—	—	510	463	231	528
Northern Rhodesia	1,934	—	—	—	10	164	—	—	—	—	(a)	—	—	—
Southern Rhodesia	—	—	—	—	—	—	—	—	—	—	—	—	470	3,100
South West Africa	—	—	234,141	283,662	272,029	644,831	778,449	746,888	47,000	102,000	123,000	119,000	265,000	318,000
Union of South Africa	—	—	—	—	20	3	—	—	—	—	(a)	(a)	—	314,000
Canada (sales)	—	—	—	(a)	—	—	—	—	—	—	—	—	—	—
Burma	—	—	(c) 750	(b) 252,916	(a) 451,035	525,876	645,825	882,929	1,283,929	103,000	124,000	221,000	258,000	317,000
India	—	—	(c) 210,583	—	—	—	—	—	—	—	—	—	433,000	629,000
Malaya	—	—	(c) 2,500	—	—	—	—	—	—	—	—	—	—	—
Australia	—	—	(c) 984	—	1,385	1,776	3,447	13,087	14,869	7,968	402	(a)	—	—
New Zealand	—	—	—	—	402	330	206	305	352	402	40	197	162	—
Papua	—	—	—	—	170	44	(f) 160	(f) 68	22	40	(a)	(a)	100	—
Fiji (exports)	—	—	—	—	—	5	70	100	240	631	—	—	—	—
<b>Total</b>	<b>..</b>	<b>..</b>	<b>1,042,000</b>	<b>1,256,000</b>	<b>1,326,000</b>	<b>1,436,000</b>	<b>2,038,000</b>	<b>2,391,000</b>	<b>2,854,000</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
<b>FOREIGN COUNTRIES</b>														
France	—	—	1,963	1,737	871	670	466	(a)	428	253	132	79	70	(a)
Greece	—	—	(e) 6,500	14,500	32,900	40,000	886	148	315	15,930	—	(a)	(a)	3,500
Hungary (d)	—	—	(e) 3,200	7,794	26,392	24,299	23,836	15,932	7,938	27,305	2,000	6,300	7,000	(a)
Italy	—	—	—	7,479	5,831	2,405	237	516	8,270	3,100	2,450	970	90	200
Portugal	—	—	—	—	—	—	—	—	—	—	—	—	—	2,200
Romania (d)	—	—	—	—	—	—	—	—	—	—	—	—	—	(a)
Spain	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sweden	—	—	—	—	—	—	—	—	—	—	—	—	—	—
U.S.S.R. (estimated)	—	—	2,000,000	2,500,000	2,500,000	2,800,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	10,200	11,600	8,800
Yugoslavia ..	—	—	(a) 1,870	(a) 7,400	12,500	13,800	13,800	13,127	12,665	5,396	17,267	2,309	1,920	7,300
Angola ..	—	—	(a) —	—	690	394	12,563	12,054	9,161	45,462	(a)	4,100	2,400	1,287
Belgian Congo ..	—	—	—	—	8,384	12,563	12,054	16,722	69,825	800	300	4,300	200	1,845
Egypt (b) ..	—	—	46	26	29	58,973	136,380	149,766	152,910	—	4,200	6,300	9,500	200
										14	8	17,700	41,000	51,000

(a) Information not available.

(b) Ore containing 30% Mn and 10% Fe.

(c) Average annual production during Japanese occupation.

(d) U.S. Bureau of Mines.

(e) June to December only.

(f) Years ended June 30 of year following  
that stated.

## PRODUCTION OF MANGANESE ORE (Cont.)

Producing Country	1945	1946	1947	1948	1949	1950	1951	Estimated Manganese Content							
								1945	1946	1947	1948	1949	1950	1951	
<b>FOREIGN COUNTRIES (Cont.)</b>															
Morocco (French)	43,960	57,974	107,688	211,026	230,132	282,828	366,300	16,900	21,400	48,600	103,300	106,430	138,300	138,300	187,400
Morocco (Spanish)	—	—	—	25	500	643	77,205	97,308	—	—	—	—	—	—	500
Tunis	—	—	128,048	47,909	28,613	61,516	77,939	88,000	58,000	22,000	13,000	28,000	—	—	(a)
Cuba (b)	195,112	26,000	33,000	50,300	53,465	34,725	112,621	120,046	90,000	92,300	11,163	13,958	23,396	14,232	28,074
Mexico	42,000	128,246	117,524	117,054	112,621	127,000	193,000	193,000	193,000	193,000	67,500	68,900	63,94	68,446	52,000
United States (c)	162,803	4,205	(a)	(a)	(a)	227,000	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Argentina	23,937	169,543	166,237	161,412	20,015	20,174	28,414	(a)	110,000	76,000	75,000	72,000	10,000	10,400	10,000
Brazil	40,940	20,125	—	—	—	—	(a)	36,000	18,800	9,500	18,800	9,500	10,400	10,000	13,594
Chile	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18,253
Peru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(a)
Indonesia	—	—	f 7,000	f 27,951	32,670	54,081	97,332	e 150,000	e 200,000	—	3,500	—	—	—	255
Japan	—	—	33,054	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Korea	—	—	—	—	3,270	25,161	25,873	29,395	16,019	(a)	(a)	(a)	(a)	(a)	(a)
Philippine Republic	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(a)
Portuguese India	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(a)
Turkey	—	—	5,015	1,675	6,400	8,195	15,964	d 21,644	84,073	1,600	3,100	7,700	10,400	40,000	40,000
New Caledonia	—	—	(a)	(a)	(a)	(a)	2,070	31,610	49,719	1,800	1,600	3,000	10,500	12,700	24,400
<b>Total</b>	..	..	3,000,000	3,150,000	3,190,000	3,700,000	4,200,000	4,300,000	4,700,000	4,700,000	4,700,000	4,700,000	4,700,000	4,700,000	4,700,000
<b>World's Total</b>	..	..	4,040,000	4,400,000	4,520,000	5,140,000	6,240,000	6,700,000	7,560,000	7,560,000	7,560,000	7,560,000	7,560,000	7,560,000	7,560,000

Manganese ore is also produced in China and Iran.

(a) Information not available.

(b) Concentrates.

(c) Shippments. Excluding the following quantities of ore containing 10 to 35% Mn, which are included with iron ore (long tons):—1945—102,078; 1946—89,654; 1947—114,788; 1948—126,823; 1949—23,361; 1950—102,919; 1951—95,000.

(d) Exports.

(e) Estimated.

(f) Years ended March 31 of that following.

(g) Average annual production during Japanese occupation.

**EXPORTS OF MANGANESE ORE, ETC.**

*(Domestic Produce)*

*(Long tons)*

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Metal .. .. ..	33	200	191	593	298	386	65
Ferro-manganese and spiegeleisen .. ..	31,729	58,636	9,069	3,236	9,267	2,520	1,437
Gold Coast—							
Ore .. .. ..	701,750	765,300	588,919	629,973	741,069	711,366	806,080
South West Africa—							
Ore .. .. ..	—	—	—	—	—	—	3,604
Union of South Africa—							
Ore .. .. ..	132,706	316,351	334,695	319,442	677,813	685,137	576,534
Canada—							
Spiegeleisen .. .. ..	3,004	792	747	645	500	316	—
Ferro-manganese .. .. ..	(a)	29,005	65,554	66,517	31,507	23,724	60,275
Hong Kong (re-exports)—							
Ore .. .. ..	—	15	—	28	12,585	1,015	—
India—							
Ore (b) .. .. ..	171,276	479,447	597,677	363,482	613,907	808,221	1,151,742
Ferruginous manganese ore .. .. ..	(a)	(a)	(a)	(a)	(a)	(a)	4,222
Ferro-manganese .. .. ..	—	10,900	—	—	—	—	—
Malaya (c)—							
Ore .. .. ..	(a)	(a)	—	—	5	71	193
Australia—							
Ore .. .. ..	116	87	5	5	—	6	—
Fiji—							
Ore .. .. ..	—	—	5	70	100	240	631
New Zealand—							
Ore .. .. ..	—	410	—	488	110	—	—
Papua (e)—							
Ore .. .. ..	(a)	(a)	(a)	(a)	160	59	(a)
<b>FOREIGN COUNTRIES</b>							
France—							
Ore .. .. ..	—	799	421	861	1,960	2,918	2,335
Manganese dioxide .. .. ..	—	—	31	19	23	111	45
Ferro-manganese .. .. ..	17	334	951	102	172	34,378	28,827
Germany (Federal)—							
Ore .. .. ..	(a)	(a)	(a)	—	138	103	160
Ferro-manganese .. .. ..	(a)	(a)	(a)	—	36	510	(d) 212
Greece—							
Ore .. .. ..	—	—	—	—	—	329	14,154
Italy—							
Ore, including manganese-ferrous iron ore .. .. ..	—	—	—	1	72	5	49
Ferro-manganese .. .. ..	—	—	—	—	597	285	466
Netherlands—							
Ore .. .. ..	(a)	233	839	2,134	2,022	2,394	2,319
Norway—							
Ferro-manganese .. .. ..	162	13,178	31,761	58,133	52,879	82,178	79,161
Ferro-silico-manganese .. .. ..	729	2,258	3,817	9,411	8,022	19,182	22,482
Portugal—							
Ore .. .. ..	3,869	1,415	3,231	146	2,460	2,370	10,370
Spain—							
Ore .. .. ..	70	—	—	104	103	—	6

(a) Information not available.

(b) Including manganese ore mined in India but exported via the Portuguese port of Mormugao as follows:—  
1945, Nil; 1946, 44,847 tons; 1947, 58,220 tons; 1948, 33,355 tons; 1949, 70,864 tons; 1950, 79,941 tons; 1951, 90,465 tons.

(c) Including re-exports.

(d) January to September only.

(e) Years ended June 30 of that stated.

EXPORTS OF MANGANESE ORE, ETC. (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Sweden—							
Ore .. .	11	296	509	335	555	1,020	584
Ferro-manganese ..	271	287	1,326	117	725	981	369
Spiegeleisen ..	—	107	114	—	—	—	—
Ferro-silico-manganese ..	380	48	53	20	203	878	220
U.S.S.R.—							
Ore .. .	(b)						
Angola—							
Ore .. .	3,937	—	—	2,657	8,670	12,797	(a)
Belgian Congo—							
Ore .. .	9,948	14,482	10,947	15,601	16,717	13,866	64,685
Egypt—							
Ore .. .	—	—	(a)	92,426	127,298	(a)	(a)
Morocco (French)—							
Ore .. .	26,936	62,103	95,468	205,010	221,250	263,048	352,729
Tunis—							
Ore .. .	—	—	241	—	(a)	(a)	(a)
Cuba—							
Ore .. .	277,303	140,619	(a)	29,479	57,323	85,008	143,559
Mexico—							
Ore .. .	39,737	23,021	53,691	56,461	51,851	31,581	86,749
Mn content ..	18,269	11,163	13,958	23,635	23,396	14,233	28,059
United States—							
Ore .. .	4,770	10,004	7,164	8,245	4,495	8,002	7,170
Ferro-manganese and spiegeleisen ..	2,883	9,342	18,280	17,630	5,917	841	641
Brazil—							
Ore .. .	240,785	149,793	139,848	139,022	147,529	145,996	(a)
Chile—							
Ore .. .	87,937	166,374	26,208	17,283	10,137	20,403	20,668
China—							
Ore .. .	(a)	2	—	395	(a)	(a)	(a)
Indonesia—							
Ore .. .	(a)	1,065	2,579	1,486	984	3,248	(a)
Japan—							
Ore .. .	(a)	(a)	(a)	(a)	(a)	101	79
Ferro-manganese ..	(a)	(a)	(a)	(a)	(a)	2,496	(a)
Silico-manganese ..	(a)	(a)	(a)	(a)	(a)	451	(a)
Philippine Republic—							
Ore .. .	(a)	(a)	3,700	41,409	21,966	(a)	(a)
Portuguese India—							
Ore .. .	—	—	99	4,689	11,005	21,644	63,399
Turkey—							
Ore .. .	—	—	30	—	7,517	18,254	45,473
New Caledonia—							
Ore .. .	—	—	—	—	2,302	1,813	20,917

(a) Information not available.

(b) The following countries record an import of ore from U.S.S.R. (long tons):—

	1945	1946	1947	1948	1949	1950	1951
Netherlands .. .	(a)	(a)	(a)	517	(a)	(a)	1,968
Norway .. .	—	—	9,881	4,904	15,181	(a)	(a)
Sweden .. .	—	—	5,890	11,902	15,081	(a)	(a)
United States (total imports) .. .	135,129	216,000	295,541	381,455	179,829	58,539	2,309

IMPORTS OF MANGANESE ORE, ETC.

(Less Re-exports)

(Long tons)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Ore .....	318,084	200,078	315,377	449,922	470,575	401,628	381,148
Metal .....	—	—	—	—	6	40	86
Ferro-manganese and spiegeleisen .....	(b) 25 10,887	150 7,325	1,685 9,014	— 11,057	— 9,100	485 10,464	1,167 12,568
Ferro-silico-manganese .....							
Union of South Africa—							
Ferro-manganese .....	126	5	1	29	83	18	(a)
Manganese dioxide .....	558	565	951	572	744	613	(a)
Canada—							
Ore .....	177,033	128,592	199,556	205,623	123,084	121,158	198,287
Ferro-manganese .....	186	1,007	487	484	1,327	908	563
Hong Kong (total imports)—							
Ore .....	(a)	99	90	107	7,574	342	267
Malaya (total imports)—							
Ore .....	(a)	(a)	45	528	180	—	170
Australia—							
Ore .....	535	1,376	1,413	8,138	21,808	15,058	2,830
Ferro-manganese .....	(a)	739	144	64	709	339	80
<b>FOREIGN COUNTRIES</b>							
Austria—							
Ore .....	(a)	(a)	—	8,346	13,571	7,307	24,501
Belgium-Luxemburg E.U.—							
Ore .....	25,258	58,117	78,737	(a)	161,295	45,102	111,874
Ferro-manganese .....	(a)	(a)	(a)	(a)	52,667	47,136	78,626
Czechoslovakia—							
Ore .....	(a)	4,042	7,783	(d) 70,448	(a)	(a)	(a)
Denmark—							
Ore (e) .....	451	1,135	257	896	460	1,560	2,771
Finland (total imports)—							
Ferro-manganese and spiegeleisen .....	471	904	1,197	1,618	1,030	696	1,637
Manganese dioxide .....	394	30	121	419	181	85	350
France—							
Ore .....	38,601	88,416	161,176	233,937	267,065	335,173	424,838
Ferro-manganese .....	1,987	11,930	11,905	244	148	102	153
Manganese dioxide .....	1,723	—	5,943	—	5	36	18
Germany (Federal)—							
Ore .....	(a)	(a)	(a)	2,759	60,624	147,677	260,978
Ferro-manganese .....	(a)	(a)	(a)	2,365	3,427	1,369	(e) 2,090
Italy—							
Ore, including manganese-ferous iron ore .....	—	7,135	40,840	49,789	46,688	21,851	54,491
Spiegeleisen .....	—	—	197	58	—	1,537	3,329
Ferro-manganese .....	—	1,066	199	4,719	2,939	1,696	219
Ferro-silico-manganese .....	—	—	—	101	660	—	—
Netherlands—							
Ore .....	(a)	3,040	18,249	5,052	17,724	8,714	6,819
Norway—							
Ore .....	10,415	47,294	102,706	132,038	164,083	160,001	198,440
Spain—							
Ore .....	7,799	855	3,693	—	3,335	2,274	6,233
Ferro-manganese .....	5	1	11	36	2	3,476	866

(a) Information not available.

(b) Excess of re-exports.

(c) Chemical grade.

(d) January to October only.

(e) January to September only.

## IMPORTS OF MANGANESE ORE, ETC. (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Sweden—							
Ore (chemical grade) ..	402	285	732	814	784	1,142	(a)
do. (metallurgical grade) ..	3,978	21,271	18,807	14,964	32,525	28,308	49,889
Ferro-manganese ..	1,952	5,362	583	2,073	1,866	2,258	(a)
Spiegeleisen ..	1,100	6,257	607	—	20	128	(a)
Ferro-silico-manganese ..	380	420	399	453	328	121	(a)
Yugoslavia—							
Ore .. .. ..	(a)	(a)	(a)	(a)	(a)	4,471	8,978
Algeria—							
Ore .. .. ..	—	—	79	21	8	30	11
Mexico—							
Ferro-manganese ..	790	474	(a)	(a)	(a)	(a)	(a)
United States—							
Ore .. .. ..	1,170,450	1,357,392	1,169,105	1,316,743	1,297,300	1,805,050	1,852,612
Mn content .. ..	565,970	662,485	560,621	627,479	601,470	828,384	828,102
Ferro-manganese ..	31,715	28,687	72,596	87,697	58,048	96,691	106,932
Mn content .. ..	24,727	23,132	58,197	70,024	46,577	76,700	84,773
Argentina—							
Dioxide and borate of manganese .. ..	53	481	(a)	(a)	(a)	(a)	(a)
Ferro-manganese .. ..	2,405	1,677	(a)	(a)	(a)	(a)	(a)
Chile—							
Ferro-manganese .. ..	496	201	257	132	(a)	(a)	(a)
Japan (total imports)—							
Ore .. .. ..	(a)	—	—	36,946	(a)	(a)	(a)

(a) Information not available.

**MERCURY**  
**PRODUCTION OF MERCURY**  
(Lb.)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Southern Rhodesia ..	50	—	—	—	—	—	—
Union of South Africa ..	64,789	58,093	—	—	—	—	—
Australia .. ..	245	—	—	—	—	—	—
New Zealand .. ..	2,294	—	—	—	—	—	—
<b>FOREIGN COUNTRIES</b>							
Austria (c) ..	(a)	(a)	(a)	(a)	419	2,866	2,315
Czechoslovakia ..	(a)	64,651	(a)	(b) 60,000	(b) 60,000	(a)	(a)
Italy .. ..	1,962,000	3,862,000	4,096,000	2,906,000	3,384,000	4,054,000	4,092,000
Sweden .. ..	110	—	—	—	—	—	—
Spain .. .. ..	3,093,000	3,177,000	4,225,985	1,723,433	2,454,058	3,801,900	(b) 3,040,000
Yugoslavia .. ..	(a)	675,000	720,000	830,000	970,000	1,091,000	1,113,000
Algeria .. .. ..	25,404	25,860	25,800	28,990	7,776	—	—
Mexico .. .. ..	1,250,021	886,282	735,945	363,015	412,639	285,505	613,670
United States .. ..	2,337,988	1,926,448	1,766,544	1,093,488	754,680	344,660	554,268
Bolivia (exports) .. ..	214	—	—	99	—	—	1,407
Chile .. .. ..	65,491	59,569	39,143	35,510	57,300	24,250	8,671
Peru .. .. ..	15,803	381	—	—	—	—	—
China .. .. ..	152,000	(a)	(a)	(a)	(a)	(a)	(a)
Japan .. .. ..	236,500	104,300	123,113	128,351	187,031	103,282	178,138
Turkey .. .. ..	12,008	—	7,448	2,052	—	—	—
WORLD'S TOTAL (b) ..	10,000,000	11,500,000	12,200,000	7,700,000	8,800,000	10,300,000	10,200,000

Mercury is also produced in the U.S.S.R.; an allowance has been made for this in the total.

(a) Information not available.

(b) Estimated.

(c) Mercury content of copper concentrates.

EXPORTS OF MERCURY, ETC.

(Domestic Produce)

(Lb.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Mercury .. ..	1,818	45,778	6,168	14,133	18,571	107,095	168,583
Chloride .. ..	(a)	122,792	9,223	36,808	20,244	51,866	94,310
Union of South Africa—							
Mercury .. ..	82,350	25,575	—	—	—	—	—
Canada—							
Mercury .. ..	(a)	57,005	17,084	175	8	8,100	58,235
Hong Kong (re-exports)—							
Mercury .. ..	(a)	9,576	33,333	7,144	56,392	10,032	16,796
Malaya (b)—							
Mercury .. ..	(a)	46,701	6,171	271	2,145	169	3,381
Sarawak—							
Mercury .. ..	(a)	(c) 230	—	—	(a)	(a)	(a)
Australia—							
Mercury .. ..	1	125	5,923	8,133	988	447	3,247
New Zealand—							
Mercury .. ..	150	—	—	—	—	—	—
<b>FOREIGN COUNTRIES</b>							
Belgium-Luxemburg E.U.—							
Mercury .. ..	(a)	—	(a)	{ 6,614 72,753 11,022	{ 4,409 15,432 —	{ 41,987 15,432 —	{ 4,409 30,865 —
Sulphide of mercury .. ..	(a)	—	(a)				
Other mercury salts .. ..	(a)	—	(a)				
Czechoslovakia—							
Mercury .. ..	(a)	—	—	(d) 45,636	(a)	(a)	(a)
France—							
Mercury .. ..	221	3,547	8,818	(a)	(a)	(a)	(a)
Mercury salts .. ..	—	—	3,086	(a)	(a)	(a)	(a)
Germany (Federal)—							
Cinnabar .. ..	(a)	(a)	(a)	—	{ 5,291 1,543 14,110	{ 661 39,463 71,641	{ (e) 2,425 3,527 (e) 37,104
Mercury and amalgam .. ..	(a)	(a)	(a)				
Mercury salts .. ..	(a)	(a)	(a)				
Italy—							
Mercury .. ..	—	1,984,160	1,274,051	2,406,125	642,868	6,262,891	2,090,423
Mercury salts .. ..	(a)	(a)	(a)	(a)	(a)	112,656	134,702
Spain—							
Mercury .. ..	2,634,590	867,739	1,311,089	5,696,744	2,101,005	7,562,736	3,689,281
Mercury salts .. ..	51	190	55	20,128	5,787	35,821	32,159
Sweden—							
Mercury .. ..	1,455	465	300	476	549	17,637	37,479
Switzerland—							
Mercury .. ..	2	1,195	163	196	326	192	421
Yugoslavia—							
Mercury .. ..	(a)	(a)	(f)	(f)	(f)	1,054,250	990,537
Algeria—							
Mercury .. ..	38,360	34,392	30,644	9,259	—	—	—
Mexico—							
Mercury .. ..	1,172,766	844,683	945,413	363,139	493,297	376,161	627,347
United States—							
Mercury .. ..	78,877	68,932	67,148	59,713	43,860	33,977	18,311
Chloride .. ..	57,005	(a)	(a)	(a)	(a)	(a)	(a)
Fulminate .. ..	506	(a)	(a)	(a)	(a)	(a)	(a)
Oxide .. ..	26,950	(a)	(a)	(a)	(a)	(a)	(a)
Other salts .. ..	35,746	(a)	(a)	(a)	(a)	(a)	(a)

(a) Information not available.

(b) Including re-exports.

(c) April 15 to December 31 only.

(d) January to October.

(e) January to September only.

(f) Figures of exports are not available but imports into the following countries from Yugoslavia are recorded:—

United States—106,400 lbs. in 1947; 95,488 lbs. in 1948 and 241,371 lbs. in 1949; Czechoslovakia—110,231 lbs. in 1947 and 53,351 lbs. in 1948 (Jan.—Oct.).

## EXPORTS OF MERCURY, ETC. (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Bolivia— Mercury . . .	214	—	—	99	—	—	1,407
Chile— Mercury . . .	74,565	68,423	26,956	4,484	(a)	(a)	(a)
Peru— Mercury . . .	15,803	381	—	(a)	(a)	(a)	(a)
Japan— Mercury . . .	11,231	—	187,393	782,641	(a)	(a)	(a)
Turkey— Mercury . . .	3,269	2,696	—	—	—	—	—

(a) Information not available.

IMPORTS OF MERCURY, ETC.

(Less Re-exports)

(L.b.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
BRITISH COUNTRIES							
United Kingdom—							
Mercury .. ..	105,061	128,642	1,777,583	1,784,538	1,133,854	3,031,024	960,397
Anglo-Egyptian Sudan—							
Mercury .. ..	—	—	137	150	207	223	(a)
Southern Rhodesia—							
Mercury .. ..	52	2,525	24,278	14,799	14,477	20,051	11,088
South West Africa—							
Mercury .. ..	(a)	57	19	56	179	(a)	(a)
Tanganyika—							
Mercury .. ..	516	605	438	3,100	(a)	(a)	(a)
Union of South Africa—							
Mercury .. ..	1,977	19,650	27,986	58,960	51,400	67,151	(a)
Canada (b)—							
Mercury .. ..	27,101	152,719	412,649	803,878	277,927	614,005	308,088
Mercury salts .. ..	(\$2,415)	(\$696)	(\$2,161)	(\$1,072)	(\$222)	(\$1,436)	(\$4,220)
Newfoundland (c)—							
Mercury .. ..	522	64	132	198	(c)	(c)	(c)
British Guiana—							
Mercury .. ..	75	1,060	1,939	632	650	936	1,259
Burma—							
Mercury .. ..	(a)	(d)	560	(a)	(a)	(a)	(a)
Hong Kong (total imports)—							
Mercury .. ..	(a)	56,700	120,000	396,644	133,456	91,960	4,636
India—							
Mercury .. ..	186,904	412,678	347,770	686,126	1,080,160	2,140,362	719,582
Malaya (total imports)—							
Mercury .. ..	(a)	306	512	1,447	845	4,061	849
Australia—							
Mercury .. ..	32,554	7,433	25,009	93,266	44,726	61,855	99,825
Mercury salts .. ..	28,414	36,648	8,830	38,655	86,482	191,589	105,522
New Zealand—							
Mercury .. ..	—	159	1,257	2,495	943	2,529	2,519
FOREIGN COUNTRIES							
Austria—							
Mercury .. ..	(a)	(a)	17,196	12,346	22,928	40,124	41,447
Mercury salts .. ..	(a)	(a)	2,646	441	—	—	—
Belgium-Luxemburg E.U.—							
Mercury .. ..	(a)	(a)	(a)	{ 127,868 24,251 39,666	{ 94,799 2,205 4,409	{ 218,258 4,409 4,409	61,729 2,205 —
Sulphide of mercury .. ..							
Other mercury salts .. ..							
Bulgaria—							
Mercury .. ..	7,402	4,852	(a)	(a)	(a)	(a)	(a)
Czechoslovakia —							
Mercury .. ..	(a)	661	224,651	(e) 53,352	(a)	(a)	(a)
Denmark—							
Mercury .. ..	4,409	13,448	14,771	26,235	20,503	54,013	11,905
Finland (total imports)—							
Mercury and amalgam ..	40	4,319	55,971	9,345	66,893	32,309	23,473
France—							
Mercury .. ..	369,936	515,882	560,195	(a)	(a)	(a)	(a)
Mercury salts .. ..	2	50,927	14,110	(a)	(a)	(a)	(a)
Germany (Federal)—							
Cinnabar .. ..	(a)	(a)	(a)	{ 441 254,193 —	{ 720,912 110 —	438,940	—
Mercury and amalgam .. ..							
Mercury salts .. ..							
Greece—							
Mercury .. ..	—	—	13	3,799	6,837	514	86
Netherlands—							
Mercury and amalgam .. ..	(a)	123,459	70,548	112,436	125,663	121,254	81,571
Norway—							
Mercury .. ..	3,598	177,148	43,600	4,445	35,364	69,648	(a)

(a) Information not available.

(b) Including Newfoundland from April 1, 1949.

(c) Years ended March 31 of year following that stated. Included with Canada from April 1, 1949.

(d) February to September only. (e) January to October only.

## IMPORTS OF MERCURY, ETC. (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Portugal—							
Mercury .. ..	26,336	36,612	29,008	6,146	14,399	3,287	55,709
Mercury salts .. ..	3,199	6,113	9,509	9,121	8,142	2,216	(a)
Sweden—							
Mercury .. ..	131,407	525,690	227,901	279,667	57,818	249,122	(a)
Switzerland—							
Mercury .. ..	10,818	192,338	64,653	101,832	55,065	152,824	117,149
Algeria—							
Mercury .. ..	—	—	—	3,968	—	—	1,984
Mercury salts .. ..	22	44	—	—	—	—	—
Angola—							
Mercury .. ..	18	108	54	(a)	(a)	(a)	(a)
Egypt—							
Mercury .. ..	174	1,023	2,873	558	1,537	4,901	(a)
Morocco (French)—							
Mercury .. ..	—	331	386	152	(a)	(a)	(a)
Mozambique—							
Mercury .. ..	11	236	368	152	79	179	218
Tunis—							
Mercury .. ..	—	—	220	441	(a)	(a)	(a)
Costa Rica—							
Mercury .. ..	677	3,589	1,801	(a)	(a)	(a)	(a)
Cuba (total imports)—							
Mercury .. ..	4,191	(a)	(a)	18,140	3,710	(a)	(a)
Mexico—							
Mercury .. ..	1,186	988	(a)	(a)	(a)	(a)	(a)
Mercury salts .. ..	917	3,971	(a)	(a)	(a)	(a)	(a)
United States—							
Mercury .. ..	5,086,247	1,055,956	984,814	2,428,248	7,838,705	4,262,056	3,637,338
Mercury salts .. ..	336	26	(a)	—	44,519	26,023	82,908
Argentina—							
Mercury .. ..	22,555	60,528	(a)	(a)	(a)	(a)	(a)
Mercury salts .. ..	7,875	8,389	(a)	(a)	(a)	(a)	(a)
Brazil (total imports)—							
Mercury .. ..	30,053	76,478	23,459	102,268	45,226	(a)	(a)
Chile—							
Mercury .. ..	205	—	659	417	(a)	(a)	(a)
Mercury salts .. ..	2,284	2,901	(a)	(a)	(a)	(a)	(a)
Colombia—							
Mercury .. ..	(a)	9,083	(a)	(a)	(a)	(a)	(a)
Mercury salts .. ..	(a)	3,545	(a)	(a)	(a)	(a)	(a)
Dutch Guiana—							
Mercury .. ..	26	11	165	—	(a)	(a)	(a)
Peru—							
Mercury .. ..	165	183	(a)	692	(a)	(a)	(a)
Mercury salts .. ..	430	1,493	(a)	271	(a)	(a)	(a)
Uruguay—							
Mercury .. ..	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Venezuela—							
Mercury .. ..	9,533	14,279	134,890	14,081	(a)	(a)	(a)
Mercury salts .. ..	(a)	9,623	9,228	6,144	(a)	(a)	(a)
China—							
Vermilion .. ..	(a)	(b)	15,584	(b)	83,121	(a)	(a)
Iran (total imports) (c)—							
Mercury .. ..	(a)	16,248	2,928	25,366	37	(a)	(a)
Japan—							
Mercury .. ..	225	(a)	(a)	(a)	(a)	(a)	(a)
Philippine Republic—							
Mercury .. ..	547	12,809	(a)	(a)	(a)	(a)	(a)
Syria and Lebanon—							
Mercury .. ..	44	3,505	(a)	(a)	(a)	(a)	(a)
Turkey—							
Mercury .. ..	353	509	692	509	353	692	187
Mercury salts .. ..	1,852	3,128	10,055	1,404	604	1,274	3,325

(a) Information not available.

(c) Years ended March 20 of year following that stated.

(b) Including artificial vermillion.

**MICA**  
**PRODUCTION OF MICA**  
 (Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Kenya	—	—	—	—	4	1	1
Northern Rhodesia—							
Sheet .. ..	5	(5 cwt.)	—	—	3	2	5
Waste .. ..	2	(6 cwt.)	—	—	—	—	—
Southern Rhodesia—							
Block and sheet ..	193	330	{ 285	270	85	402	{ 93
Waste .. ..			6	17	213		250
South West Africa (waste)	—	—	—	—	—	58	112
Tanganyika—							
Block and sheet ..	107	70	88	66	55	58	69
Ground .. ..	—	—	5	3	36	59	—
Waste .. ..	150	265	—	—	—	25	—
Uganda	7	—	—	1	2	(7 cwt.)	(3 cwt.)
Union of South Africa—							
Sheet .. ..	1	1	1	1	1	13	5
Waste .. ..	1,112	1,756	1,977	1,339	1,048	1,336	1,746
Canada (sales)—							
Rough mine-run or rifted	5	309	110	10	4	(20 lbs.)	
Trimmed .. ..	30	14	11	33	21	81	
Splittings .. ..	2	6	—	8	4	1	
Sold for mechanical splittings .. ..	147	114	130	142	4	47	1,307
Ground .. ..	783	1,186	1,865	1,673	828	989	
Scrap .. ..	2,178	2,265	1,598	1,659	678	614	
Ungraded .. ..	—	—	—	3	19	—	
By varieties—							
Phlogopite .. ..	2,542	3,172	2,907	3,304	1,280	1,445	(a)
Muscovite .. ..	603	722	807	224	277	287	(a)
Ceylon (exports) .. ..	1	(8 cwt.)	(4 cwt.)	—	—	—	(4 cwt.)
India (exports)—							
Blocks .. ..	1,206	1,350	710	679	417	748	1,590
Splittings .. ..	3,253	6,566	7,305	10,196	9,017	11,646	13,237
Scrap .. ..	323	2,586	1,565	7,273	4,098	3,279	8,546
Australia (b)—							
Crude and scrap .. ..	54	36	10	19	(34 lbs.)	23	37
Cut .. ..	31	23	41	40	29	30	23
New Zealand .. ..	8 cwt.)	—	—	—	—	—	—
<b>FOREIGN COUNTRIES</b>							
Austria .. ..	64	38	77	89	249	362	302
France .. ..	—	—	—	—	—	—	(a)
Italy .. ..	41	13	17	23	(a)	(a)	(a)
Norway (incl. waste) .. ..	133	64	183	151	326	544	969
Portugal .. ..	—	—	3	—	—	—	—
Spain .. ..	18	4	12	11	9	12	11
Sweden—							
Block .. ..	108	—	111	14	11	2	
Ground .. ..	16	68	41	49	49	162	
Angola—							
Sheet .. ..	15	{ 6	4	10	12	15	15
Waste and splittings .. ..		{ 25	84	96	43	151	119
Eritrea .. ..	(a)	(a)	(a)	(13 cwt.)	(8 cwt.)	1	—
Madagascar—							
Phlogopite (block) .. ..	602	459	444	499	944	789	943
Muscovite .. ..	8	2	—	—	—	—	—
Morocco (French) .. ..	(a)	(a)	(a)	142	53	81	36
Mozambique .. ..	2	2	1	—	101	41	11
Mexico (exports) .. ..	402	80	268	27	(a)	(a)	(a)

(a) Information not available.

(b) The following amounts of Damourite were also produced (long tons): 1945—94; 1946—203; 1947—314; 1948—362; 1949—692; 1950—696; 1951—505.

PRODUCTION OF MICA (Cont.)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
United States (sales)—							
Sheet (uncut) .. ..	580	482	186	121	229	258	266
Scrap (b) .. ..	36,661	47,859	44,462	46,569	29,336	61,929	64,171
Argentina—							
Sheet .. .. ..	698	} 423	{ (a) (a)	(a) (a)	(a) (a)	(a) (a)	(a) (a)
Waste .. .. ..	10						
Bolivia (exports) .. ..	—	—	—	—	—	—	—
Brazil .. .. ..	1,000	1,613	1,207	1,868	1,341	1,784	(a)
Peru .. .. ..	483	204	2	(a)	(a)	(a)	(a)
Uruguay .. .. ..	1	1	14	2	1	1	1
Korea .. .. ..	93	(a)	(a)	(a)	(a)	(a)	(a)
<b>TOTAL *</b> ..	<b>50,500</b>	<b>68,200</b>	<b>62,800</b>	<b>73,100</b>	<b>49,300</b>	<b>85,500</b>	<b>94,000</b>

\*Excluding mica produced in Roumania and the U.S.S.R.

(a) Information not available.

(b) Including mica recovered from kaolin and mica schists.

EXPORTS OF MICA

(Domestic Produce)

(Long tons)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Splittings, ground and waste .. .. ..	50	128	275	294	487	479	726
Southern Rhodesia—							
Block and sheet waste .. .. ..	207	326	284	312	443	513	{ 100
Waste .. .. ..							337
Tanganyika—							
Block and sheet .. .. ..	96	72	70	71	57	50	70
Ground and waste .. .. ..	150	265	5	3	36	84	—
Uganda .. .. ..	7	—	—	2	2	—	—
Union of South Africa (b) .. .. ..	1,047	2,675	2,238	1,287	892	1,050	782
Canada—							
Rough cobbed and thumb trimmed .. .. ..	388	313	213	162	79	104	302
Splittings .. .. ..	2	4	2	5	13	—	—
Ground .. .. ..	157	201	80	947	192	250	346
Scrap and waste .. .. ..	2,167	1,741	1,143	892	303	528	438
Ceylon .. .. ..	1	(8 cwt.)	(4 cwt.)	—	—	—	(4 cwt.)
India—							
Blocks .. .. ..	1,206	1,350	710	679	417	764	1,617
Splittings .. .. ..	3,253	6,566	7,305	10,196	9,023	11,978	13,725
Scrap .. .. ..	323	2,586	1,565	7,273	4,098	3,679	9,203
Australia—							
Slabs .. .. ..	(£A1,187)	(£A6,801)	(£A16,686)	(£A13,487)	2	1	5
<b>FOREIGN COUNTRIES</b>							
Austria .. .. ..	(a)	(a)	1	93	431	78	315
Belgium-Luxemburg E.U.—							
Sheets and plates .. .. ..	(a)	(a)	(a)	20	43	15	21
Bulgaria .. .. ..	—	—	(a)	(a)	(a)	(a)	(a)
France—							
Unmanufactured .. .. ..	—	37	5	42	76	83	113
Sheet, plate and manufac-tures .. .. ..	2	6	11	30	11	27	39
Germany (Federal)—							
Unmanufactured .. .. ..	(a)	(a)	(a)	—	—	—	1
Netherlands .. .. ..	(a)	(a)	1	2	7	6	25
Norway—							
Sheet .. .. ..	171	220	68	89	111	562	538
Scrap .. .. ..	384	67	98	149	20	30	(a)
Portugal .. .. ..	5	—	—	—	—	—	—
Sweden .. .. ..	(a)	(a)	(a)	(a)	(a)	1	10
Angola (b) .. .. ..	10	—	107	(a)	(a)	23	—
Madagascar—							
Phlogopite, etc. .. .. ..	244	703	538	700	794	815	672
Morocco (French) .. .. ..	—	—	—	—	—	139	113
Mozambique .. .. ..	1	1	—	2	1	—	1
Mexico .. .. ..	402	80	268	27	13	173	(a)
United States—							
Unmanufactured .. .. ..	127	132	148	151	51	150	178
Ground and manufac-tured .. .. ..	748	1,245	1,185	1,101	938	1,231	1,514
Argentina .. .. ..	313	350	(a)	(a)	(a)	(a)	(a)
Brazil .. .. ..	969	1,130	844	971	550	811	(a)
Peru.. .. ..	483	167	(a)	(a)	(a)	(a)	(a)

(a) Information not available.

(b) Chiefly waste mica. Exports of sheet mica are very small.

IMPORTS OF MICA

*(Less Re-exports)*

*(Long tons)*

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Slabs .. .. ..	1,274	1,073	1,091	614	94	(b) 407	292
Splittings .. .. ..	225	2,200	3,308	1,649	1,704	1,208	3,062
Ground and waste .. .. ..	741	993	629	3,300	4,225	2,031	4,138
Tanganyika .. .. ..	1	—	1	3	—	—	—
Union of South Africa—							
Mica and micanite sheets .. .. ..	7	12	10	15	11	16	(a)
Canada—							
Mica and manufactures .. .. ..	(\$53,168)	(\$65,898)	(\$139,818)	(\$101,043)	(\$150,923)	(\$249,285)	(\$326,717)
India—							
Block .. .. ..	554	—	11	110	62	130	72
Splittings .. .. ..	—	3	30	29	19	125	26
Australia—							
Slabs, waste and scrap .. .. ..	(a)	(c) 50	(c) 81	(c) 51	115	120	186
Sheet and splittings .. .. ..	(a)	(c) 13	(c) 29	(c) 92	29	48	38
Ground .. .. ..	(a)	(c) 8	(c) 7	(c) 7	10	11	6
New Zealand (\$N.Z.) .. .. ..	(a)	(a)	(a)	(a)	(\$7,072)	(\$12,834)	(\$27,810)
<b>FOREIGN COUNTRIES</b>							
Austria—							
Crude .. .. ..	(a)	(a)	(a)	(a)	2	6	23
Sheet .. .. ..	(a)	(a)	7	15	31	18	29
Belgium-Luxemburg E.U.—							
Crude sheet and crude plate .. .. ..	(a)	(a)	(a)	453	204	399	649
Cut sheet and cut plate .. .. ..	(a)	(a)	(a)	62	34	—	—
Czechoslovakia .. .. ..	(a)	—	3	(d) 30	(a)	(a)	(a)
Denmark—							
Block .. .. ..	2	22	10	21	23	87	550
Powder .. .. ..	3	21	18	25	302	842	367
France—							
Unmanufactured .. .. ..	6	104	386	652	695	1,545	1,634
Sheet, plate and manufacturers .. .. ..	47	282	284	16	6	7	13
Germany (Federal)—							
Unmanufactured .. .. ..	(a)	(a)	(a)	—	443	951	1,367
Italy—							
Unmanufactured .. .. ..	{ (a)	{ (a)	207	432	852	{ 1,147	3,410
Sheet .. .. ..	{ (a)	{ (a)	54	144	{ 263	20	25
Netherlands—							
Unmanufactured .. .. ..	{ (a)	{ (a)	54	144	{ 263	80	251
Sheet, plate and manufactured .. .. ..	{ (a)	{ (a)	54	144	{ 263	34	269
Portugal .. .. ..	1	(a) 5	7	(a) 5	45	36	—
Sweden .. .. ..	(a)	(a) 6	(b) 2	(a) 2	188	627	(a)
Egypt .. .. ..	—	(b) 6	—	—	—	—	(a)
Mexico .. .. ..	10	86	102	126	(a)	(a)	(a)
United States—							
Unmanufactured .. .. ..	5,088	7,553	5,345	7,624	5,591	5,419	6,821
Cut, splittings and manufactured .. .. ..	3,272	4,924	5,089	8,355	8,689	11,113	10,045
Japan .. .. ..	(a)	—	48	130	224	81	415
Turkey .. .. ..	1	2	1	1	6	1	1

(a) Information not available.

(b) Excess of re-exports.

(c) Year ended June 30 of that stated.

(d) January to October only.

**MOLYBDENUM**  
**PRODUCTION OF MOLYBDENUM ORE**  
*(In terms of MoS<sub>2</sub>)*  
(Cwt.)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Canada (Shipments) ..	7,495	6,043	6,784	2,721	—	925	3,125
Hong Kong .. ..	—	—	—	—	—	—	2
Australia .. .. ..	25	150	70	60	106	88	27
<b>FOREIGN COUNTRIES</b>							
Austria .. .. ..	(a)	(b)	145	(b)	20	340	625
Finland .. .. ..	3,620	4,110	2,300	—	—	—	755
Norway .. .. ..	2,486	313	3,216	2,641	2,316	2,185	4,094
Sweden .. .. ..	59	—	—	20	98	118	(a)
Morocco (French) .. ..	—	1,575	1,181	—	—	—	—
Mexico .. .. ..	14,368	26,840	4,467	—	—	—	—
United States .. ..	458,363	271,102	402,485	397,411	335,268	423,809	578,196
Chile .. .. ..	27,595	18,367	13,172	17,454	18,346	31,652	56,572
Peru .. .. ..	952	137	103	68	82	48	(a)
Japan .. .. ..	3,540	1,480	550	32	—	787	2,853
Korea (b) .. .. ..	1,800	(a)	(a)	(a)	(a)	(a)	(a)
<b>TOTAL*</b> ..	<b>520,300</b>	<b>330,300</b>	<b>434,350</b>	<b>420,410</b>	<b>356,560</b>	<b>460,240</b>	<b>645,800</b>

\*Excluding molybdenum ore produced in Roumania, Spain, U.S.S.R., Yugoslavia, China and Turkey.

(a) Information not available.

(b) Estimated.

EXPORTS OF MOLYBDENUM ORE, ETC.

(Domestic Produce)

(Cwt.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom— Ferro-molybdenum ..	(a)	(a)	2,680	1,400	2,620	147	78
Australia— Ore and concentrates ..	—	(b) 7 131	41 820	—	70	—	20
<b>FOREIGN COUNTRIES</b>							
Finland— Ore .. .. ..	1,228	4,099	1,375	—	643	—	—
France— Molybdic acid and molybdates .. .. ..	—	2	—	(a)	(a)	(a)	(a)
Norway— Ore .. .. ..	5,085	198	3,420	2,600	1,742	1	6,424
Sweden— Ore .. .. ..	—	39	—	39	—	—	—
Morocco (French)— Ore .. .. ..	—	4,378	4,350	1,965	4,199	4,140	20
Mexico— Ore and concentrates ( $MoS_2$ content) ..	15,222	26,780	4,351	—	(a)	(a)	(a)
United States— Ore and concentrates ..	47,789	(a)	(a)	(a)	(a)	(a)	(a)
	42,628	8,413	44,516	61,539	79,222	92,844	55,536
	802	1,969	1,188	503	769	1,304	974
	15,783	6,620	8,509	10,620	8,520	10,520	13,249
Chile— Ore .. .. ..	12,234	45,742	14,874	23,125	5,905	41,336	80,700
Peru— Ore ( $MoS_2$ content) ..	952	99	917	79	—	130	(a)
Korea— Ore ( $MoS_2$ content) (c) ..	787	(a)	(a)	(a)	(a)	(a)	(a)
Manchuria— Ore ( $MoS_2$ content) (c) ..	984	(a)	(a)	(a)	(a)	(a)	(a)

(a) Information not available.

(b) Year ended June 30, 1946.

(c) Imports into Japan from the country indicated.

IMPORTS OF MOLYBDENUM ORE, ETC.

(Less Re-exports)

(Cwt.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Ore .. .. ..	21,255	25,824	46,190	45,754	52,622	61,716	62,458
Metal .. .. ..	—	—	1	2	6	8	32
Canada—							
Oxide ( <i>Mo</i> content)	1,820	1,010	1,610	1,790	2,180	(a)	(a)
Ferro-molybdenum ( <i>Mo</i> content)				1,200	960	(a)	(a)
<b>FOREIGN COUNTRIES</b>							
Austria—							
Molybdic acid .. ..	(a)	(a)	(a)	(a)	(a)	22	356
Ferro-molybdenum ..	(a)	(a)	(a)	(a)	(a)	3,287	2,517
Finland—							
Ferro-molybdenum ..	—	—	—	203	245	202	(a)
France—							
Metal and alloys .. ..	(a)	(a)	(a)	31	32	—	51
Molybdic acid and molybdates .. ..	—	—	8	(a)	(a)	(a)	(a)
Italy—							
Ferro-molybdenum ..	—	15,058	535	1,214	514	1,708	1,555
Sweden—							
Ore .. .. ..	4,527	14,192	12,283	8,248	20,452	20,412	16,141
Ferro-molybdenum ..	797	1,342	5,813	818	3,706	2,047	(a)
United States—							
Ore ( <i>MoS<sub>2</sub></i> content) ..	9,900	4,118	—	—	—	—	63
Japan—							
Ore ( <i>MoS<sub>2</sub></i> content) ..	1,870	(a)	(a)	(a)	(a)	(a)	(a)

(a) Information not available.

**MONAZITE**  
**PRODUCTION OF MONAZITE**  
 (Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
India .. .. ..	(b) 1,567	— 60	(a) —	(a) —	(a) 167	(a) 186	(a) 156
Malaya .. .. ..	— 54	—	—	—	—	—	—
Australia (c) .. .. ..	—	—	—	—	—	(d) —	(a) 293
<b>FOREIGN COUNTRIES</b>							
Belgian Congo .. .. ..	—	—	—	—	—	—	—
Egypt .. .. ..	(3 civt.) —	(3 civt.) —	—	—	— 6	— 3	— 71
Brazil (exports) .. .. ..	1,014	1,230	1,723	1,756	2,278	(a) —	(a) 36 1

Monazite is also produced in the United States.

(a) Information not available.

(b) Average annual production during Japanese occupation.

(c) Monazite content of low-grade concentrates. In addition 41 tons of high-grade concentrates have been produced.

(d) Revised.

EXPORTS OF MONAZITE, ETC.

*(Domestic Produce)*

(Long tons)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
India— Monazite sand .. ..	200	1,947	703	(a)	50	(a)	114
<b>FOREIGN COUNTRIES</b>							
France— Thorium nitrate and other rare-earth salts .. ..	—	(2 cwt.)	11	—	1	—	—
United States— Thorium compounds .. ..	(b) 3	(a)	(a)	(a)	(a)	(a)	(a)
Brazil— Monazite sand .. ..	1,014	1,230	1,723	1,756	2,278	(a)	(a)

(a) Information not available.

(b) January to June only.

IMPORTS OF MONAZITE, ETC.

*(Less Re-exports)*

(Long tons)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Canada— Thorium and cerium salts .. .. ..	(£2,788)	(£7,800)	(£5,223)	(£17,103)	(£14,586)	(£11,171)	(£23,038)
<b>FOREIGN COUNTRIES</b>							
France— Thorium nitrate and other rare-earth salts .. ..	—	34	35	14	120	305	448
United States— Monazite sand and thorite .. .. ..	490	—	(a)	(a)	148	(a)	(a)

(a) Information not available.

**NICKEL**  
 PRODUCTION OF NICKEL ORE  
*(In terms of metal)*  
*(Long tons)*

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Union or South Africa (b)	495	491	519	451	559	829	1,120
Canada .. .. ..	109,433	85,770	105,912	117,625	114,901	110,410	123,128
<b>TOTAL</b> .. ..	<b>109,900</b>	<b>86,300</b>	<b>106,400</b>	<b>118,076</b>	<b>115,459</b>	<b>111,239</b>	<b>124,248</b>
<b>FOREIGN COUNTRIES</b>							
Finland (i) .. .. ..	364	107	—	—	—	—	82
Italy .. .. ..	12	—	—	—	—	—	—
Norway .. .. ..	508	—	—	—	—	—	—
Sweden .. .. ..	384	—	—	—	—	—	—
U.S.S.R. (c)	13,200	20,000	25,000	25,000	25,000	25,000	25,000
Cuba (h) .. .. ..	17,586	16,324	3,126	—	—	—	(a) 675
United States (e) .. .. ..	1,031	314	577	788	705	815	—
Indonesia .. .. ..	(f) 300	—	—	—	—	—	—
Japan (d) .. .. ..	642	—	—	—	—	—	—
New Caledonia (g) .. .. ..	4,010	3,300	3,300	4,805	3,327	5,542	8,740
<b>TOTAL*</b> .. ..	<b>38,000</b>	<b>40,000</b>	<b>32,000</b>	<b>31,000</b>	<b>29,000</b>	<b>31,300</b>	<b>34,500</b>
<b>WORLD'S TOTAL*</b> ..	<b>148,000</b>	<b>126,000</b>	<b>138,000</b>	<b>149,000</b>	<b>144,500</b>	<b>142,500</b>	<b>158,700</b>

\* Nickel ores are also produced in Brazil. Totals are approximate.

(a) Information not available.

(b) Nickel content of platinum matte.

(c) Estimated by the U.S. Bureau of Mines.

(d) Obtained chiefly from nickel-bearing iron ores.

(e) Nickel content of salts and nickel produced as a by-product in the electrolytic refining of copper (partly from imported blister copper). 1945 includes nickel content of ores produced.

Secondary metal was recovered in the United States as follows :—

	Long tons		Long tons
1945 .. .. ..	5,788	1949 .. .. ..	5,071
1946 .. .. ..	7,364	1950 .. .. ..	7,853
1947 .. .. ..	8,519	1951 .. .. ..	7,680
1948 .. .. ..	7,902		

(f) Average annual production during the Japanese occupation.

(g) Content of dry ore mined. The estimated content of matte and ferro-nickel (since 1948) exported was :—

	Long tons		Long tons
1945 .. .. ..	2,865	1949 .. .. ..	3,764
1946 .. .. ..	2,294	1950 .. .. ..	4,842
1947 .. .. ..	1,137	1951 .. .. ..	4,358
1948 .. .. ..	2,427		

(h) Content of ore mined. The estimated content of oxide produced was :—

	Long tons		Long tons
1945 .. .. ..	10,728	1949 .. .. ..	—
1946 .. .. ..	11,068	1950 .. .. ..	—
1947 .. .. ..	1,982	1951 .. .. ..	(a)
1948 .. .. ..	—		

(i) Nickel content of concentrates.

## EXPORTS OF NICKEL

*(Domestic Produce)*

(Long tons)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Cubes, rondels, etc. ..	4,318	4,354	5,393	6,244	10,700	8,268	7,124
Plates, sheets, etc. ..	10	214	207	247	169	189	101
Ingots, sheets, wire, etc. (alloys) .. ..	322	1,650	1,525	1,864	2,336	2,530	1,729
Scrap and alloyed .. ..	—	34	1,494	1,600	2,600	7,431	4,513
Nickel oxide .. ..	24	111	48	19	112	176	180
Union of South Africa—							
Matte ( <i>Ni</i> content) ..	(a)	313	256	405	607	575	1,112
Canada—							
Matte or speiss ( <i>Ni</i> content) .. ..	25,264	27,344	35,506	45,358	50,806	47,402	51,680
Nickel, fine .. ..	69,793	72,140	63,175	63,613	61,686	59,727	64,605
Nickel oxide ( <i>Ni</i> content)	1,570	461	5,834	8,743	1,028	1,489	843
<b>FOREIGN COUNTRIES</b>							
Belgium-Luxemburg E.U.—							
Ingots, scrap, etc. ..	1	25	105	{ 35	9	47	57
Sheets, wire, etc. ..				{ 24	7	10	3
Czechoslovakia—							
Crude and scrap ..	(a)	{ 18	60	—	(a)	(a)	(a)
Plates and sheets ..		{ 6	—	—	(a)	(a)	(a)
Denmark—							
Crude and scrap ..	2	—	2	21	19	102	35
Finland—							
Ore .. .. ..	—	—	—	—	—	920	—
France—							
Ore .. .. ..	(a)	(a)	(a)	20	20	—	27
Matte and speiss .. ..	3	—	11	10	—	625	2
Ingots .. .. ..	—	1	1	3	8	399	435
do. (alloys) .. ..	2	4	—	—	—	434	289
Sheets and wire .. ..	—	—	1	6	4	10	18
do. (alloys) .. ..	—	40	63	88	70	155	36
Germany (Federal)—							
Crude, scrap and coin ..	(a)	(a)	(a)	—	—	827	29
Bars, sheets, wire, etc. ..	(a)	(a)	(a)	21	11	264	178
Italy—							
Ingots .. .. ..	—	—	—	98	—	—	1
Sheets, tubes, wire and alloys .. .. ..	—	—	388	723	867	37	16
Netherlands—							
Crude and scrap ..	(a)	13	93	141	258	294	78
Norway—							
Crude .. .. ..	1,172	4,459	7,403	7,193	7,421	9,645	9,575

(a) Information not available.

EXPORTS OF NICKEL (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Sweden—							
Crude .. ..	—	35	42	—	—	—	—
Switzerland—							
Crude, scrap and alloys	—	—	268	94	92	696	333
Bars, sheets, etc., and alloys .. ..	1	146	423	336	402	547	136
Cuba—							
Ore .. ..	15,846	(a)	590	1	1	(a)	(a)
United States—							
Bars, rods, sheets and alloys .. ..	721	841	1,211	1,208	719	302	172
Scrap and alloys ..	2,043	4,997	7,522	5,202	2,486	2,534	3,565
Nickel-silver bars, etc. ..	119	910	1,395	563	457	222	198
New Caledonia—							
Ore .. ..	—	—	1,181	—	—	—	6,889
Matte, etc. .. ..	3,828	2,977	1,476	3,612	5,793	6,191	3,556

(a) Information not available.

# IMPORTS OF NICKEL

*(Less Re-exports)*  
*(Long tons)*

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
BRITISH COUNTRIES							
United Kingdom—							
Ore, concentrates and matte .. .. ..	19,373	12,737	21,500	26,403	32,771	25,221	34,260
Ingots, cubes, rondels, etc. (b) .. .. ..	67	4,742	7,655	4,685	2,292	2,480	3,225
Plates, sheets, etc. .. .. ..	8	162	439	414	270	12	47
Ingots, sheets, etc. (alloys) .. .. ..	1,331	3,206	5,222	4,296	1,243	1,111	2,288
Scrap and alloyed .. .. ..	28	480	30	276	297	820	221
Nickel oxide .. .. ..	85	306	389	221	456	539	491
Canada—							
Ingots or blocks and alloyed .. .. ..	11	5	82	37	12	19	43
Bars, rods, sheets, etc. .. .. ..	606	1,106	966	1,087	1,190	1,071	990
do. (alloyed) .. .. ..	75	319	181	93	90	104	84
Hong Kong (total imports)—							
Nickel .. .. .. (a)		9	35	3	1	2	—
Australia—							
Pigs and ingots .. .. .. } 79	{ 147	796	285	1,221	407	302	
Bars and rods .. .. .. }	17	23	32	59	57	42	
Scrap .. .. .. (a)	—	(e) 200	(e) 143	15	6	161	
Irish Republic—							
Nickel, alloys and manufacturers .. .. ..	6	21	20	8	10	6	5
FOREIGN COUNTRIES							
Austria—							
Crude .. .. .. } (a)	{ 186	199	462	867	663		
Anodes .. .. .. }	7	2	26	32	11		
Ingots, sheets, etc. .. .. .. }	8	13	31	12	16		
Scrap .. .. .. }	—	10	—	—	—		
Belgium-Luxemburg E.U.—							
Ingots, etc. .. .. .. } 180	{ 926	1,033	{ 4	21	344	357	
Scrap .. .. .. }	358	477	291	200	13	6	
Sheets, wire, etc. .. .. .. }	477	—	—	—	147	166	
Czechoslovakia—							
Crude and scrap .. .. .. } (a)	{ 188	1,724	(c) 1,639	(a)	(a)	(a)	
Plates and sheets .. .. .. }	36	34	(c) 29	(a)	(a)	(a)	
Denmark—							
Crude and scrap .. .. ..	31	87	65	101	55	89	58
Finland (total imports)—							
Crude and scrap .. .. ..	1	4	39	100	24	144	210
France—							
Matte and speiss .. .. ..	—	2,179	785	2,633	5,734	7,142	5,448
Ingots .. .. ..	1,825	4,321	4,039	1,447	3,470	190	86
do. (alloys) .. .. ..	1	121	102	217	79	108	298
Sheets and wire .. .. ..	1	153	225	149	107	223	94
do. (alloys) .. .. ..	4	94	157	214	215	219	192
Nickel sulphate and oxide .. .. ..	85	1,795	1,180	(a)	(a)	(d) 434	(d) 355
Germany (Federal)—							
Ore .. .. .. } (a)	{ (a)	(a)	{ 1,774	—	581	29,587	
Crude, scrap and coin .. .. .. }	—	—	8	2,089	5,869	4,080	
Bars, sheets, wire, etc. .. .. .. }	—	—	26	25	25	21	
Italy—							
Ingots, scrap and alloyed .. .. ..	—	1,270	1,298	675	901	1,493	610
Sheets, tubes, wire, etc., and alloyed .. .. ..	—	59	260	226	366	263	96
Netherlands—							
Crude and scrap .. .. .. (a)		431	576	224	245	487	323
Norway—							
Matte (copper-nickel) .. .. ..	1,882	11,138	14,464	16,771	19,006	16,362	(a)
Crude, bars, rods, etc. .. .. ..	7	22	6	2	7	51	(a)

(a) Information not available.

(c) January to October only.

(e) Year ended June 30 of that stated.

(b) Excess of re-exports.

(d) Sulphate only.

## IMPORTS OF NICKEL (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Portugal .. . . .	8	55	45	12	38	21	6
Spain— Ingots, bars, etc. ..	20	343	274	365	144	428	230
Sweden— Crude .. . . .	1,884	2,955	3,167	1,929	2,718	3,342	2,732
Switzerland— Crude, scrap, and alloyed Bars, sheets, etc., and alloyed.. . . . .	260	931	566	780	225	604	597
Algeria— Sheets, wire and alloys	10	212	354	432	225	192	320
Egypt (total imports)— Crude, bars, sheets, etc.	2	2	1	2	2	2	—
Mexico— Ingots .. . . .	16	36	12	22	13	32	(a)
United States— Ore and matte .. . . .	123	40	103	32	(a)	(a)	(a)
Crude, tubes, etc., and alloys .. . . .	22,356	17,005	13,068	12,370	9,936	9,942	11,454
Nickel oxide .. . . .	68,458	63,538	52,385	63,899	65,869	62,316	69,209
Brazil (total imports)— Cubes and sheets ..	17,042	12,965	13,459	19,209	10,930	14,559	10,702
Chile— Ingots, bars and plates	204	204	212	56	132	(a)	(a)
Uruguay— Ingots .. . . .	84	75	73	95	(a)	(a)	(a)
Iran (total imports) (b)— Ingots, bars, etc. ..	(a)						
Japan— Ore .. . . . .	67	160	—	(a)	(a)	(a)	828
Matte .. . . . .	(a)	—	(a)	(a)	(a)	(a)	(a)
Metal .. . . . .	435	—	—	—	(a)	(a)	326
Turkey— Ingots, bars, and sheets ..	11	7	8	8	—	11	—

(a) Information not available.

(b) Years ended March 20 of year following that stated.

**NITROGEN COMPOUNDS**  
**PRODUCTION OF NITRATES (NATURAL)**  
 (Long tons)

Producing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
India— Nitrate of potash ..	(b) 7,467	(b) 3,457	4,114	2,972	6,354	5,501	6,384
<b>FOREIGN COUNTRIES</b>							
Spain— Nitrate of potash ..	420	500	500	400	(a)	(a)	(a)
Chile— Nitrate of soda ..	1,361,654	1,622,915	1,605,460	1,758,518	1,741,957	1,588,653	1,657,804

A small amount of nitrate of soda is also produced in Peru, and nitrified earth in China.

(a) Information not available.

(b) Exports plus consumption in tea gardens.

## ESTIMATED PRODUCTION OF MANUFACTURED NITROGEN COMPOUNDS\*

(Long tons)

Producing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom (b)—							
Total ammonia products basis 25% NH <sub>3</sub> ..	1,375,600	1,506,500	1,408,600	1,648,800	1,691,100	1,803,400	1,906,300
Actual ammonium sulphate .. ..	760,400	833,700	796,700	901,000	924,500	960,700	968,100
Canada—							
Ammonium sulphate ..	197,767	176,728	175,737	192,062	201,741	188,870	(a)
Ammonium nitrate (c) ..	183,915	236,721	(a)	(a)	(a)	(a)	(a)
Ammonium phosphate (c) ..	(a)	(a)	(a)	(a)	(a)	(a)	(a)
India—							
Ammonium sulphate ..	(d) 19,591	(d) 19,108	(a)	35,210	45,935	48,845	46,747
Australia—							
Ammonium sulphate (c) ..	22,095	21,823	29,266	39,489	53,247	28,804	57,391
<b>FOREIGN COUNTRIES</b>							
Austria—							
Lime ammonium nitrate ..	(a)	31,321	107,298	261,909	283,605	358,176	429,122
Belgium—							
N content—							
Synthetic ammonia etc. ..		108,739	122,713	153,495	167,776	154,867	188,639
Ammonium sulphate .. ..	9,096	10,610	12,159	11,486	10,767	15,557	
Cyanamide .. ..	5,355	6,786	5,333	(a)	(a)	(a)	
Mixed fertilizers .. ..	2,835	3,785	2,181	2,531	2,874	3,618	
Technical products .. ..	4,825	10,133	9,260	7,607	6,442	13,040	
Czechoslovakia—							
Nitrogen fertilizers .. ..	(a)	(a)	130,300	158,000	(a)	(a)	(a)
Finland—							
Cyanamide .. ..	(a)	(a)	(a)	(a)	(a)	(a)	2,646
France—							
Ammonium sulphate (c) ..	35,700	106,886	201,480	242,646	268,008	249,231	(a)
Cyanamide (c) .. ..	9,600	13,800	19,400	18,000	16,480	24,133	(a)
Nitrate of soda (c) .. ..	1,900	9,400	16,700	21,200	34,100	42,744	(a)
Nitrate of lime (c) .. ..	63,000	113,400	172,300	179,000	175,470	195,768	(a)
Nitrate of ammonia (c) ..	29,000	57,300	141,300	177,600	175,700	198,475	(a)
" Ammonitratre " (c) ..	41,000	106,400	97,400	102,900	133,600	178,771	(a)
Germany (Federal)—							
Chemical nitrogen (N content)—							
Fertilizer .. ..	(a)	183,000	187,200	250,233	360,691	433,241	473,843
Technical use .. ..	(a)	(a)	(a)	(a)	49,148	67,689	84,108
Italy—							
Ammonium sulphate .. ..	22,895	129,117	199,478	300,322	317,845		
Cyanamide .. ..	1,008	29,701	73,212	120,291	53,240		
Nitrate of soda .. ..	—	75	453	553	3,087		
Nitrate of lime .. ..	19,801	64,896	132,327	123,655	152,435		
Nitrate of ammonia ..	52,126	8,510	13,725	20,510	24,056		
Di-ammonium phosphate ..	—	72	1,137	6,729	12,278		
Netherlands—							
Ammonium sulphate (N content) .. ..	2,562	5,525	10,791	9,740	(a)	(a)	(a)
Nitrogen fertilizers (N content) .. ..	(a)	(a)	66,818	81,773	87,172	153,783	207,301

\* Includes by-product ammonium sulphate which is separately recorded as far as available on pages 70-73.

(a) Information not available.

(b) Source: Annual Report of the British Sulphate of Ammonia Federation.

(c) Years ended June 30 of the year stated.

(d) Coke-ovens only.

## ESTIMATED PRODUCTION OF MANUFACTURED NITROGEN COMPOUNDS (Cont.)

Producing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Norway—							
Cyanamide .. ..	12,931	28,308	45,183	37,475	39,193	47,788	33,675
Nitrate of ammonia .. ..	2,515	2,748	3,567	3,010	3,227	5,679	5,308
Nitrate of lime .. ..	469,276	521,424	465,626	428,361	563,632	760,087	868,765
Nitrate of soda .. ..	2,839	3,317	2,966	2,638	2,524	6,640	2,348
Lime ammonium nitrate	7,626	—	22,144	21,605	27,285	70,864	55,428
Poland—							
Ammonium sulphate .. ..	(a)	54,722	64,633	(c) 76,000	(a) 166,455	507,000	(a)
Cyanamide .. ..		97,621	118,905	155,742	(a) 166,455		
Nitrate of soda .. ..		1,740	1,315	(a) 127,739	(a) 128,018		
"Saletrzak" .. ..		36,474	69,149	9,143	50,222		
Nitrate of ammonia .. ..		6,032	—	—	86,799		
Other nitrogen fertilizers	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Portugal—							
Cyanamide .. ..	(a)	—	—	13	12	—	1
Ammonium chloride .. ..		—	—	510	1,079	979	500
Nitrate of ammonia .. ..		(a)	2,546	506	447	782	698
Nitrate of soda .. ..		1,988	2,924	786	265	169	123
Ammonium sulphate .. ..		1,485	—	744	144	219	469
Spain—							
Ammonium sulphate .. ..	16,428	15,779	15,921	12,921	10,039	13,520	20,165
Sweden—							
Compressed ammonia (100%) .. ..	255	2,574	6,168	7,403	9,428	(a)	(a)
Ammonium sulphate (b) .. ..	3,222	3,244	4,241	(d) 2,919	(d) 2,944	(a)	(a)
Ammonia (25%) .. ..	3,141	2,924	2,841	—	—	(a)	(a)
Synthetic nitrogen fertilizer (N content) .. ..	13,602	12,709	10,798	(e) 20,529	(e) 23,502	(e) 23,694	(e) 19,415
Switzerland—							
Nitrogen fertilizers (N content) .. ..	14,000	14,000	14,000	12,000	(a)	(a)	(a)
United States—							
Sulphate equivalent of ammonia produced (coke-ovens) .. ..	780,999	664,033	814,564	830,083	756,970	825,503	890,869
Actual ammonium sulphate (coke-ovens) .. ..	682,404	574,779	722,714	769,135	728,244	755,099	(a)
Actual ammonium sulphate (synthetic plants) .. ..	79,342	139,869	174,864	236,139	755,531	(a)	(a)
Anhydrous ammonia (synthetic plants) .. ..	489,871	647,801	994,643	973,023	1,155,408	(a)	(a)
Ammonium nitrate, original .. ..	376,328	647,231	970,419	882,448	909,559	(a)	(a)
Brazil (Volta Redonda)—							
Ammonium sulphate .. ..	(a)	(a)	(a)	4,209	(a)	(a)	(a)
Japan—							
Ammonium sulphate .. ..	239,162	459,451	709,597	931,209	1,212,893	1,545,165	1,647,963
Cyanamide .. ..	61,400	142,989	172,232	201,723	344,109	449,105	408,820
Ammonium nitrate .. ..	7,559	5,256	6,330	9,755	9,933	13,299	28,735
Ammonium chloride .. ..	791	(a)	(a)	2,575	4,134	7,759	13,641

(a) Information not available.

(b) Amount from gas and coke works only. Other ammonium sulphate included with "Synthetic nitrogen fertilizer."

(c) Estimated.

(d) Included with nitrogen fertilizers.

(e) Total nitrogen fertilizers. The comparable figure for 1947 was 19,362 tons.

# EXPORTS OF NITROGEN COMPOUNDS

*(Domestic Produce)*

(Long tons)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951	
<b>BRITISH COUNTRIES</b>								
United Kingdom—								
Nitrate of potash ..	546	2,752	2,133	2,854	1,196	1,868	2,364	
Nitrate of soda ..	4,181	5,159	1,952	28	542	1,170	7,554	
Ammonium sulphate ..	252,327	277,925	246,375	221,044	262,142	277,086	225,537	
Ammonium chloride ..	13,303	15,938	9,267	13,431	13,023	14,725	15,283	
Ammonium nitrate ..	37,376	130,516	79,455	97,075	67,614	58,572	63,756	
Ammonium phosphate ..	74	675	329	766	578	520	720	
Liquid ammonia ..	2,339	10,918	7,344	850	937	932	1,117	
Anhydrous ammonia ..	308	767	1,395	1,432	1,697	3,457	3,337	
Canada—								
Ammonium sulphate ..	161,776	138,792	141,942	130,695	149,238	186,706	130,110	
Nitrogen fertilizers ..	(a)	(a)	(a)	(a)	(a)	338,586	266,271	
Hong Kong (re-exports)—								
Nitrate of potash ..	(a)	120	2,275	(a)	(a)	(a)	(a)	
Nitrate of soda ..	(a)	4	436	(a)	—	9	—	
Ammonium sulphate ..	(a)	1,631	8,746	(b) 32,992	(b) 28,668	(b) 117,170	(b) 100,751	
Ammonium chloride ..	(a)	459	615	675	385	853	1,567	
Anhydrous ammonia ..	(a)	—	10	(a)	(a)	(a)	(a)	
India—								
Nitrate of potash ..	153	1,135	816	36	15	64	227	
Malaya (including re-exports)—								
Nitrate of potash ..	(a)	—	5	1	1	5	14	
Other nitrogen fertilizers ..	(a)	16	72	200	601	1,092	1,315	
Australia—								
Nitrate of soda ..	2	189	5	—	—	57	3	
Ammonium sulphate ..	164	115	161	106	34	158	78	
<b>FOREIGN COUNTRIES</b>								
Austria—								
Lime ammonium nitrate ..	(a)	(a)	52,402	102,312	205,638	289,887	269,822	
Anhydrous ammonia ..	(a)	(a)	(a)	(a)	1,383	9,227	3,528	
Belgium-Luxemburg E.U.—								
Nitrate of potash ..	..	(a)	(a)	(a)	998	1,729	1,111	1,328
Nitrate of soda ..	..				24,329	17,108	2,252	359
Nitrate of lime ..	..				165	128	—	1,312
Ammonium sulphate ..	..				262,133	232,658	385,680	460,907
Ammonium chloride ..	..				18,832	8,363	1	2,347
Ammonium nitrate ..	..				26,158	64,004	67,481	165,817
Ammonium carbonate ..	..				125	34	51	23
Ammonium phosphate ..	..				6,021	5,830	996	1,868
Cyanamide ..	..	..	..	..	2,386	2,426	14,824	9,235
Liquid ammonia ..	..	..	..	..	369	110	45	61
Czechoslovakia—								
Nitrate of potash ..	..	(a)	(a)	(a)	—	(c) 4	(a)	(a)
Nitrate of soda ..	..				30	(c) —	(a)	(a)
Ammonium sulphate ..	..				4	(c) —	(a)	(a)
Ammonium chloride ..	..				15	(c) 39	(a)	(a)
Ammonium nitrate ..	..				809	(c) 2,365	(a)	(a)
Cyanamide ..	..				25	(c) —	(a)	(a)
France—								
Nitrate of potash ..	..	46	1,144	4,310	3,165	4,157	4,551	3,705
Nitrate of soda ..	..	150	332	2,104	565	169	684	1,015
Nitrate of lime ..	..	—	41	2,368	2,387	1,892	3,352	6,311
Ammonium sulphate (d)	..	1	13,168	58,066	36,101	39,808	106,955	95,650
Ammonium chloride ..	..	(a)	(a)	(a)	555	646	1,772	1,553
Ammonium nitrate ..	..	—	201	551	2,550	1,550	4,824	5,249
Cyanamide ..	..	697	41	89	375	148	819	667
Liquid ammonia ..	..	9	1	190	368	185	473	282
Anhydrous ammonia ..	..	44	215	337	398	441	552	563

(a) Information not available.  
(c) January to October only.

(b) Synthetic nitrates of sodium, calcium and ammonia.  
(d) May include some "Ammonium nitrate."

## EXPORTS OF NITROGEN COMPOUNDS (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Germany (Federal)—							
Nitrate of potash ..				—	88	946	1,784
Nitrate of soda ..				98	1,251	34,304	3,976
Nitrate of lime, etc.				355	400	114,946	99,632
Ammonium sulphate, etc.	a)	(a)	(a)	—	654	87,318	219,480
Ammonium chloride ..				—	1,367	4,583	5,834
Ammonium nitrate, etc.				1	—	4,436	1,750
Cyanamide ..				—	5	4,893	(b) 4,226
Liquid ammonia ..				—	276	126	10,334
Italy—							
Ammonium nitrate ..	(a)	(a)	91	7,200	482	586	10
Ammonium sulphate ..	(a)	(a)	1	26,149	41,208	16,890	31,674
Cyanamide ..	(a)	(a)	—	1,584	1,874	4,721	11,683
Netherlands—							
Nitrate of potash ..			—	—	1	5	17
Nitrate of soda ..			—	(a)	(a)	17	25
Nitrate of lime ..			—	31	7,879	7,075	62
Ammonium sulphate ..			7,888	7,187	34,593	103,619	39,302
Ammonium chloride ..	(a)	213	429	121	—	41	205,218
Ammonium nitrate ..		—	98	(a)	(a)	(a)	56
Lime ammonium nitrate ..		—	984	31	979	(a)	49,620
Other nitrogen fertilizers		—	215	441	(a)	82	46
Norway—							
Nitrate of soda ..	2,328	2,273	3,962	2,474	1,807	5,895	4,531
Nitrate of lime ..	371,969	421,719	385,236	354,210	538,165	731,883	825,026
Ammonium nitrate ..	74	148	1,919	632	1,241	1,828	1,707
Cyanamide ..	4,667	32,082	42,615	30,446	40,138	42,282	14,005
Spain—							
Ammonium sulphate ..	56	2,778	2,216	166	447	709	874
Synthetic nitrates ..	—	2,026	577	748	1,385	158	713
Sweden—							
Nitrates of potash, soda and lime ..	3	7	52	59	6	34	17
Ammonium nitrate ..	3,272	2,961	—	—	115	297	129
Ammonium sulphate ..	311	123	54	—	—	—	—
Liquid ammonia ..	48	1	—	5	—	—	—
Switzerland—							
Nitrate of potash (crude)	41	271	298	14,172	1,256	15,449	8,686
Nitrates of potash and soda (purified)	488	256	654	364	2,154	—	10
Ammonium sulphate, etc.	(a)	(a)	(a)	4,733	2,715	3,217	2,274
United States—							
Nitrate of soda ..	10,919	14,500	17,786	15,268	3,316	31,448	38,990
Nitrate of potash, etc. ..	3,363	(a)	(a)	(a)	(a)	(a)	(a)
Ammonium nitrate (d)	8,790	6,225	5,968	4,542	435,220	87,058	5,628
Other nitrogen fertilizers (d)	74,792	104,746	137,149	560,368	20,991	36,931	56,936
Ammonium sulphate ..	18,528	22,550	79,108	187,934	589,940	737,156	119,732
Nitrogen phosphatic fertilizers ..	850	3,360	55,900	30,848	179,433	151,379	97,317
Anhydrous ammonia ..	3,850	5,499	5,412	3,042	3,508	9,109	5,274
Liquid ammonia ..	2,424	(a)	(a)	(a)	(a)	(a)	(a)
Chile—							
Nitrate of soda ..	1,588,302	1,386,113	1,590,978	1,618,919	1,523,256	1,637,818	1,520,133
Nitrate of potash ..	715	702	165,669	103,177	52,655	73,619	52,388
Japan—							
Ammonium sulphate ..	(a)	—	5,559	26,430	—	47,502	(e) 21,632

(a) Information not available.  
 recorded prior to 1949

(b) January to September only.  
 (d) Including ammonium nitrate fertilizer up to 1948

(c) Ammonium nitrate fertilizer not separately  
 (e) Unrefined only.

IMPORTS OF NITROGEN COMPOUNDS

(Less Re-exports)

(Long tons)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Nitrate of potash ..	(c) 5	297	110	25	(c) 37	244	488
Nitrate of soda ..	19,175	45,085	19,276	44,553	43,846	17,000	30,044
Nitrate of lime ..	1	—	—	—	1	—	—
Cyanamide ..	850	686	1,573	1,703	1,808	3,615	3,439
Ammonium chloride ..	—	—	(c) 6	—	—	—	9
Ammonium nitrate ..	2	—	—	—	—	2	—
Ammonium phosphate ..	35,162	18,273	9,615	—	—	21	(a)
Ammonium sulphate ..	—	—	—	858	—	—	—
Anhydrous ammonia ..	—	—	—	2	2	6	13
Anglo-Egyptian Sudan—	104	2,717	2,368	3,447	12,576	9,654	10,567
Nitrogenous fertilizers							
Kenya and Uganda—							
Nitrate of soda ..	(a)	(a)	(a)	81	—	—	—
Synthetic nitrate of soda, calcium and ammonia	(a)	(a)	(a)	1,432	—	—	19
Other nitrogen fertilizers	(a)	(a)	(a)	440	1,093	707	1,315
Mauritius—							
Nitrate of potash ..	—	500	—	1,976	991	988	1,482
Nitrate of soda ..	—	3,454	9,220	5,829	4,940	6,916	6,622
Ammonium chloride ..	—	—	427	—	—	—	—
Ammonium sulphate ..	2,471	2,500	4,596	11,408	19,566	14,078	21,828
Northern Rhodesia—							
Nitrates ..	—	—	1	—	—	8	72
Ammonium compounds ..	58	39	43	449	570	511	837
Southern Rhodesia—							
Nitrates (incl. fertilizers)	77	84	79	2,786	1,449	1,559	1,577
Anhydrous ammonia ..	10	12	14	9	11	20	19
South West Africa—							
Anhydrous ammonia ..	5	4	4	7	6	8	(a)
Tanganyika—							
Nitrate of soda ..	(a)	(a)	(a)	20	1	—	—
Synthetic nitrate of soda, calcium and ammonia	(a)	(a)	(a)	260	101	2	21
Other nitrogen fertilizers	(a)	(a)	(a)	26	694	813	853
Union of South Africa—							
Nitrate of soda ..	(b) 533	472	4,953	3,034	248	(c) 1	(a)
Ammonium sulphate ..	15,237	10,198	10,255	4,746	23,892	33,569	(a)
Ammonium chloride ..	(b) 403	534	681	397	777	597	(a)
Ammonium nitrate ..	(b) 8,617	2,873	5,893	12,482	12,775	15,629	(b) 16,136
Anhydrous ammonia ..	—	3	—	2	3	1	(a)
British Guiana—							
Nitrogenous fertilizers ..	10,939	11,046	8,452	10,158	15,147	10,329	17,967
British West Indies—							
Barbados—							
Nitrate of soda ..	—	—	—	613	1,253	—	—
Ammonium sulphate ..	—	7,484	2,582	6,771	7,582	6,222	12,137
Jamaica—							
Nitrogenous fertilizers	345	6,656	6,630	5,812	9,313	10,844	15,954
Trinidad and Tobago—							
Ammonium sulphate ..	6,086	7,330	6,826	9,136	5,715	5,275	8,916
Canada (d)—							
Nitrate of potash ..	655	366	261	355	439	448	634
Nitrate of soda ..	12,417	13,909	14,973	17,594	16,938	17,486	23,613
Ammonium sulphate ..	93	57	110	116	125	92	281
Ammonium chloride ..	509	731	139	526	388	351	1,128
Ammonium nitrate ..	74	73	75	93	148	652	1,279
Anhydrous ammonia ..	151	1,836	2,202	58	525	5,714	1,214

(a) Information not available.  
(c) Excess of re-exports.

(b) Total imports.  
(d) Including Newfoundland from April 1, 1949.

## IMPORTS OF NITROGEN COMPOUNDS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES (Cont.)</b>							
Newfoundland (c)—							
Nitrogen fertilizers ..	415	580	849	800	(c)	(c)	(c)
Liquid ammonia ..	3	5	5	9	(c)	(c)	(c)
Anhydrous ammonia ..	12	7	10	5	(c)	(c)	(c)
Ceylon—							
Nitrate of potash refuse ..	—	—	—	—	—	2	—
Nitrate of soda ..	—	—	—	3,620	3,665	29	—
Ammonium sulphate ..	47,614	29,567	44,027	47,298	54,345	49,790	86,306
Cyanamide ..	1,949	—	—	709	292	160	196
Cyprus—							
Ammonium chloride ..	1	13	2	5	6	6	6
Hong Kong (total imports)—							
Nitrate of potash ..	(a)	202	446	(a)	(a)	(a)	(a)
Nitrate of soda ..	(a)	88	1,337	(a)	(a)	(a)	(a)
Ammonium sulphate ..	(a)	1,687	4,311	(b) 44,055	(b) 39,447	(b) 100,329	(b) 105,195
Ammonium chloride ..	(a)	961	1,142	1,075	442	1,084	4,184
Anhydrous ammonia ..	(a)	22	68	(a)	(a)	(a)	(a)
India—							
Nitrate of soda ..	—	—	1,712	23,666	33,769	583	10,710
Ammonium sulphate ..	70,747	121,848	117,825	140,009	121,297	410,907	84,684
Ammonium phosphate ..	1,786	4,504	6,002	4,737	18,666	—	—
Ammonium chloride ..	2,014	1,904	1,816	3,429	4,438	1,508	4,443
Other ammonium salts ..	1,696	308	2,553	3,629	817	399	2,809
Anhydrous ammonia ..	147	157	191	111	144	91	137
Other nitrogen fertilizers ..	6	1	6,978	5,450	6,428	12,989	450
Malaya (total imports)—							
Nitrate of potash ..	(a)	53	4	—	41	10	84
Other nitrogen fertilizers ..	(a)	1,937	14,715	10,861	17,131	22,311	29,154
Palestine—							
Nitrogen fertilizers ..	12,375	7,208	(a)	(a)	(e)	(e)	(e)
Anhydrous ammonia ..	7	7	(a)	(a)	(e)	(e)	(e)
Australia—							
Nitrate of potash ..	95	124	139	35	218	269	805
Nitrate of soda ..	4,352	3,007	3,720	8,019	15,324	13,270	12,740
Ammonium chloride ..	410	84	128	14	120	21	59
Ammonium sulphate ..	26,707	26,052	11,587	25,478	28,485	42,749	28,982
Ammonium nitrate ..	(d) 25	(d) 80	(d) 1,304	(d) 799	1,218	535	3,092
Other nitrogen fertilizers ..	(d) 3	(d) 30	(d) 2	(d) 69	(d) 33	86	55
New Zealand—							
Nitrate of potash ..	2	1	22	11	10	94	64
Nitrate of soda ..	4,173	2,106	2,802	2,504	3,204	3,067	4,042
Ammonium sulphate ..	2,089	649	1,126	2,411	2,687	4,587	4,692
Ammonium chloride ..	198	170	340	96	131	338	235
Anhydrous ammonia ..	65	62	76	91	110	83	83
Fiji—							
Ammonium sulphate ..	(a)	(a)	(a)	2,719	2,989	4,573	3,508
Irish Republic—							
Nitrate of potash ..	55	46	55	40	141	215	95
Nitrate of soda ..	80	174	8,051	10,100	6,037	159	5,788
Ammonium sulphate ..	1,602	4,021	8,089	27,562	25,844	31,185	36,700
Anhydrous ammonia ..	25	28	48	38	56	57	80
<b>FOREIGN COUNTRIES</b>							
Austria—							
Nitrate of lime ..	..	(a)	(a)	(a)	(a)	(a)	2,928
Nitrate of potash ..	..						
Cyanamide ..	..						
Ammonium chloride ..	..						

(a) Information not available.

(b) Synthetic nitrates of sodium, calcium and ammonia.

(c) Years ended March 31 of year following that stated. Included with Canada from April 1, 1949.

(d) Years ended June 30 of that stated.

(e) See "Israel" under Foreign Countries.

## IMPORTS OF NITROGEN COMPOUNDS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Belgium-Luxemburg E.U.—							
Nitrate of potash ..				41	27	113	124
Nitrate of soda ..				12,902	63	14,162	5,957
Nitrate of lime ..				1	100	—	1
Cyanamide ..				2	—	137	728
Ammonium sulphate ..				16	20	6,673	1,694
Ammonium chloride ..				136	597	739	546
Ammonium nitrate ..				—	—	3,497	478
Anhydrous ammonia ..				6	6,226	(a)	11,543
Bulgaria—							
Nitrate of potash ..	103	118					
Nitrate of soda ..	75	72					
Ammonium nitrate, etc.	141	5,339					
Ammonium chloride ..	120	99					
Liquid ammonia ..	3	—					
Czechoslovakia—							
Nitrate of soda ..		200	406	(c) —	(a)	(a)	(a)
Ammonium chloride ..		15	—	(c) 6,776	(a)	(a)	(a)
Cyanamide, etc. ..		11	68	(c) 84	(a)	(a)	(a)
Denmark—							
Nitrate of potash ..	12	462	380	335	587	738	(a)
Nitrate of soda ..	5,230	46,046	55,320	39,391	73,600	44,136	40,187
Nitrate of lime ..	208,961	181,796	186,268	163,366	241,030	305,619	361,281
Ammonium sulphate ..	115	—	14,173	27,603	9,501	32,182	14,436
Ammonium chloride ..	163	580	482	635	430	820	1,024
Ammonium nitrate ..	98	140	312	258	198	216	61,662
Cyanamide ..	4,771	5,033	4,862	5,190	2,188	3,937	787
Finland (total imports)—							
Nitrate of potash ..	—	17	33	37	55	30	100
Nitrate of soda ..	100	1	17,539	5,637	241	607	565
Nitrate of lime ..	—	16,212	24,977	22,630	38,742	40,209	29,276
Ammonium nitrate ..	2,335	4,495	14,283	17,383	10,811	7,262	6,168
Ammonium sulphate ..	1,311	203	966	608	541	23,434	61,504
Ammonium chloride ..	—	133	156	43	136	42	319
Cyanamide ..	5,106	—	—	—	—	—	—
Liquid ammonia ..	48	17	41	215	450	402	555
France—							
Nitrate of soda ..	37,662	196,194	135,103	128,826	107,340	139,242	147,097
Nitrate of lime, etc.	44,063	180,413	94,068	11,748	22,259	—	1,699
Ammonium sulphate (b)	19,719	17,952	21,305	32,325	10,553	—	25,111
Ammonium nitrate ..	899	10,567	—	119,812	99,430	23,385	28,157
Ammonium chloride ..	(a)	(a)	(a)	976	158	1,063	782
Anhydrous ammonia ..	(a)	1,685	5,494	15,161	13,889	16,077	25,669
Cyanamide ..	325	—	1,968	6,709	7,577	25,869	—
Liquid ammonia ..	44	1	3,121	32	—	2	16
Other nitrogen fertilizers	4,003	19,737	35,191	2,040	20	59	103
Germany (Federal)—							
Nitrate of potash ..				—	34	—	10
Nitrate of soda ..				—	—	—	3,978
Nitrate of lime, etc.				85,864	15	—	—
Cyanamide ..				—	—	—	—
Ammonium nitrate ..				164,937	97,833	32,613	—
Ammonium sulphate ..				—	1	13	—
Ammonium chloride ..				—	—	—	—
Liquid ammonia ..				—	—	1	—
Greece—							
Nitrate of soda ..		8,779	134	9,214	3,953	16,671	46,522
Ammonium sulphate ..	{ 3,835	4,462	10,373	16,211	47,254	23,943	58,645
Liquid ammonia ..	{ —	95	67	758	1,169	745	1,224

(a) Information not available.  
 (c) January to October only.

(b) May include some "ammonium nitrate."  
 (d) Nitrogen in fertilizers.

## IMPORTS OF NITROGEN COMPOUNDS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Iceland—							
Nitrate of lime .. ..	1	3,550	1,964	833	1,968	1,462	—
Nitrate of soda .. ..	13	2	—	—	492	—	(a)
Ammonium sulphate ..	2,669	893	(a)	(a)	(a)	(a)	(a)
Ammonium nitrate ..	(a)	(a)	(a)	(a)	2,391	2,705	7,135
Lime ammonium nitrate	892	2,179	2,578	4,104	4,500	4,913	2,461
Nitrophoska .. ..	—	—	5	—	(a)	(a)	295
Other nitrogen fertilizers	246	250	(a)	(a)	1,715	244	177
Italy—							
Nitrate of potash .. ..	(a)	(a)	1,540	753	1,574	1,839	1,320
Nitrate of soda .. ..	(a)	(a)	70,834	29,557	4,496	40,564	25,666
Nitrate of lime .. ..	—	—	—	3,675	2,294	10,488	7,814
Ammonium chloride ..	(a)	(a)	197	279	224	487	413
Ammonium nitrate ..	(a)	(a)	7,399	642	31	906	5,038
Cyanamide .. ..	(a)	(a)	8,269	50	4,103	8,313	2,948
Netherlands—							
Nitrate of potash .. ..	(a)	156	198	220	718	1,891	1,647
Nitrate of soda .. ..	(a)	114,450	55,781	69,339	33,160	31,332	1,956
Nitrate of lime .. ..	(a)	29,461	19,647	14,727	13,108	28	314
Ammonium sulphate ..	(a)	982	14,069	966	2,340	6,912	285
Ammonium chloride ..	(a)	85	206	160	241	810	974
Ammonium nitrate ..	(a)	78,271	106,927	60,178	67,568	5,617	—
Lime ammonium nitrate	(a)	2	—	—	—	177,074	109,756
Cyanamide .. ..	(a)	14,181	19,887	11,704	19,501	17,178	12,795
Other nitrogen fertilizers	(a)	99	—	—	15,812	—	—
Norway—							
Nitrate of potash .. ..	210	122	115	93	169	106	(a)
Nitrate of soda .. ..	—	—	—	—	—	—	(a)
Ammonium sulphate ..	—	—	—	162	—	266	(a)
Ammonium nitrate ..	—	—	—	—	—	—	(a)
Poland—							
Ammonium nitrate ..	(a)	(a)	17,440	(a)	(a)	(a)	(a)
Portugal—							
Nitrate of potash .. ..	278	198	249	122	173	—	(a)
Nitrate of soda .. ..	33,877	44,998	22,834	50,644	29,708	26,969	(a)
Ammonium sulphate ..	9,828	7,820	24,320	39,249	37,630	84,804	104,588
Ammonium chloride ..	146	623	561	300	774	1,753	10
Ammonium nitrate ..	13,958	8,198	1,603	4,518	8,194	1,027	(a)
Cyanamide .. ..	200	4,348	3,758	974	2,954	6,882	14,745
Lime ammonium nitrate	—	—	—	3,008	4,563	1,030	(a)
Spain—							
Nitrate of soda .. ..	47,412	68,550	87,518	73,069	101,670	162,818	30,555
Cyanamide .. ..	761	—	—	975	2,341	3,742	226
Ammonium sulphate ..	—	—	37,143	45,549	57,751	175,223	172,194
Synthetic nitrates ..	1,446	31,355	4,162	10,039	27,089	93,004	112,787
Sweden—							
Nitrate of potash .. ..	101	592	412	223	610	542	(a)
Nitrate of soda .. ..	12,152	24,280	18,156	23,520	37,944	34,370	36,165
Nitrate of lime .. ..	98,328	111,172	79,374	78,177	131,916	210,067	284,563
Ammonium nitrate ..	—	—	—	1	2,444	6,378	(a)
Ammonium sulphate ..	25	21	20	14	15	3,833	8,825
Ammonium chloride ..	208	758	613	890	403	634	(a)
Cyanamide .. ..	2,165	—	—	—	2,529	(a)	(a)
Liquid ammonia .. ..	—	—	5	—	—	—	(a)
Switzerland—							
Nitrate of potash, crude	—	49	—	—	—	—	—
Nitrates of potash and soda, purified .. ..	39	707	737	878	319	932	547
Ammonium sulphate, etc.	—	10	5	105	12	1,089	419
Ammonium chloride .. ..	88	383	644	331	323	516	798
Liquid ammonia .. ..	—	1	—	—	—	49	5

(a) Information not available.

## IMPORTS OF NITROGEN COMPOUNDS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
FOREIGN COUNTRIES (Cont.)							
Yugoslavia—							
Nitrate of potash ..						98	222
Nitrate of soda ..						9,399	12,210
Ammonium chloride ..	(a)	(a)	(a)	(a)	(a)	82	141
Ammonium sulphate ..						295	79
Ammonium nitrate ..						2,599	8,930
Algeria—							
Nitrate of potash ..	12	20	15	100	16	38	22
Nitrate of soda ..	557	275	5,187	8,494	583	345	384
Nitrate of lime ..	2,935	4,643	1,157	1,255	537	2,216	4,104
Ammonium sulphate ..	—	4,204	18,343	12,666	14,183	14,401	21,608
Ammonium nitrate ..	(a)	(a)	(a)	5,304	527	3,664	2,617
Cyanamide ..	—	41	20	985	59	578	274
Liquid ammonia ..	25	135	141	75	80	123	106
Egypt—							
Nitrate of soda ..	225,195	169,720	367,057	369,245	339,138	337,512	(a)
Nitrate of lime ..	(a)	(a)	(a)	(a)	50,732	32,126	(a)
Ammonium sulphate ..	14,300	20,807	21,797	63,620	61,895	(a)	(a)
Ammonium chloride ..	324	287	315	582	569	(a)	(a)
Ammonium nitrate ..	36,205	—	10	20,854	104,467	(a)	(a)
Nitro-chalk ..	—	—	—	—	—	(a)	(a)
Madagascar—							
Nitrogenous fertilizers ..	(a)	1,480	2,311	1,177	(a)	(a)	(a)
Morocco (French)—							
Nitrate of soda ..	79	523	633	(a)	(a)	(a)	(a)
Ammonium sulphate ..	5	528	7,510	(a)	(a)	(a)	(a)
Morocco (Spanish)—							
Ammonium sulphate ..	42	105	110	(a)	(a)	(a)	(a)
Mozambique—							
Ammonium sulphate ..	11	—	—	—	—	—	—
Tunis—							
Nitrate of potash ..	1	6	12	16	(a)	(a)	(a)
Nitrate of soda ..	89	90	186	276	(a)	(a)	(a)
Nitrate of lime ..	—	63	—	20	(a)	(a)	(a)
Ammonium sulphate ..	—	—	290	1,256	(a)	(a)	(a)
Cuba—							
Nitrates of potash and soda ..	22,190			{ 18,954	13,143		
Ammonium sulphate ..	11,638	(a)	(a)	{ 15,906	21,913		
Anhydrous ammonia ..	255			217	198		
Mexico—							
Nitrates of potash and soda ..	15,695	11,236	(b) 19,690	(b) 15,441	(a)	(b)	(a)
Ammonium sulphate ..	4,371	2,899	2,914	2,415	(a)	(a)	(a)
Ammonium chloride ..	198	376	(a)	(a)	(a)	(a)	(a)
Ammonium nitrate ..	2,504	2,206	3,337	3,026	3,624	(a)	(a)
Liquid ammonia ..	863	837	1,485	1,504	1,338	1,701	(a)
United States—							
Nitrates of potash and soda, crude ..	—	3,929	2,232	—	6,074	18,240	7,365
Nitrate of soda ..	758,829	482,920	496,897	643,717	603,163	549,709	648,196
Nitrate of lime ..	—	2,946	7,900	8,715	34,474	39,581	49,771
Ammonium sulphate ..	106,152	90,677	102,141	94,542	94,195	128,154	192,952
Ammonium chloride ..	2,637	328	369	821	739	5,332	2,995
Ammonium nitrate ..	585	987	88,786	89,860	123,836	198,948	306,359
Ammonium phosphates ..	82,819	81,351	93,919	96,632	112,745	95,215	120,575
Cyanamide ..	125,944	145,619	137,289	104,021	103,469	87,254	60,921
Argentina—							
Nitrate of potash ..	(a)	(a)					
Nitrate of soda ..	13,785	12,527					
Ammonium sulphate ..	—	309					
Liquid ammonia ..	19	21					
Anhydrous ammonia ..	—	44					

(a) Information not available.

(b) Nitrate of soda only.

## IMPORTS OF NITROGEN COMPOUNDS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Brazil (total imports)—							
Nitrate of potash ..	975	703	906	1,168	881	(a)	(a)
Nitrate of soda ..	29,874	34,905	69,401	36,879	37,639	61,509	(a)
Ammonium nitrate ..	45	10	90	75	379	(a)	(a)
Ammonium sulphate ..	437	864	1,354	134	803	(a)	(a)
Cyanamide ..	31	137	49	143	167	(a)	(a)
Liquid ammonia ..	45	13	74	41	37	(a)	(a)
Anhydrous ammonia ..	157	253	239	112	234	(a)	(a)
Chile—							
Ammonium chloride ..	214	261					
Ammonium sulphate ..	3	4					
Ammonium nitrate ..	5,003	3,248		3,643	1,918	6,184	2,258
Liquid ammonia ..	19	3					
Anhydrous ammonia ..	100	86					
Colombia—							
Nitrate of potash ..	79	249				158	289
Nitrate of soda ..	2,367	2,287		(a)	(a)	2,313	1,633
Ammonium chloride ..	17	6				(a)	(a)
Ammonium sulphate ..	212	7				(a)	(a)
Peru—							
Nitrate of potash ..	(a)	(a)				(a)	5,687
Nitrate of soda (c) ..	27,971	36,625		(a)	31,025	(a)	7,383
Liquid ammonia ..	102	103		(a)	116	(a)	(a)
Uruguay—							
Nitrate of potash ..					43	106	41
Nitrate of soda ..				(a)	234	609	321
Ammonium sulphate ..				(a)	64	314	392
Liquid ammonia ..					87	149	168
Venezuela—							
Nitrate of potash ..	31	66	51		427	(a)	(a)
Nitrate of soda ..	729	1,653	2,588		347	(a)	(a)
Ammonium sulphate ..	197	617	523		136	(a)	(a)
Liquid ammonia ..	25	18	50		76	(a)	(a)
China—							
Nitrate of potash ..			214	710	28	(a)	(a)
Nitrate of soda ..			370	2,395	11,406	(a)	(a)
Ammonium sulphate ..			3,923	28,794	41,875	(a)	(a)
Israel—							
Nitrate of soda ..						148	15
Ammonium sulphate ..			(b)			7,223	14,409
Nitrogen fertilizers ..			(b)			3,745	3,943
Anhydrous ammonia ..						33	30
Japan (total imports)—							
Ammonium sulphate ..	39,368	(a)	(a)		47,215	(a)	198,144
Ammonium nitrate ..	(a)	—	239,096		276,051	(a)	73,342
Syria and Lebanon—							
Nitrates ..	2,168	3,370	(a)		(a)	(a)	(a)
Ammonium chloride ..	32	73	(a)		(a)	(a)	(a)
Liquid ammonia ..	9	1	(a)		(a)	(a)	(a)
Turkey—							
Nitrate of soda ..	77	—	2,252		1,372	690	69
Ammonium chloride ..	16	—	125		270	304	207
Ammonium sulphate ..	671	890	135		3,961	—	—
Ammonium nitrate ..	—	—	—		150	147	169
Cyanamide ..	370	—	—		—	—	—
Di-ammonium phosphate ..	1,385	—	—		906	—	—
Other nitrogen fertilizers ..	—	50	1,485		—	—	—
Liquid ammonia ..	(a)	(a)	(a)		33	25	111
							49

(a) Information not available.

(b) See "Palestine" under British Countries.

(c) Imports of "Fertilizers" from Chile assumed to be nitrate of soda.

# PETROLEUM AND ALLIED PRODUCTS

## PRODUCTION OF CRUDE PETROLEUM \*

(Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Crude petroleum ..	71,600	55,399	47,255	43,500	45,600	45,700	45,200
Shale oil .. ..	116,186	111,775	97,232	109,600	112,500	111,600	104,500
Union of South Africa							
(Shale oil) (c) .. ..	25,400	22,700	29,200	39,016	37,581	39,569	37,514
Canada (b) (a) .. ..	(k) 1,073,772	905,234	919,654	1,496,040	2,636,443	3,626,245	(k) 6,097,000
Barbados .. ..	248	183	44	11	24	—	—
Trinidad (b) .. ..	3,000,000	2,877,400	2,919,000	2,872,493	2,945,246	2,947,489	2,977,531
Bahrain Islands (i) ..	980,014	1,073,870	1,262,336	1,463,454	1,473,096	1,476,663	1,474,742
British Borneo—							
Brunei .. ..	11,200	285,496	1,700,231	2,645,412	3,337,027	4,051,010	4,891,784
Sarawak .. ..	(a)	1,000	23,964	46,597	56,752	56,601	51,702
Burma (b) .. ..	37,000	—	11,570	(f)	(f)	(f)	(f)
India (b) .. ..			{ 251,707	253,313	257,572	251,804	(a)
Pakistan (j) .. ..	319,288	296,340	{ 54,521	82,018	134,457	183,000	193,985
Kuwait (i) .. ..	—	797,350	2,815,143	6,291,577	12,183,669	17,018,666	27,783,170
Qatar (i) .. ..	—	—	—	—	—	1,551,853	2,332,213
Australia .. ..	—	—	—	120	140	160	270
New Zealand .. ..	372	333	336	339	965	948	758
<b>TOTAL</b> .. ..	<b>5,635,000</b>	<b>6,427,000</b>	<b>10,132,000</b>	<b>15,343,000</b>	<b>23,221,000</b>	<b>31,361,000</b>	<b>46,250,000</b>
<b>FOREIGN COUNTRIES</b>							
Albania .. ..	110,000	120,000	180,000	240,000	300,000	345,000	410,000
Austria .. ..	446,534	832,338	(d) 900,000	(d) 960,000	(d) 1,250,000	(d) 1,500,000	(d) 1,832,000
Czechoslovakia .. ..	25,400	23,300	36,600	35,000	48,000	49,000	68,000
France .. ..	27,941	50,865	49,090	50,908	70,900	125,200	289,000
Germany (Federal) .. ..	533,329	(g) 638,900	(g) 567,506	625,207	828,284	1,100,949	1,345,100
Hungary .. ..	645,418	650,207	560,700	476,000	500,000	502,000	760,000
Italy .. ..	6,920	10,611	10,296	9,064	9,032	8,041	17,407
Netherlands .. ..	5,759	61,657	209,300	487,715	611,131	693,708	703,063
Poland .. ..	102,461	114,898	126,212	(d) 133,000	(d) 150,000	(d) 160,000	(d) 180,000
Roumania .. ..	4,606,000	4,189,767	3,736,393	(d) 4,084,000	(d) 4,324,000	(d) 4,429,000	(a) 4,192,000
U.S.S.R. (d) .. ..	20,000,000	21,500,000	25,600,000	28,900,000	33,000,000	37,200,000	41,600,000
Yugoslavia .. ..	(d) 20,000	20,947	37,949	34,408	61,619	110,514	153,168
Algeria .. ..	253	162	128	108	267	3,390	8,040
Egypt .. ..	1,328,160	1,262,053	1,312,542	1,860,736	2,209,287	2,305,925	2,295,343
Morocco (French) .. ..	3,350	2,534	2,723	12,715	17,203	38,695	74,001
Cuba .. ..	18,652	19,727	37,000	36,000	20,000	15,000	13,000
Mexico (b) .. ..	6,312,151	6,632,850	8,026,400	8,243,549	8,746,100	10,156,056	10,761,000
United States (b) .. ..	234,747,260	237,525,890	254,381,781	276,737,671	252,096,849	270,352,600	307,469,700
Argentina .. ..	3,216,659	2,924,574	3,071,410	3,265,272	3,175,900	3,371,000	3,449,000
Bolivia .. ..	57,495	54,639	56,847	69,888	89,173	82,000	77,000
Brazil .. ..	10,160	8,600	12,410	18,450	14,060	37,823	88,815
Chile .. ..	—	—	—	—	16,000	79,000	91,000
Colombia (b) .. ..	3,214,793	3,158,242	3,518,310	3,352,300	4,186,200	4,797,091	5,520,986
Ecuador .. ..	355,163	315,563	314,730	341,879	341,717	350,959	352,000

\* Excluding Natural Gasoline. See page 212.

(a) Information not available.

(b) The following conversion rates have been used: 35 gallons=1 barrel, and the undermentioned barrels=1 ton:—Canada 7.9, Trinidad 7.0, Burma 7.4, India 7.4, Pakistan 7.0, Cuba 7.5, Mexico 7.1, United States 7.3, Bolivia 7.6, Colombia 7.1, Ecuador 7.5, Venezuela 6.95, Indonesia 7.5.

(c) Years ended June 25 of that stated.

(d) Estimated.

(e) Average annual production during Japanese occupation.

(f) Included under Foreign Countries.

(g) British and U.S. Zones.

(h) Revised to exclude Natural Gasoline.

(i) British Protected State.

(j) Revised.

(k) Including Natural Gasoline.

PRODUCTION OF CRUDE PETROLEUM (Cont.)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Peru..	1,798,543	1,612,795	1,674,410	1,842,594	1,941,654	1,959,000	2,102,000
Venezuela ..	46,834,474	56,258,426	62,979,666	70,503,375	69,343,100	78,611,400	89,456,000
Burma ..	(c)	(c)	(c)	44,528	35,118	66,902	100,414
China (d) ..	60,100	65,600	52,400	80,000	100,000	135,000	109,000
Formosa ..	509	2,000	2,600	(a)	(a)	(a)	(a)
Indonesia (b) ..	1,065,000	306,069	1,197,425	4,257,638	5,839,472	6,313,315	7,327,307
Iran ..	16,839,490	19,189,551	20,192,419	24,871,058	26,807,000	31,750,000	31,176,600
Iraq ..	4,816,156	4,712,235	4,759,387	3,426,482	4,116,267	6,544,913	8,552,300
Japan ..	210,200	186,600	178,300	157,000	191,400	289,000	327,000
Saudi Arabia ..	2,841,500	7,992,250	11,980,260	18,751,270	22,820,783	26,196,852	36,608,585
Turkey ..	(a)	(a)	(a)	(a)	14,522	16,700	18,800
<b>TOTAL</b> ..	<b>350,266,000</b>	<b>370,955,000</b>	<b>406,359,000</b>	<b>454,520,000</b>	<b>443,950,000</b>	<b>489,700,000</b>	<b>542,530,000</b>
<b>WORLD'S TOTAL</b> ..	<b>356,185,000</b>	<b>377,382,000</b>	<b>416,491,000</b>	<b>469,863,000</b>	<b>467,171,000</b>	<b>521,059,000</b>	<b>588,780,000</b>

(a) Information not available.

(b) For conversion rate for 1945 to 1947 see footnote (b) on previous page.

(c) Included under British Countries.

(d) Estimated.

(e) Anglo-Iranian Oil Co. only.

PRODUCTION OF NATURAL GASOLINE

(Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Canada ..	(d)	49,342	48,548	53,256	54,255	50,725	(d)
Trinidad (b) ..	20,680	21,250	20,570	20,700	19,260	19,485	22,845
India ..	2	111	70	—	—	—	—
<b>FOREIGN COUNTRIES</b>							
Poland ..	(a)	3,623	9,984	(a)	(a)	(a)	(a)
Roumania ..	136,800	128,810	113,689	(a)	(a)	(a)	(a)
Egypt ..	(a)	(a)	(a)	(a)	(a)	11,115	12,520
Cuba ..	(a)						
Mexico ..	(a)	(a)	(a)	(a)	(a)	158,000	(a)
United States ..	12,853,000	13,282,000	15,167,000	16,837,000	17,925,000	20,881,000	23,496,000
Argentina ..	8,826	8,505	7,698	9,340	8,301	(a)	(a)
Ecuador ..	4,800	4,700	(a)	(a)	(a)	(a)	(a)
Peru..	109,882	106,468	104,114	110,675	136,012	(a)	(a)
<b>WORLD'S TOTAL (c)</b>	<b>13,300,000</b>	<b>13,760,000</b>	<b>15,630,000</b>	<b>17,320,000</b>	<b>18,430,000</b>	<b>21,400,000</b>	<b>24,000,000</b>

(a) Information not available.

(b) About half the production is blended with crude petroleum at field storage.

(c) Totals refer only to those countries reported above.

(d) Included with crude petroleum.

PRODUCTION OF NATURAL GAS\*

(Million cubic feet)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Union of South Africa	(a)						
Barbados .. . . .	20	7	18	57	69	74	106
Canada .. . . .	48,412	47,900	52,657	58,603	60,457	67,822	73,838
Trinidad .. . . .	27,503	27,170	29,617	30,697	32,287	32,312	31,725
Brunei (e) .. . . .	(a)	(b) 1,000	8,933	19,837	20,483	26,615	(a)
<b>FOREIGN COUNTRIES</b>							
Austria .. . . .	1,151	1,625	1,854	1,833	2,098	1,769	1,699
France .. . . .	3,015	3,891	5,191	6,145	8,052	8,306	10,044
Germany (Federal) .. . . .	2,507	3,860	2,746	2,377	1,922	2,386	2,715
Hungary .. . . .	(c) 1,420	3,221	3,560	4,136	4,414	(a)	(a)
Italy .. . . .	1,475	2,264	3,285	3,818	8,341	17,807	33,792
Poland .. . . .	4,590	5,153	5,236	(b) 9,147	(a)	(a)	(a)
Roumania .. . . .	46,065	47,844	41,530	(a)	77,693	(a)	(a)
Mexico .. . . .	26,910	27,122	35,258	37,361	41,954	59,244	83,950
United States .. . . .	3,918,686	4,030,605	4,582,173	5,148,020	5,419,736	6,281,048	7,457,359
Argentina .. . . .	21,507	19,998	20,578	21,411	23,793	(a)	(a)
Ecuador .. . . .	2,476	2,338	3,072	(a)	(a)	(a)	(a)
Uruguay .. . . .	111	150	104	16	20	27	36
Venezuela .. . . .	256,385	331,394	402,589	470,393	502,741	557,111	673,112
China (d) .. . . .	5	2,157	1,928	(a)	(a)	(a)	(a)
Indonesia .. . . .	(a)	(a)	848	13,031	17,777	22,088	27,900

NOTE.—This table is necessarily incomplete owing to the fact that official statistics of production of natural gas are published by only a few countries.

\* The figures represent only that part of the gas produced which is actually utilized.

(a) Information not available.

(b) Estimated.

(c) July to December only.

(d) Partial production only.

(e) Actual production. The amounts sold were: 1949—1,665; 1950—1,829; 1951—1,752.

PRODUCTION OF NATURAL ASPHALT, ETC.

(Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Barbados (exports of manjak)	9	—	—	—	—	—	—
Trinidad .. .. ..							
	63,118	93,851	87,346	128,993	145,160	132,846	154,705
<b>FOREIGN COUNTRIES</b>							
Albania (estimated) ..	a)	9,000	14,000	(a)	(a)	(a)	(a)
Spain .. ..	9,800	2,560	4,507	4,709	7,982	(a)	(a)
Angola (Libollite) .. ..	(a)	118	1,000	200	(a)	(a)	(a)
Belgian Congo—							
Bitumen .. .. ..	—	—	—	—	—	359	1,660
French Equatorial Africa—							
Bitumen .. .. ..	344	—	—	—	—	—	—
French West Africa—							
Bitumen .. .. ..	133	—	—	—	—	—	—
Cuba (c) .. .. ..	(b)	8,927	2,048	(a)	(a)	(a)	(a)
Mexico (exports) .. ..		2,085	429	(a)	(a)	(a)	(a)
United States (sales)—							
Gilsomite .. .. ..	54,708	61,078	59,969	46,537	45,948	59,095	58,501
Wurtzilite .. .. ..	—	21	15	—	—	—	—
Argentina—							
Rafaelite .. .. ..	1,471	(a)	(a)	(a)	(a)	(a)	(a)
Asphaltite .. .. ..	133,200	83,300	81,800	81,000	77,500	46,100	14,000

NOTE.—This table is necessarily incomplete owing to the fact that official statistics of production of natural asphalt are published by only a few countries.

(a) Information not available.

(b) Partial production only. Complete information is not available.

(c) U.S. Bureau of Mines.

### PRODUCTION OF ASPHALT ROCK

(Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES</b>							
France .. .. ..	13,768	31,244	35,776	44,008	52,834	82,270	75,000
Italy .. .. ..	142,885	201,246	245,838	241,336	237,966	243,442	260,750
Spain .. .. ..	7,200	3,600	4,200	5,448	7,637	(a)	(a)
Switzerland .. .. ..	9,235	10,173	9,346	(a)	(a)	(a)	(a)
Angola .. .. ..	6,159	7,340	7,294	11,958	14,764	7,301	17,482
United States (sales) .. ..	573,750	694,158	897,089	967,861	1,027,617	1,057,746	1,230,745
Indonesia .. .. ..	(a)	2,408	195	(a)	(a)	(a)	(a)
Philippine Republic .. .. ..	(a)	(a)	(a)	3,050	44,500	51,983	29,842
Syria .. .. ..	(a)	(a)	16,000	16,258	16,925	14,458	14,115

NOTE.—This table is necessarily incomplete owing to the fact that official statistics of production of asphalt rock are published by only a few countries.

(a) Information not available.

### PRODUCTION OF OIL-SHALE

(Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Great Britain .. .. ..	1,398,202	1,316,533	1,110,817	1,380,719	1,402,694	1,452,287	1,411,709
Union of South Africa (b) .. .. ..	119,275	111,891	165,816	205,318	203,867	212,613	196,596
Australia .. .. ..	123,170	121,654	138,427	136,352	120,956	98,487	78,564
<b>FOREIGN COUNTRIES</b>							
Austria .. .. ..	4,546	2,598	1,586	1,122	894	628	985
France .. .. ..	222,248	340,043	409,238	436,465	487,249	551,035	340,418
Italy .. .. ..	12,855	5,018	3,158	5	(a)	(a)	(a)
Spain .. .. ..	99,574	106,129	67,745	74,465	73,321	49,947	52,285
Sweden (c) .. .. ..	1,751,282	1,843,937	1,326,960	1,376,567	1,235,787	1,532,970	(a)

NOTE.—Oil-shale is also produced in Germany, U.S.S.R. and Manchuria.

(a) Information not available.

(b) Torbanite. Years ended June 25 of that stated.

(c) Alum shale.

PRODUCTION OF PETROLEUM REFINERY PRODUCTS IN CERTAIN COUNTRIES\*

(Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951	
<b>BRITISH COUNTRIES</b>								
United Kingdom—								
Aviation and motor spirit	431,500	486,800	328,600	639,700	904,100	1,639,800	3,100,000	
Other spirit .. .	43,100	69,700	69,800	94,900	107,900	128,100	95,000	
Kerosene .. .	4,800	38,200	89,300	121,400	130,500	161,400	245,100	
Gas oil and diesel oil .. .	202,100	470,500	436,600	887,700	1,206,900	1,913,700	3,055,100	
Fuel oil .. .	89,600	351,100	580,300	1,359,400	2,347,600	3,772,500	7,650,000	
do. (used in refineries)	109,700	249,900	258,200	401,300	493,500	595,800	852,900	
Lubricating oil .. .	253,700	312,600	344,100	368,100	376,900	421,900	412,200	
Bitumen .. .	278,621	459,529	433,068	532,400	561,900	637,200	746,200	
Paraffin wax .. .	11,097	11,910	15,228	14,100	14,200	15,600	15,100	
Canada (b)—								
Aviation spirit .. .	60,873	25,385	28,977	45,815	45,153	40,656	(a)	
Motor spirit .. .	3,061,777	3,310,244	3,493,187	3,950,359	4,676,207	5,204,227	(a)	
Naphtha (d)	95,455	85,468	93,322	94,877	118,989	118,914	(a)	
Kerosene .. .	264,673	430,782	343,921	463,897	510,215	713,957	(a)	
do. Power .. .	134,057	136,643	128,727	159,837	137,774	112,228	(a)	
Gas oil, etc. .. .	488,482	729,299	982,988	722,935	1,156,639	1,555,114	(a)	
Fuel oil .. .	2,245,715	2,243,299	2,272,026	2,867,406	2,895,424	3,129,582	(a)	
do. (used in refineries)	438,378	446,359	479,804	511,571	545,238	603,312	(a)	
Diesel oil .. .	455,844	507,680	711,853	757,401	814,871	942,813	(a)	
Lubricating oil .. .	205,735	226,881	242,093	238,582	230,179	233,342	(a)	
Grease .. .	8,997	10,273	13,521	11,406	13,560	15,013	(a)	
Coke .. .	59,660	62,156	69,754	78,070	104,794	109,099	(a)	
Asphalt .. .	315,013	415,431	580,123	633,004	627,710	662,698	(a)	
Barbados—								
Motor spirit .. .	291	(a)	(a)	(a)	(a)	(a)	(a)	
Kerosene .. .	500	(a)	(a)	(a)	(a)	(a)	(a)	
Fuel oil .. .	1,790	(a)	(a)	(a)	(a)	(a)	(a)	
Trinidad—								
Aviation spirit .. .	.. .	(a)	(a)	(a)	78,902	129,479	174,152	191,220
Motor spirit .. .	.. .				616,499	580,529	569,187	630,404
White spirit .. .	.. .				654	295	338	314
Kerosene .. .	.. .				59,354	63,574	60,317	84,552
do. Power .. .	.. .				167,534	195,042	163,891	347,512
Gas and diesel oil .. .	.. .				561,193	581,609	599,359	690,670
Fuel oil .. .	.. .				2,078,369	2,414,576	2,359,050	2,747,178
Lubricating oil and greases .. .	.. .				352	345	367	356
Bitumen .. .	.. .				61,098	54,847	66,361	71,725
Other finished products .. .	.. .				17,319	24,906	37,897	45,961
Bahrein Islands (c)—								
Aviation spirit .. .	67,897	17,654	2,935	—	—	—	—	
Motor spirit .. .	605,854	894,652	1,198,529	1,458,000	1,598,000	1,771,000	2,025,304	
Kerosene .. .	303,528	505,311	726,895	665,000	609,000	710,000	833,564	
Gas oil and diesel oil .. .	583,483	867,166	944,974	1,253,000	1,169,000	1,334,000	1,303,242	
Fuel oil .. .	858,825	1,793,629	2,776,980	3,334,000	3,356,000	2,983,000	3,834,619	
Bitumen .. .	.. .	(a)	(a)	(a)	45,000	68,000	72,477	
India—								
Motor spirit .. .	75,208	60,826	53,791	58,520	(a)	(a)	(a)	
Kerosene .. .	38,172	50,851	49,662	40,482	(a)	(a)	(a)	
Batching oil .. .	2,013	1,293	2,012	—	—	—	—	
Other oils .. .	.. .	8,000	10,685	32,110	(a)	(a)	(a)	
Lubricating oils .. .	.. .	15,755	19,242	—	—	—	—	
Fuel oil .. .	86,713	40,522	47,001	59,735	(a)	(a)	(a)	
Coke .. .	.. .	11,282	11,172	10,699	(a)	(a)	(a)	
Bitumen .. .	.. .	3,598	1,187	2,824	(a)	(a)	(a)	
Paraffin wax .. .	.. .	31,826	32,677	35,624	39,665	(a)	(a)	

\* This table refers to the more important products obtained and does not include in some cases items classified as "other products". It follows, therefore, that the sum of the products shown for a particular country does not necessarily represent the total refinery products produced.

(a) Information not available.

(b) Including the amounts used at the refineries. In the case of Fuel oil these amounts are shown separately.

(c) British Protected State.

(d) Revised.

## PRODUCTION OF PETROLEUM REFINERY PRODUCTS IN CERTAIN COUNTRIES (Cont.)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES (Cont.)</b>							
Pakistan—							
Motor spirit	7,783	7,097		8,900	19,800	35,600	36,580
Kerosene	2,226	1,826		1,545	3,580	7,500	6,670
Diesel oil	2,407	1,578		5,240	5,180	8,770	(a)
Fuel oil	3,833	3,605		27,175	73,300	102,100	(a)
Lubricating oil	8,571	3,945		536	668	2,176	(a)
Greases	215	293		(a)	(a)	(a)	(a)
Paraffin wax	18	79		(a)	(a)	(a)	(a)
Sarawak—							
Motor spirit	(a)	230	126,800	264,097	317,980	389,857	429,067
Kerosene, power	(a)	—	(a)	299	317	317	252
Gas, diesel and fuel oils	(a)	—	843,000	1,388,663	1,393,513	1,464,440	1,505,536
Australia—							
Motor spirit	5,820	30,758	140,249	206,388	256,000	254,406	299,800
Kerosene	—	12,103	13,221	11,998	10,500	1,098	(a)
Gas oil	—	16,966	14,283	23,998	11,000	91,525	37,000
Diesel oil	—	—	—	1,950	73,000	34,201	115,000
Fuel oil	4,195	104,811	164,964	139,971	183,000	238,686	322,000
Lubricating oil (b)	6,044	5,938	10,657	23,920	23,302	11,604	41,693
Grease (b)	4,506	3,719	4,735	9,589	9,589	5,103	(a)
Bitumen	—	—	—	32,424	52,000	60,255	79,000
<b>FOREIGN COUNTRIES</b>							
Belgium—							
Motor spirit	6,000	21,200	27,031	59,017	72,511	159,905	
Kerosene	4,000	8,100	10,357	9,830	8,950	11,754	
Fuel oil, etc.	31,000	72,700	148,468	203,244	236,180	577,863	
Lubricating oil	5,000	5,000	6,058	6,673	5,961	4,667	
Asphalt, etc.	34,000	(a)	66,906	53,721	79,161	79,880	
Denmark—							
Gas oil	(a)	(a)	200				
Diesel oil	(a)	(a)	6,100				
Lubricating oil	4,763	8,542	9,951	9,256	7,578	10,925	(a)
Grease	197	656	870	1,171	941	1,389	(a)
Asphalt	—	(a)	16,303	13,275	14,696	23,592	21,962
France—							
Motor spirit	72,800	740,167	1,252,481	1,685,813	2,495,600	3,084,900	3,858,200
Kerosene and white spirit	3,720	101,510	195,558	267,229	261,000	280,000	321,000
Gas oil	39,400	421,693	599,864	1,133,468	1,740,000	2,297,900	2,767,000
Fuel oil	124,000	880,284	1,811,008	3,839,844	5,364,000	6,627,400	8,920,500
Lubricating oil	866	67,310	171,646	213,949	200,000	288,000	340,000
Road oil	—	2,460	203,096	417,924			
Coke	—	—	—	467,200	607,000	810,000	(a)
Paraffin wax	—	—	—	—	—	—	—
Germany (Federal) (c)—							
Aviation spirit	(a)	(a)	(a)	2,857	11,896	39,018	64,846
Motor spirit	87,400	70,800	96,756	407,326	960,478	1,430,002	
Kerosene	(a)	(a)	(a)	54,347	71,434	83,569	50,861
Diesel oil	(a)	95,700	77,200	88,207	296,521	552,450	1,194,015
Fuel oil	(a)	(a)	(a)	54,728	169,319	463,431	769,077
Lubricating oil	(a)	144,100	161,700	196,586	300,309	540,600	343,574
Bitumen	(a)	30,600	47,600	123,153	197,737	366,550	392,977
Other products	(a)	(a)	(a)	115,869	129,492	147,174	64,276
Hungary—							
Motor spirit	200,000	(a)	(a)	(a)	(a)	(a)	(a)
Kerosene	121,000	(a)	(a)	(a)	(a)	(a)	(a)
Gas oil	97,000	(a)	(a)	(a)	(a)	(a)	(a)
Fuel oil	155,000	(a)	(a)	(a)	(a)	(a)	(a)
Lubricating oil	4,000	(a)	(a)	(a)	(a)	(a)	(a)
Italy (d)—							
Motor spirit	1,156	11,953	296,026	407,654	696,880	968,598	1,336,284
Kerosene	26	5,993	122,120	185,379	225,348	294,415	461,991
Gas and diesel oil	28	16,885	304,111	505,836	760,557	1,023,248	1,386,126
Fuel oil	397	13,464	458,852	884,628	1,676,787	2,389,993	3,264,277
Lubricating oil	230	—	23,739	26,264	50,222	56,840	96,693
Coke	—	109	18,728	23,137	19,688	7,790	4,527

(a) Information not available

(b) Years ended June 30 of year stated.

(c) British and American zones only for 1946 and 1947.

(d) Figures for 1949 and 1950 revised. Figures for previous years may not be quite comparable.

## PRODUCTION OF PETROLEUM REFINERY PRODUCTS IN CERTAIN COUNTRIES (Cont.)

Producing Country	1945	1946	1947	1948	1949	1950	1951
FOREIGN COUNTRIES (Cont.)							
Italy—(Cont.)							
Bitumen .. ..	404	—	38,703	64,282	134,367	177,651	199,239
Turpentine substitute .. ..	292	—	6,865	3,426	8,160	10,679	12,620
Other products .. ..	—	—	7,821	9,843	16,494	26,362	43,656
Netherlands—							
Motor spirit .. ..	(a)	(a)	(a)	500,433	678,000	1,284,000	1,615,100
Kerosene .. ..				763	(a)	78,000	189,000
Diesel oil .. ..				186,829	513,000	968,000	1,409,000
Residual fuel oil .. ..				598,640	1,261,000	2,716,000	2,712,000
Lubricating oil .. ..				1,709	1,400	20,000	34,000
Coke .. ..				111,002	(a)	(a)	(a)
Asphalt .. ..				134,861	(a)	(a)	241,000
Poland—							
Motor spirit .. ..	(a)	(a)	(a)	33,796	46,582	(a)	(a)
Kerosene .. ..				17,150	29,138	(a)	(a)
Gas oil and light oils .. ..				29,562	33,303	(a)	(a)
Lubricating oil .. ..				19,279	28,073	(a)	(a)
Greases .. ..				2,182	3,393	(a)	(a)
Paraffin wax .. ..				8,268	8,138	(a)	(a)
Petroleum jelly .. ..				627	564	(a)	(a)
Asphalt .. ..				9,391	3,466	(a)	(a)
Portugal—							
Motor spirit .. ..	(a)	(a)	(a)	63,220	67,506	67,500	68,400
Kerosene .. ..				23,845	46,346	54,600	62,100
Gas and diesel oil .. ..				40,011	40,504	53,200	80,100
Fuel oil .. ..				112,972	119,581	102,400	141,200
Roumania—							
Motor spirit .. ..	1,322,096	1,085,793	1,068,687	(a)	(a)	(a)	(a)
White spirit .. ..	98,000	65,000	14,130	(a)	(a)	(a)	(a)
Kerosene .. ..	450,549	514,662	460,719	(a)	(a)	(a)	(a)
Gas oil (b) .. ..	579,874	507,000	443,285	(a)	(a)	(a)	(a)
Fuel oil (b) .. ..	1,729,809	1,456,000	1,262,992	(a)	(a)	(a)	(a)
Lubricating oil .. ..	95,603	100,000	81,237	(a)	(a)	(a)	(a)
Paraffin wax .. ..	4,200	4,900	6,995	(a)	(a)	(a)	(a)
Coke .. ..	3,468	4,900	8,774	(a)	(a)	(a)	(a)
Asphalt .. ..	33,534	49,000	35,982	(a)	(a)	(a)	(a)
Other products .. ..	36,196	8,722	14,198	(a)	(a)	(a)	(a)
Sweden—							
Motor spirit .. ..	{}	{}	{}	55,972	52,907	51,308	68,631
White spirit .. ..				2,244	1,939	4,254	—
Kerosene .. ..				5,379	7,156	12,612	20,233
Fuel oil, etc. .. ..				63,744	373,346	408,645	365,065
Lubricating oil .. ..				2,728	5,802	10,208	16,055
Asphalt .. ..				2,693	17,730	56,428	75,930
Canary Islands—							
Motor spirit .. ..	60,000	145,000	185,000	185,000	116,837	187,585	133,000
Kerosene .. ..	15,000	20,000	20,000	30,000	15,747	37,287	35,000
Gas oil .. ..	20,000	50,000	55,000	140,000	136,238	154,976	117,829
Diesel oil .. ..	(a)	(a)	(a)	(a)	(a)	59,309	135,860
Fuel oil .. ..	60,000	200,000	200,000	270,000	224,196	319,516	398,235
Lubricating oil .. ..	(a)	(a)	(a)	(a)	(a)	6,171	2,120
Asphalt .. ..	3,000	10,000	10,000	10,000	21,399	56,462	44,727
Egypt—							
Motor spirit .. ..	180,805	193,225	195,215	191,524	209,694	191,247	205,122
Kerosene .. ..	66,852	65,845	70,424	97,456	114,190	147,508	207,048
Gas oil .. ..	{}	{}	{}	803,010	749,567	759,505	1,313,572
Diesel oil .. ..				(a)	(a)	(a)	1,600,504
Fuel oil .. ..				(a)	(a)	(a)	{ 37,866
Asphalt .. ..				170,099	173,356	138,310	62,763
Morocco (French)—							
Motor spirit .. ..	1,224	703	755	873	1,136	2,470	7,397
Kerosene .. ..	158	71	181	—	—	3,381	7,743
Gas and fuel oils .. ..	1,867	1,087	1,725	8,124	12,196	31,760	58,883

(a) Information not available.

(b) Excluding the amounts used at the refineries.

## PRODUCTION OF PETROLEUM REFINERY PRODUCTS IN CERTAIN COUNTRIES (Cont.)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Cuba—							
Motor spirit .. ..	(a)	56,200	61,500	65,100	78,300	76,800	93,800
Turpentine substitute .. ..	(a)	1,000	—	(a)	(a)	(a)	(a)
Kerosene .. ..	(a)	27,500	34,700	38,200	50,000	64,500	71,300
Gas oil and diesel oil .. ..	(a)	58,800	62,800	59,400	64,900	56,200	69,100
Fuel oil .. ..	(a)	(a)	(a)	21,700	25,200	33,200	73,500
Lubricating oil .. ..	(a)	10,600	21,900	(a)	(a)	(a)	2,000
Asphalt .. ..	(a)	27,600	29,700	(a)	(a)	(a)	(a)
Mexico—							
Motor spirit .. ..	1,877,000	2,069,000	1,035,000	1,133,000	1,210,000	1,343,112	1,473,478
Kerosene .. ..	550,000	607,000	524,000	534,000	591,000	568,926	697,679
Fuel oil .. ..	3,439,000	3,757,000	3,829,000	3,704,000	4,105,000	3,969,772	4,346,142
Gas oil .. ..	685,000	768,000	756,000	696,000	752,000	713,108	766,833
Lubricating oil .. ..	49,000	46,000	33,000	38,000	31,000	26,265	35,529
Paraffin wax .. ..	27,800	26,400	13,200	11,500	10,600	11,900	10,500
Asphalt .. ..	174,000	360,000	263,000	149,000	150,500	126,400	74,100
Netherlands West Indies (b)—							
Aviation spirit .. ..	779,000	409,000	508,000	3,113,400	2,167,916	634,944	5,550,400
Motor spirit .. ..	3,131,000	4,194,000	4,295,000	2,676,5-0	3,221,279	4,754,851	2,308,000
Kerosene .. ..	659,000	1,197,000	1,462,000	1,279,542	1,277,021	1,997,981	
Gas oil .. ..	1,148,000	2,164,000	2,113,000	1,984,314	c 2,119,636	3,234,284	4,033,000
Diesel oil .. ..	1,642,000	1,943,000	2,317,000	3,630,522	d 2,710,883	1,402,462	
Fuel oil .. ..	19,771,000	19,632,000	22,245,000	24,752,339	23,348,490	25,565,943	26,733,000
Lubricating oil .. ..	61,000	194,000	132,000	237,133	303,969	232,620	272,000
Asphalt .. ..	169,000	114,000	211,000	73,379	203,510	323,394	(a)
United States—							
Aviation spirit .. ..	16,933,000	2,824,000	3,922,000	5,138,000	5,217,000	5,687,000	8,019,000
Motor spirit (b) .. ..	74,108,000	86,200,000	92,343,000	100,488,000	104,981,000	111,688,000	122,482,000
Kerosene .. ..	10,312,000	13,285,000	14,052,000	15,516,000	13,001,000	15,083,000	17,276,000
Gas oil and fuel oil distillates (e) .. ..	33,816,000	39,063,000	42,357,000	51,655,000	46,069,000	54,126,000	64,559,000
Residual fuel oil .. ..	68,467,600	62,907,200	65,303,400	68,004,(00	61,954,200	62,011,000	68,451,000
Lubricating oil .. ..	5,861,400	6,390,300	7,247,100	7,198,200	6,354,500	7,242,900	8,608,000
Paraffin wax .. ..	365,125	375,375	453,000	439,000	401,000	557,750	601,750
Coke .. ..	1,806,200	1,896,600	2,156,600	2,588,200	3,028,400	3,075,700	3,388,750
Asphalt .. ..	6,363,000	7,290,700	8,001,000	8,428,400	7,955,700	9,454,500	10,763,300
Road oil .. ..	427,000	928,000	1,125,000	1,259,000	1,224,600	1,102,200	970,500
Argentina—							
Aviation spirit .. ..	10,406	11,663	8,660	9,148	9,497	(a)	(a)
Motor spirit .. ..	748,721	954,872	1,076,561	1,202,311	1,201,300	1,480,400	1,387,800
Kerosene .. ..	291,920	427,600	445,600	(a)	(a)	578,000	661,700
Fuel oil .. ..	1,497,319	1,421,137	1,557,115	1,866,360	1,978,950	2,479,000	2,413,800
Gas oil .. ..	49,838	66,931	69,300	117,388	167,440	248,700	253,100
Diesel oil .. ..	207,109	276,203	284,797	378,722	385,470	501,400	537,900
Lubricating oil .. ..	82,192	76,120	86,856	100,480	96,260	98,000	98,000
Bolivia—							
Motor spirit .. ..	13,015	12,623	15,518	20,223	38,283	37,800	28,100
Kerosene .. ..	2,688	3,044	3,146	4,243	5,251	9,200	7,900
Fuel oil .. ..	17,467	10,354	11,836	12,932	25,741	24,000	10,500
Diesel oil .. ..	2,670	2,414	2,855	3,527	5,793	5,900	5,200
Brazil—							
Motor spirit .. ..	(a)	14,575	14,087	14,361	(a)	(a)	(a)
Other spirit .. ..	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Kerosene .. ..	(a)	6,950	4,843	3,910	(a)	(a)	(a)
Gas oil .. ..	(a)	2,831	1,414	(a)	(a)	(a)	(a)
Diesel oil .. ..	(a)	8,665	10,438	16,174	(a)	(a)	(a)
Fuel oil .. ..	(a)	13,363	14,150	19,361	(a)	(a)	(a)
Lubricating oil .. ..	(a)	404	529	382	(a)	(a)	(a)

(a) Information not available.

(b) Exports for the years 1948 to 1951.

(c) Includes some Diesel oil.

(d) Some Diesel oil is included with Gas oil.

(e) Revised.

## PRODUCTION OF PETROLEUM REFINERY PRODUCTS IN CERTAIN COUNTRIES (Cont.)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Colombia—							
Aviation spirit . . .	(a)	(a)	11,600	7,700	11,539	9,527	9,691
Motor spirit . . .	130,000	141,000	184,000	155,000	207,483	221,891	227,941
Other spirit . . .	1,900	2,500	2,200	4,000	(a)	(a)	(a)
Kerosene . . .	23,000	23,000	31,000	30,500	40,903	42,965	46,080
Gas oil . . .	6,000	5,000	7,000	1,400	1,611	6,645	6,986
Fuel oil . . .	451,000	484,000	760,000	686,000	889,592	894,050	932,060
Diesel oil . . .	27,000	31,000	42,000	48,400	65,663	75,624	66,172
Lubricating oil . . .	5,000	7,000	6,000	6,000	9,687	10,946	7,438
Asphalt . . .	10,000	15,000	19,000	22,000	29,500	24,800	21,735
Ecuador—							
Motor spirit . . .	33,000	33,365	45,300	51,020	59,030	62,797	65,500
Kerosene . . .	9,000	9,792	11,600	11,900	13,890	15,515	16,800
Diesel oil . . .	18,130	16,431	26,400	34,500	36,970	33,100	32,400
Residual fuel oil . . .	68,000	83,600	85,000	81,200	97,400	100,743	108,400
Lubricating oil . . .	280	340	(a)	(a)	(a)	600	—
Peru—							
Motor spirit . . .	442,855	393,973	411,191	456,418	460,000	569,000	618,000
Kerosene . . .	125,689	109,961	95,286	114,154	137,964	151,000	190,000
Diesel oil . . .	426,482	409,171	440,430	160,953	188,672	188,000	215,000
Fuel oil . . .	785,309	514,096	421,010	817,901	820,021	800,000	845,000
Lubricating oil . . .	7,489	8,017	9,924	9,761	9,500	11,000	11,200
Coke . . .	52	179	221	305	(a)	(a)	(a)
Asphalt . . .	8,954	5,835	11,551	9,747	12,700	11,300	(a)
Uruguay—							
Motor spirit . . .	60,312	91,184	93,245	140,316	118,632	147,831	172,686
Kerosene . . .	34,526	53,709	62,145	87,807	92,492	104,699	118,915
Gas oil . . .	26,137	30,432	32,834	42,870	44,368	51,813	55,140
Fuel oil . . .	136,903	137,456	193,301	410,998	411,879	398,495	482,686
Venezuela—							
Motor spirit . . .	347,000	443,000	450,000	463,694	703,166	1,641,826	2,119,639
Kerosene . . .	63,000	72,000	92,000	88,957	348,147	327,482	448,032
Gas oil . . .	8,000	246,000	6,000	7,900	240,300	767,700	890,443
Diesel oil . . .	734,000	736,000	937,000	926,000	946,900	1,612,100	2,471,689
Fuel oil . . .	3,335,000	3,304,000	3,563,000	4,547,834	4,999,954	7,471,212	9,125,781
Asphalt . . .	—	—	25,000	38,000	46,000	105,000	147,000
Burma—							
Motor spirit . . .	—	—	2,798	8,756	7,980	15,998	22,378
Kerosene . . .	—	—	445	5,168	5,309	11,328	18,000
Diesel oil . . .	—	—	189	4,742	5,236	10,879	22,451
Fuel oil . . .	—	—	7,338	18,573	13,330	22,637	31,313
Indonesia—							
Aviation spirit . . .	(a)	(a)	(a)	(a)	(a)	153,460	228,245
Motor spirit . . .	(a)	(a)	339,000	(a)	(a)	1,967,464	2,139,537
Kerosene . . .	(a)	(a)	205,000	(a)	(a)	865,291	1,015,120
Fuel oil, solar oil and diesel oil . . .	(a)	(a)	981,000	(a)	(a)	3,981,656	4,623,965
Paraffin wax . . .	(a)	(a)	(a)	(a)	(a)	43,745	90,599
Asphalt . . .	(a)	(a)	10,700	(a)	(a)	27,226	27,033
Iran—							
Motor spirit, etc. . .	3,320,200	3,211,700	3,251,300	3,822,800	4,202,000	4,324,800	b 2,169,900
Kerosene, etc. . .	1,130,000	1,825,900	1,663,500	1,867,500	2,210,100	2,337,700	b 1,240,300
Gas, diesel and fuel oils . . .	10,805,100	11,768,400	12,087,300	13,778,200	15,310,800	16,147,400	b 8,116,900
Other products . . .	175,900	94,200	171,000	223,400	221,100	242,900	(b) 112,800
Iraq—							
Motor spirit . . .	41,200	46,800	59,600	69,600	66,000	68,600	78,900
Kerosene . . .	49,300	56,400	61,600	67,100	73,500	79,500	86,500
Gas, diesel and fuel oils . . .	182,700	194,800	215,000	224,300	217,000	229,400	257,600

(a) Information not available.

(b) Anglo-Iranian Oil Co. only.

## PRODUCTION OF PETROLEUM REFINERY PRODUCTS IN CERTAIN COUNTRIES (Cont.)

Producing Country	1945	1946	1947	1948	1949	1950	1951
FOREIGN COUNTRIES (Cont.)							
Japan—							
Aviation spirit .. .	1,040	—	—	14,687	18,686	292,678	—
Motor spirit .. .	31,339	21,498	19,006	—	—	—	574,927
Kerosene .. .	31,101	20,139	20,407	23,373	20,791	60,915	99,416
Gas oil .. .	13,950	7,259	9,412	8,153	12,731	95,811	259,757
Diesel oil .. .	75,108	62,167	34,997	22,561	20,736	188,966	368,713
Fuel oil .. .	21,591	9,987	594	25,913	25,418	537,829	848,115
Lubricating oils .. .	49,584	42,805	35,541	35,214	38,983	138,669	270,886
Lebanon—							
Motor spirit .. .	44,076	46,110	48,754	52,031	60,611	93,860	115,655
Kerosene .. .	23,636	26,833	26,997	27,481	32,941	60,249	61,862
Gas oil .. .	28,000	29,180	32,879	35,818	44,632	84,249	98,691
Fuel oil .. .	116,853	118,091	128,785	136,404	144,255	234,844	262,042
Saudi Arabia—							
Motor spirit .. .	.. .	(a)	(a)	(a)	(a)	1,252,555	940,129
Kerosene .. .	.. .					319,948	375,101
Diesel oil .. .	.. .					1,632,503	1,441,274
Fuel oil .. .	.. .					2,686,132	2,032,083
Asphalt .. .	.. .					—	4,789
							1,393,748
							595,041
							3,334,787
							3,557,106
							27,970

(a) Information not available.

# EXPORTS OF PETROLEUM AND ALLIED PRODUCTS\*

*(Domestic Produce)*

*(Long tons)*

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Aviation spirit (bunkers) (b) .. .	429	14,740	37,944	46,309	54,020	63,446	73,574
Motor spirit .. .	1,613	6,271	78,340	20,607	53,710	95,660	115,902
Other spirit .. .	1,148	7,765	1,818	2,042	4,021	11,929	38,667
Kerosene .. .	58	500	4,039	2,089	17,183	28,601	38,343
Gas oil .. .		8,329	44,600	16,137	33,945	72,897	147,700
Diesel oil .. .		(c)	18	9	1	20,540	144,536
Fuel oil .. .	1,016	1,417	46,266	22,832	146,163	609,167	2,354,980
do. (bunkers) (b) .. .	1,739,963	1,683,192	1,957,462	1,983,254	2,031,746	2,228,369	2,964,322
Lubricating oil .. .	16,362	135,623	116,770	114,574	123,264	126,752	175,500
Other refined oils .. .	133	1,288	2,267	3,297	2,485	5,319	12,262
Mineral jelly .. .	40	474	113	112	218	267	326
Paraffin wax .. .	933	577	3,536	2,655	1,654	2,783	709
Malta—							
Aviation spirit (bunkers) (b) .. .	(a)	—	—	10,683	12,528	14,664	3,852
Gas oil (bunkers) (b) .. .	(a)	367	2,272	980	2,712	2,000	2,138
Fuel oil (bunkers) (b) .. .	(a)	4,751	11,119	11,236	8,919	9,530	9,559
Anglo-Egyptian Sudan—							
Motor spirit (bunkers) (b) .. .	—	—	—	5,529	8,146	6,862	(a)
Gold Coast (b)—							
Aviation spirit (bunkers) .. .	214	19	1,604	{ 2,557	2,576	1,923	2,108
Motor spirit (bunkers) .. .				{ 101	1	3	1
Gas oil (bunkers) .. .	(a)	(a)	(a)	733	891	1,207	1,201
Fuel oil (bunkers) .. .	14,796	14,491	12,057	20,084	14,298	28,031	28,059
Kenya (d)—							
Bunkers (b)—							
Aviation spirit .. .	{ 358	1,121	4,060	{ 5,853	4,184	5,199	7,129
Motor spirit .. .	{ 29,387	101,350	84,728	{ 341	16	11	19
Fuel oil .. .	94	98	136	128,299	142,754	135,478	121,764
Lubricating oil .. .				243	227	258	289
Mauritius—							
Fuel oil (bunkers) (b) .. .	(a)	(a)	(a)	(a)	871	4,141	4,836
Nigeria (bunkers)—							
Diesel oil (b) .. .	—	—	—	44	91	3	1,064
Gas oil (b) .. .	{ 639	819	2,470	{ 241	2,410	743	1,526
Fuel oil (b) .. .				2,945	10,991	3,115	9,958
Sierra Leone (bunkers)—							
Aviation spirit (b) .. .	—	—	—	—	—	248	—
Fuel oil (b) .. .	—	—	—	—	885	412	66
Tanganyika (b)—							
Aviation spirit (bunkers) .. .	—	—	—	1,376	610	897	503
Fuel oil (bunkers) .. .	—	—	10	19	9	119	668
Uganda (b)—							
Aviation spirit (bunkers) .. .	(e)	(e)	(e)	(e)	1,807	1,568	724
Union of South Africa—							
Bunkers (b)—							
Motor spirit .. .	710	260	2,656	4,564	3,994	(a)	(a)
Diesel oil .. .	{ 224,504	{ 49,106	80,169	87,263	115,299	(a)	(a)
Fuel oil .. .		180,360	195,961	318,661	343,725	(a)	(a)
Asphalt and bitumen .. .	105	68	955	3,618	3,295	2,871	(a)
Canada (f)—							
Crude petroleum .. .	—	—	35	98	—	—	48,826
Motor spirit .. .	186,311	33,052	23,300	28,762	6,621	406	698

\* Excluding the United Kingdom, the following rates have been used for converting Imperial gallons to long tons:

—Aviation spirit 315, Motor spirit 305, Kerosene 275, Gas oil 260, Diesel oil 256, Fuel oil 240, Lubricating oil 250, Crude petroleum 245, Asphalt 220, Road oil 220.

(a) Information not available.

(c) Included with Fuel oil.

(d) Including Uganda up to 1948 inclusive.

(e) Included with Kenya.

(f) Including Newfoundland from April 1, 1949.

(b) Foreign produce. See imports.

## EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES (Cont.)</b>							
<b>Canada (Cont.)—</b>							
Kerosene, etc. .. ..	24,015	10,837	342	1,222	610	538	22
Fuel oil .. ..	135,899	84,490	113,028	264,962	105,273	2,668	897
do. (bunkers) .. ..	1,206,000	906,000	1,057,000	925,936	943,150	863,645	(a)
Diesel oil (bunkers) .. ..				178,223	178,183	187,069	(a)
Lubricating oil .. ..	3,788	17,895	12,049	3,668	496	255	425
Other oils .. ..	575	848	1,605	3,008	1,673	1,675	277
Mineral wax .. ..	817	5,676	19,413	14,588	2,278	336	4,732
Petroleum coke .. ..	19,875	13,018	24,480	29,041	19,322	60,985	51,462
<b>Newfoundland (f)—</b>							
Fuel oil (bunkers) (c) ..	38,166	20,257	27,816	74,289	(f)	(f)	(f)
<b>British Guiana (b)—</b>							
Aviation spirit (bunkers)	48	49	297	333	278	309	371
<b>British West Indies—</b>							
Barbados—							
Manjak .. ..	9	—	—	—	—	—	—
Bermuda—							
Bunkers (b) (d)—							
Aviation spirit .. ..				11,438	18,425	20,136	(a)
Motor spirit .. ..				281	217	189	(a)
Kerosene .. ..				386	370	337	(a)
Fuel oil .. ..				13,408	3,158	4,022	(a)
Diesel oil .. ..				2,497	5,089	479	(a)
Lubricating oil .. ..				22	13	4	(a)
Jamaica—							
Bunkers (b)—							
Aviation spirit .. ..	2,863	3,015	1,348	(a)	(a)	(a)	(a)
Motor spirit .. ..		9	24	(a)	(a)	(a)	(a)
Gas oil (c) .. ..	7,617	24	—	(a)	674	(a)	(a)
Diesel oil (c) .. ..	12,242	16,030	1,477	4,384	2,393	10,123	6,238
Fuel oil (c) .. ..	11,883	19	5,550	26,496	42,554	75,221	52,658
Trinidad and Tobago—							
Crude petroleum .. ..	23	12,869	125,911	298,525	280,803	335,043	268,799
Motor spirit (g) .. ..	152,997	538,807	613,369	614,410	634,125	633,471	739,599
do. (bunkers) (g) .. ..	423,173	4,865	6,952	7,403	8,129	8,281	10,745
Kerosene .. ..	84,632	387,460	233,849	216,124	238,164	227,705	385,728
do. (bunkers) .. ..	97,578	67	137	178	181	199	125
Gas and diesel oil .. ..	15,157	101,241	106,479	220,390	276,978	284,142	458,333
do. (bunkers) .. ..	89,963	28,139	42,450	57,685	42,190	27,396	178,200
Fuel oil .. ..	179,829	507,693	777,339	1,135,084	1,373,827	1,337,684	1,404,939
do. (bunkers) .. ..	1,769,335	1,175,161	1,212,682	1,028,550	1,177,823	1,084,217	1,192,228
Lubricating oil .. ..		10	46	248	115	131	65
Road oil .. ..	5,427	9,302	7,479	9,096	11,938	16,927	22,739
Asphalt—							
Crude .. ..	536	—	41	16	27	—	38
Dried .. ..	9,990	26,563	32,364	41,988	47,962	46,659	45,557
Asphalt cement .. ..	6,551	23,241	24,295	49,369	29,393	23,433	39,473
Bituminous asphalt .. ..	11,351	40,451	26,351	60,896	45,480	62,304	73,516
Falkland Islands—							
Fuel oil (bunkers) (b) .. ..	—	4,001	10,772	2,305	1,000	19,281	17,772
Aden—							
Fuel oil (bunkers) (b) .. ..	404,301	694,861	960,132	1,575,539	2,138,491	2,720,861	2,243,935
Bahrein Islands (e)—							
Aviation spirit .. ..	36,012	46,838	5,407	12,699	14,207	19,555	24,795
Motor spirit .. ..	576,148	893,762	1,193,854	1,448,023	1,562,756	1,704,725	1,963,355
Kerosene .. ..	288,532	507,404	697,114	674,490	595,288	669,190	811,855
Diesel oil .. ..	571,081	860,019	968,496	1,191,181	1,180,995	1,277,940	1,259,165
Fuel oil (incl. bunkers) .. ..	833,048	1,798,609	2,756,799	3,231,716	3,400,630	2,903,215	3,823,700
Asphalt .. ..	—	—	—	14,411	42,639	66,690	66,530

(a) Information not available.

(b) Foreign produce. See imports.

(c) Amounts imported for bunkers. The amounts actually shipped are not available.

(d) Including bunkers for military forces.

(e) British Protected State.

(f) Years ended March 31 of year following that stated. Included with Canada from April 1, 1949.

(g) Including aviation spirit.

EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES (Cont.)</b>							
<b>British Borneo—</b>							
Brunei—							
Crude petroleum (g) ..	(a)	184,407	1,689,963	2,641,516	3,200,400	4,011,463	4,895,559
Natural gas (1,000 cubic feet) ..	(a)	(a)	893,344	1,260,126	1,663,516	1,822,776	1,744,904
Sarawak—							
Crude petroleum (b) ..	(c) 219,418	706,675	1,169,665	1,768,681	2,356,997	3,206,152	
Motor spirit ..	(c) —	48,879	122,699	160,136	228,295	234,642	
Kerosene ..	(c) 26	25,351	—	189	218	—	
Diesel oil etc. ..	(c) —	854,841	1,307,533	1,340,139	1,415,875	1,426,524	
do. (bunkers) ..	(c) —	36,527	31,812	43,678	54,569	80,280	
Lubricating oil ..	(c) —	—	—	—	—	—	
Ceylon (bunkers) (d)—							
Gas oil ..	—	—	55	333	1,311	2,231	
Diesel oil ..	70,414	54,524	52,096	65,114	83,531	78,849	71,145
Fuel oil ..	557,121	239,560	247,564	314,897	449,761	479,298	513,746
Lubricating oil ..	218	128	96	158	233	173	200
Hong Kong (re-exports)—							
Motor spirit ..	(a) 49,338	74,506	57,333	55,968	52,503	15,283	
Kerosene ..	79,174	54,143	41,372	37,912	26,299	7,556	
Fuel oil and gas oil ..	2,401	1,721	—	—	—	—	
Diesel oil ..	(a) 24,154	55,020	63,316	74,662	55,297	13,213	
Lubricating oil ..	6,022	7,244	(a)	(a)	(a)	(a)	
Greases ..	109	114	(a)	(a)	(a)	(a)	
Petroleum jelly ..	1,386	319	484	1,203	1,217	627	
Paraffin wax ..	1,055	1,891	3,863	6,997	9,308	2,559	
India—							
Aviation spirit (bunkers)							
Domestic produce ..	—	—	—	—	—	247	2,941
Foreign produce ..	7,376	11,336	17,703	6,622	8,972	11,417	6,117
Motor spirit (e) ..	—	290	—	—	—	—	—
Fuel oil (bunkers) (d) ..	203,032	198,808	95,518	22,412	22,897	40,231	32,790
Paraffin wax ..	14,128	16,409	15,850	11,973	13,232	19,816	28,708
Kuwait (f)—							
Crude petroleum ..	—	768,441	2,113,646	6,224,815	12,010,102	15,797,037	26,623,054
Export distillate ..	—	—	—	—	11,344	161,887	177,990
Diesel oil ..	—	—	—	—	—	24,940	30,495
Fuel oil ..	—	—	—	—	—	108,378	167,892
Malaya (including re-exports)—							
Aviation spirit ..	(a)	(a)	115,657	111,436	80,945	126,726	
do. do. (bunkers) ..	(a)	(a)	5,805	6,926	9,221	10,916	12,699
Motor spirit ..	102,815	136,379	182,567	300,993	514,384	604,438	
Kerosene ..	90,320	50,088	105,890	89,978	113,366	143,776	
do. Power ..	(a)	(a)	13,787	32,662	52,533	126,859	
Gas oil ..	(a)	(a)	50,946	72,830	157,814	234,463	
Diesel oil ..	(a)	(a)	219,404	326,364	445,221	304,692	
Fuel oil ..	101,038	236,902	274,268	609,044	577,081	377,922	
do. (bunkers) ..	(a)	278,250	349,055	469,891	595,500	900,256	
Lubricating oil ..	1,714	5,249	7,023	4,778	4,191	4,655	
Other petroleum products ..	6	33	23	65	131	973	
Paraffin wax ..	81	23	151	356	361	3,741	
Asphalt and bitumen ..	424	403	1,485	1,307	1,225	1,154	
Palestine—							
Motor spirit ..	255,246	380,318	(a)	(a)	(a)	(a)	
Kerosene ..	199,500	265,060	(a)	(a)	(a)	(a)	
Fuel oil, gas oil and diesel oil ..	900,062	1,616,769	(a)	(a)	(a)	(a)	
Asphalt ..	9,229	21,955	(a)	(a)	(a)	(a)	

(a) Information not available.

(c) April 15 to December 31 only.

(e) Includes trade by land as recorded.

(g) Exported to Sarawak for refining. Some is, however, re-exported from Sarawak and shown as exports from that country.

(b) Including crude petroleum imported from Brunei.

(d) Foreign produce. See imports.

(f) British Protected State.

## EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES (Cont.)</b>							
Australia—							
Crude petroleum ..	16	13	1,948	—	7	—	—
Aviation spirit (bunkers) ..	(a)	959	1,902	3,265	4,095	4,283	(a)
(f. (e) .. ..							4,315
Motor spirit, etc. ..	3,210	1,435	690	2,233	(f) 1,309	(f) 1,399	3,633
Kerosene ..	265	512	1,163	208	1,912	4,978	4,038
Lubricating oil ..	184	643	2,214	203	2,249	2,551	7,967
Residual and solar oils ..	17	77	471	1,364	5,180	7,640	—
Fuel oil (bunkers) (f)—							
Domestic produce ..	19,472	8,804	58,562	32,974	52,598	39,231	(a)
Foreign produce ..	777,889	681,117	306,569	309,824	385,298	360,408	(a)
Paraffin wax, etc. ..	57	198	82	11	7	6	3
Fiji—							
Aviation spirit(bunkers)(e) ..	(a)	221	2,652	3,371	3,751	3,781	3,355
Fuel oil (bunkers) (e) ..	{ 3,872	6,370	3,795	{ 5,334	6,138	548	627
Diesel oil (bunkers) (e) ..				{ 979	1,791	627	2,709
New Zealand—							
Fuel oil (bunkers) (d) ..	(e) 38,184	(e) 39,102	(a)	42,867	21,709	33,100	39,136
Lubricating oil(bunkers)(e) ..	441	401	(a)	325	687	723	623
<b>FOREIGN COUNTRIES</b>							
Austria—							
Crude petroleum ..				{ 5 015	527	—	—
Kerosene..					993	9,932	—
Gas oil ..				{ 204	1,980	15,367	7,736
Fuel oil ..					18,123	11,554	39,565
Lubricating oil, etc.					496	—	16,703
							3,249
Belgium-Luxemburg E.U.—							
Crude petroleum ..	(a)	(a)	(a)	6,328	154	—	16,275
Motor spirit ..	(a)	(a)	(a)	5,019	6,741	31,473	31,017
Kerosene..	(a)	(a)	(a)	45	58	1,937	1,340
Gas oil ..						{ 70,331	26,475
do. (bunkers) (b) ..						{ 17,710	23,388
Fuel oil, etc.						{ 33,416	121,671
do. (bunkers) (b) ..						{ 234,800	416,856
Lubricating oil ..				{ 763,411	{ 48,723	200,692	62,299
do. (bunkers) (b) ..						{ 3,739	3,624
Other heavy oils ..						{ 1,087	128
Petroleum jelly ..						{ 76	229
Paraffin wax ..						{ 264	83
Ozokerite and ceresin ..						{ 236	135
Asphalt and bitumen ..						{ (a)	634
Residual asphalt, etc. ..						{ 129	17,719
Pitch ..						{ (a)	
Czechoslovakia—						{ (a)	
Lubricating oil, etc. ..			{ 1,252	1,261	{ (c)	{ (a)	{ (a)
Paraffin wax ..			{ 2	52	{ (c)	{ (a)	{ (a)
Asphalt products ..			{ 1,006	404	{ (c)	{ (a)	{ (a)
France—							
Crude petroleum ..	—	—	1	84	3,441	11,223	8,620
Motor spirit ..	505	107,054	184,600	198,493	542,710	609,744	716,966
Kerosene..	—	3,852	46,751	48,361	76,068	87,672	135,654
Lubricating oil ..	73	4,507	10,799	3,423	7,838	24,346	37,594
Gas oil ..	603	31,866	61,179	188,284	806,350	1,332,154	1,384,464
Fuel oil ..	15,462	180,335	250,140	439,393	747,324	1,101,330	2,374,421
Road oil, etc. ..	—	8,082	21,578	(a)	(a)	(a)	(a)
Petroleum jelly ..	—	22	42	29	24	73	55
Paraffin wax ..	18	75	372	14	442	2,411	907
Ozokerite, ceresin, etc. ..	2	15	19	20	33	7	75
Petroleum coke, etc. ..	—	624	1,567	148	25	171	1,239
Asphalt and bitumen ..	411	788	2,610	2,743	4,336	12,144	11,429

(a) Information not available.

(b) Bunkers for foreign ships only.

(c) January to October only.

(d) Foreign produce. Excluded from imports.

(e) Foreign produce. See imports.

(f) Years ended June 30 of that stated.

EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Germany (Federal)—							
Crude petroleum ..		(c) 260,000	(e) 39,000	(e) 280,000	—	1	79,116
Motor spirit ..		(e) 359,000	(e) 448,000	—	6	202	241
Kerosene..	..	..	..	—	—	—	—
Gas oil ..	..	..	..	—	1,131	154	27
Fuel oil (incl. (b)) ..	..	..	..	—	84,225	96,220	95,333
Lubricating oil ..	..	..	..	—	90	3,776	6,706
Paraffin wax ..	..	..	..	—	6	1,393	3,521
Ozokerite, etc. ..	..	..	..	60	425	1,376	1,365
Asphalt ..	..	..	..	249	4,002	1,028	904
Hungary—							
Crude petroleum ..		34,857	..	..	..	..	..
Kerosene ..	..	40,473	..	..	..	..	..
Gas oil ..	..	29,889	236,700	..	..	..	..
Fuel oil ..	..	29,458	..	..	..	..	..
Lubricating oil ..	..	65,962	..	..	..	..	..
Italy—							
Motor spirit ..	..	..	103	2,900	100,039	242,432	430,841
Kerosene..	..	..	3	4,612	61,217	111,806	174,601
Lubricating oil ..	..	..	6	8	33	6	735
Gas oil ..	..	..	1,642	3,498	75,003	157,146	370,500
Fuel oil (d) ..	..	..	629	3,526	37,128	294,209	371,570
Paraffin wax ..	..	..	1	10	8	5	—
Asphalt and bitumen ..	..	..	836	4,838	6,385	15,604	8,342
Pitch ..	..	..	..	..	(a)	(a)	9,760
Netherlands—							
Crude petroleum ..	..	4	1	—	—	—	17
Aviation spirit (bunkers)	..	(a)	(a)	19,651	24,720	24,364	28,820
Motor spirit ..	..	1,231	23	68,273	238,831	605,175	1,039,301
Kerosene..	..	3	1	—	—	13,398	55,418
Gas oil ..	..	168	3,290	30,437	235,914	599,767	717,037
do. (bunkers) (c) ..	..	48,596	98,521	124,406	188,500	257,769	319,874
Fuel oil ..	..	..	10,235	94,471	546,972	1,500,996	1,219,354
do. (bunkers) (c) ..	..	(a)	78,443	312,056	320,681	384,558	537,757
Lubricating oil ..	..	95	610	7,890	20,248	55,036	62,985
Greases ..	..	6	34	(a)	(a)	6,235	7,178
Petroleum jelly ..	..	15	122	590	311	1,624	2,453
Paraffin wax ..	..	48	66	268	634	4,518	2,588
Ozokerite and ceresin ..	..	221	346	2,203	1,789	1,533	830
Asphalt ..	..	35,235	59,144	59,660	59,381	96,506	129,518
Natural asphalt ..	..	—	—	25	—	397	—
Petroleum coke ..	..	(a)	—	1,149	3,868	798	644
do. (bunkers) ..	..	—	—	24,965	36,309	18,950	15,773
Norway—							
Motor spirit ..	..	3	31	94	124	69	61
Kerosene..	..	4	5	11	17	24	30
Fuel oil and solar oil ..	..	96	570	2,668	26,629	1,440	84
Residual oils, etc. ..	..	23	34	90	82	37	(a)
Portugal—							
Motor spirit ..	..	4	9	15	6	—	550
Kerosene..	..	7	12	8	4	28	137
Fuel oil (bunkers) (b) ..	..	241	342	604	5,965	2,238	50
Lubricating oil, etc. ..	..	172	65	191	215	73	203
Other oils ..	..	19	12	4	4	4	2
Roumania—							
Crude petroleum ..	..	20,703	5,835	(a)	(a)	(a)	(a)
Motor spirit ..	..	1,252,641	1,051,462	876,755	(a)	(a)	(a)
Kerosene..	..	344,440	326,466	270,925	(a)	(a)	(a)
Fuel oil and gas oil (d) ..	..	1,433,847	785,195	626,667	(a)	(a)	(a)
Other oils ..	..	55,231	57,889	55,998	(a)	(a)	(a)
Paraffin wax ..	..	1,973	3,231	5,912	(a)	(a)	(a)
Asphalt ..	..	12,978	5,112	6,820	(a)	(a)	(a)
Petroleum coke ..	..	—	10	—	(a)	(a)	(a)

(a) Information not available.

(c) Including imported oil.

(e) Bizonal area.

(b) Bunkers on foreign ships only.

(d) Including bunkers.

## EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Spain—							
Motor spirit .. .	37,831	5,008	3	65	227	151	114
Kerosene.. .	3	5	8	—	4	—	—
Diesel oil .. .	42	—	5	—	—	144	—
Lubricating oil .. .	78	14	98	110	33	99	5
Asphalt .. .	296	252	57	41	—	—	—
Sweden—							
Motor spirit .. .	13	3,084	119	481	13,757	18,579	636
Kerosene.. .	1	9	129	—	1	1,335	21
Fuel oil and gas oil .. .	1,113	12,250	20,016	—	2	17,126	9,895
Lubricating oil .. .	119	994	338	300	465	342	381
Other oils .. .	—	403	1,178	668	—	7	139
Paraffin wax .. .	4	66	—	—	—	42	13
Petroleum jelly .. .	15	22	25	—	—	—	10
Ozokerite and ceresin .. .	1	50	19	—	—	15	10
Asphalt .. .	275	69	182	76	1,470	113	117
Pitch .. .	44	1,393	2,710	4,107	13,229	23,214	11,956
Switzerland—							
Motor spirit .. .	1	83	407	1,025	106	3,381	3,093
Fuel oil .. .	—	1	—	—	—	—	—
Lubricating oil and grease .. .	3	63	221	275	123	102	69
Petroleum jelly .. .	—	67	34	12	16	2	36
Asphalt and bitumen .. .	5	238	702	2,961	3,378	3,013	3,091
Paraffin wax and ceresin .. .	—	2	88	72	239	14	8
Yugoslavia—							
Kerosene.. .						2,963	1,344
Gas oil .. .						10	4,544
Fuel oil .. .						22,568	43,239
Bitumen .. .						—	1,279
Algeria—							
Crude petroleum .. .	(a)	(a)	—	—	—	1,472	6,557
Motor spirit, etc. .. .	134	379	604	44	107	5	11
Kerosene.. .	10	2	6	3	5	4	6
Gas oil .. .	149	46	16	4	2	13	2
Fuel oil .. .	—	147	6	133	5	6	70
Fuel oil and gas oil (b) .. .	3,806	45,214	271,240	393,981	400,786	(a)	(a)
Lubricating oil .. .	3	9	95	12	24	23	202
Bitumen .. .	1	—	—	269	10	1,639	(a)
Canary Islands (c)—							
Petroleum products .. .	26,625	127,962	272,628	272,102	386,380	461,144	400,873
do. (bunkers) .. .	8,767	283,107	658,798	1,267,542	1,386,538	1,520,175	1,445,003
Ceuta (c)—							
Petroleum products .. .	2	22	52	812	—	—	312
do. (bunkers) .. .	100	11,054	53,762	133,414	214,400	69,205	380,081
Egypt—							
Motor spirit .. .	35	—	12	59	760	927	(a)
Kerosene.. .	3	2	1	1	1	52	(a)
Fuel oil, etc. .. .	—	14	—	—	—	326,893	303,401
do. (bunkers for foreign ships) .. .	148,742	261,258	115,908	283,176	419,546	—	—
Lubricating oil .. .	—	—	—	998	2,078	63	(a)
Asphalt, etc. .. .	54,422	161,335	82,272	44,387	24,342	38,237	29,085
Melilla—							
Petroleum products .. .	1,285	1,031	1,067	83	(a)	—	—
Morocco (French)—							
Crude, refined and residual .. .	185	93	731	(a)	(a)	(a)	(a)
Cuba (including re-exports)—							
Natural asphalt .. .	173	(a)	(a)	292	27	—	(a)
Mexico—							
Crude petroleum .. .	354,627	430,001	449,278	1,558,805	854,230	1,673,450	1,024,152
Motor spirit .. .	1,215	1,077	14,997	226,030	5,641	54,775	30,745

(a) Information not available.

(b) Bunkers of foreign produce

(c) Foreign produce. See imports.

## EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Mexico (Cont.)—							
Kerosene .. ..	146,291	102,872	65,040	204,271	59,739	125,803	78,883
Fuel oil .. ..	527,044	{ 597,935	349,581	809,252	277,736	343,686	1,348,775
do. (bunkers) .. ..		17,364	52,541	142,513	215,646	307,542	
Gas oil .. ..	70,538	115,924	43,109	159,428	65,982	76,018	57,463
Lubricating oil .. ..	59	157	172	151	462	845	(a)
Asphalt (petroleum) ..	—	29,679	4,685	17,035	76	75	(a)
Natural asphalt ..	2,085	429	—	(a)	(a)	(a)	(a)
Netherlands West Indies—							
Crude petroleum .. ..	45,841	684,989	1,857,048	1,831,544	794,005	956,237	469,300
Aviation spirit .. ..	2,336,076	2,503,415	2,575,183	3,113,400	2,167,916	634,944	(a)
Motor spirit .. ..	1,577,029	2,173,681	2,246,914	2,676,540	3,221,279	4,754,851	5,550,300
Kerosene .. ..	700,502	895,677	855,198	1,279,542	1,277,021	1,997,981	2,307,800
Gas oil .. ..	690,244	1,438,569	1,876,765	1,887,831	2,074,930		
do. (bunk 1) .. ..	51,844	42,064	40,658	96,483	44,706		
Diesel oil .. ..	1,399,557	1,969,486	1,958,583	2,730,150	1,992,272	4,636,746	4,032,500
do. (bunkers) .. ..	360,071	2,622,108	823,809	900,372	718,611		
Fuel oil .. ..	19,471,771	18,879,251	20,764,950	21,498,212	21,071,597	25,565,943	26,733,000
do. (bunkers) .. ..	1,544,955	2,000,160	2,441,952	3,254,127	2,276,893		
Lubricating oil .. ..	62,132	82,805	40,625	237,133	303,969	232,620	272,000
Asphalt .. ..	108,081	71,292	87,293	73,379	203,510	323,394	(a)
United States—							
Crude petroleum .. ..	5,050,432	6,081,946	6,551,731	5,676,652	4,724,037	4,974,820	4,086,210
Aviation spirit .. ..	3,606,046	178,325	396,702	566,001	841,073	595,754	1,149,964
Motor spirit .. ..	5,700,249	4,181,634	3,766,271	2,496,977	2,358,004	1,287,573	2,255,152
Other finished light products .. ..	184,026	50,858	91,620	163,976	122,905	113,661	164,110
Natural gasoline .. ..	100,853	351,870	554,447	466,597	500,729	114,591	188,303
Kerosene .. ..	753,893	1,041,576	851,977	372,059	231,820	166,796	763,270
Gas oil and distillate fuel oil .. ..	4,436,321	3,814,817	3,644,364	2,600,532	1,347,674	1,470,024	2,787,503
Residual fuel oil .. ..	1,043,388	847,812	1,203,327	1,362,498	1,246,596	1,733,237	3,517,972
Fuel oil (bunkers) .. ..	11,523,988	8,749,096	(a)	(a)	(a)	(a)	(a)
Lubricating oil .. ..	891,090	1,511,844	1,948,399	1,769,820	1,698,425	1,882,764	2,288,350
Transformer oil .. ..	14,181	17,359	26,070	21,337	27,202	23,539	34,353
Greases .. ..	29,135	43,754	79,800	52,360	52,382	51,000	59,330
Paraffin wax .. ..	70,671	89,609	138,487	124,242	128,837	139,049	155,358
Petroleum jelly .. ..	20,814	41,827	41,618	28,428	29,275	33,487	49,746
Asphalt and bitumen, natural .. ..	42,048	17,345	21,341	12,216	14,885	16,801	22,248
Other asphalt, etc. .. ..	189,556	352,626	496,383	241,034	209,336	127,883	163,612
Petroleum coke .. ..	186,764	344,630	369,565	447,549	436,004	436,539	790,202
Liquefied petroleum gases .. ..	52,351	98,620	106,940	91,447	107,243	136,130	175,269
Natural gas (million cu. ft.) .. ..	13,247	13,337	8,035	5,645	5,170	23,474	19,573
Argentina—							
Motor spirit .. ..	3,719	1,125					
Kerosene .. ..	755	362					
Gas oil .. ..	51	123					
Fuel oil .. ..	7,703	1,780					
Diesel oil .. ..	2,347	497					
Lubricating oil .. ..	602	689					
Grease .. ..	5	3					
Asphalt .. ..	89	524					
Bitumen (Rafaelite) .. ..	1,151	3,298					
Bolivia—							
Crude petroleum .. ..	19,803	14,926	14,887	14,182	(a)	(a)	(a)
Fuel oil .. ..	(a)	2,810	253	275	(a)	(a)	(a)
Chile—		—	—	—	—	55,000	94,000
Colombia—							
Crude petroleum .. ..	2,683,785	2,446,810	2,799,386	2,690,231	3,452,409	4,038,410	4,605,281
Motor spirit .. ..	5	26					
Kerosene .. ..	2	2					
Fuel oil, etc. .. ..	31,803	67					
Ecuador—							
Crude petroleum .. ..	251,350	178,272	133,874	199,493	130,816	(a)	(a)

(a) Information not available.

## EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Peru—							
Crude petroleum ..	26,691	170,277	281,143	246,033	311,188	368,078	(a)
Motor spirit (b) ..	406,838	363,341	305,238	296,053	348,550	290,307	(a)
Kerosene (b) ..	87,584	63,008	30,545	32,325	40,447	34,170	(a)
Gas oil ..	(a)	(a)	(a)	—	87,516	—	(a)
Fuel oil and Diesel oil ..	574,884	373,207	} 306,159	{ 331,615	} 287,024	237,349	(a)
do. (bunkers) ..	105,691	65,989					
Lubricating oil and grease ..	1,610	2,057	2,520	2,516	1,757	1,402	(a)
Uruguay—							
Motor spirit ..	(a)	(a)	(a)	13,000	11,000	(a)	(a)
Kerosene ..	(a)	(a)	(a)	600	1,300	(a)	(a)
Gas oil and diesel oil ..	(a)	(a)	(a)	21,000	23,000	(a)	(a)
Fuel oil ..	(a)	(a)	(a)	156,000	305,000	(a)	(a)
Venezuela—							
Crude petroleum ..	40,995,580	49,357,769	55,500,266	61,691,749	60,406,000	64,636,000	71,853,000
Motor spirit ..	68,596	231,314	161,660	57,609	208,000	970,000	1,277,000
Kerosene ..	12	29	25	(a)	26,000	11,500	187,000
Gas oil ..	87,838	273,838	299,090	213,451	105,800	396,000	807,000
Fuel oil ..	2,982,417	2,855,964	3,110,113	3,962,141	4,277,000	6,865,396	7,878,000
Diesel oil ..	391,184	538,332	455,868	466,480	692,000	1,170,586	1,656,000
Indonesia—							
Crude petroleum ..	(a)	(a)	(a)	9,714	300	7,942	(a)
Motor spirit ..				118,600	992,164	1,725,900	1,735,264
Kerosene ..	(a)	(a)	(a)	98,200	399,636	554,300	540,527
Fuel and motor oils ..							3,437,023
do. (bunkers) ..							3,490,698
Lubricating oil ..	(a)	(a)	(a)	2,387,200	3,321,900	61,898	(a)
Greases ..						(a)	(a)
Paraffin wax ..						(a)	(a)
Asphalt ..						(a)	(a)
Turpene ..						(a)	(a)
Iran—							
Crude petroleum ..	86,800	1,203,400	1,732,500	3,255,200	3,206,200	6,501,300	(c) 3,353,700
Motor spirit ..	2,992,600	3,198,400	2,935,600	3,655,500	3,964,800	4,080,900	(c) 1,799,300
Kerosene ..	1,117,300	1,917,600	1,698,900	1,851,000	2,117,200	2,283,500	(c) 1,085,400
Gas, diesel and fuel oils ..	9,865,300	11,179,900	10,869,900	13,480,100	14,769,500	15,767,300	(c) 7,458,100
Other products ..	137,300	71,600	136,000	185,700	195,600	202,400	(c) 89,000
Iraq—							
Crude petroleum ..	4,279,652	4,344,030	4,305,266	3,010,965	3,662,438	6,046,527	7,838,292
Motor spirit ..	820	(a)	(a)	(a)	(a)	(a)	(a)
Kerosene ..	283	(a)	(a)	(a)	(a)	(a)	(a)
Bitumen ..	5	(a)	(a)	(a)	(a)	(a)	(a)
Saudi Arabia—							
Crude petroleum ..	2,412,000	4,343,000	7,192,000	(a)	(a)	(a)	(a)
Syria and Lebanon—							
Fuel oil ..	29,216	14	(a)	2,770	437	(a)	(a)
Asphalt and bitumen ..	272	597	(a)	—	1,444	(a)	(a)

(a) Information not available.

(b) Including bunkers.

(c) Anglo-Iranian Oil Co. only.

## IMPORTS OF PETROLEUM AND ALLIED PRODUCTS\*

(Less Re-exports)

(Long tons)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Crude petroleum ..	955,976	2,174,292	2,473,558	4,635,474	6,048,182	9,246,108	16,680,733
Aviation spirit (d) ..	2,074,557	106,727	54,322	276,615	372,391	243,217	356,447
Motor spirit ..	4,887,750	3,753,370	3,798,140	3,622,017	4,046,823	3,677,648	2,959,396
Other spirit ..	158,326	102,787	84,521	104,525	107,653	104,198	180,478
Kerosene—Power do. —Other ..	1,239,212	1,445,255	709,252	888,667	919,341	811,970	839,740
Fuel oil (d) ..	3,355,958	3,565,113	2,930,924	5,112,805	2,947,351	2,162,309	2,152,689
Diesel oil ..	780,040	768,707	231,739	301,747	310,412	232,436	246,703
Gas oil ..	1,817,540	1,831,726	1,595,384	1,801,342	1,723,225	1,375,485	1,472,134
Lubricating oil ..	309,373	339,332	333,012	347,348	291,833	479,861	447,556
Mineral jelly ..	7,624	5,788	9,684	9,723	8,060	8,822	10,595
Paraffin wax ..	33,371	33,066	38,256	36,014	18,096	29,581	58,310
Other petroleum wax ..						5,086	6,428
Ozokerite ..	—	24	178	329	17	94	12
Petroleum coke ..	(a)	(a)	6,958	7,222	13,069	9,131	9,449
Asphalt and bitumen (f) ..	9,148	26,182	30,504	44,007	48,909	54,365	56,924
Malta—							
Aviation spirit (d) ..	(a)	—	—	19,913	22,945	13,026	13,549
Motor spirit ..	2,938	19,154	13,049	8,202	16,087	13,067	15,325
Kerosene ..	20,175	21,685	5,266	25,590	28,915	16,103	27,079
Fuel oil (d) ..	(a)	17,389	29,042	34,955	29,367	27,517	21,227
Gas oil (d) ..	(a)	8,832	8,440	8,997	8,060	9,728	14,955
Lubricating oil ..	(a)	—	1,018	674	546	660	1,074
Anglo-Egyptian Sudan—							
Aviation spirit (d) ..	14,880	18,556	25,523	35,245	36,707	39,492	11,990
Motor spirit (d) ..							36,573
Kerosene ..	6,368	7,721	9,690	8,913	10,685	10,347	12,253
Fuel oil and gas oil ..	46,672	64,587	73,775	75,753	82,097	86,711	123,073
Lubricating oil, etc. ..	2,336	2,352	2,998	3,906	4,160	2,732	4,374
Asphalt, etc. ..	2,742	67	770	1,456	1,625	2,199	3,639
Gambia—							
Aviation spirit ..	2,676	677	1,672	1	(c)	307	28
Motor spirit ..	500	683	1,114	1,212	1,270	1,938	1,410
Kerosene ..	208	309	245	455	373	513	567
Fuel oil ..	342	466	1,040	1,329	1,702	1,661	1,819
Lubricating oil ..	40	95	104	155	272	241	231
Gold Coast—							
Aviation spirit (d) ..	34,053	23,365	29,778	1,770	3,468	2,346	2,307
Motor spirit (d) ..				34,925	44,099	60,201	65,507
Kerosene ..	7,853	5,667	13,946	10,954	14,301	20,565	18,988
Fuel oil (d) ..				23,242	20,828	38,224	33,315
Gas oil (d) ..	43,305	56,534	58,766	42,610	45,858	50,820	59,394
Diesel oil ..				1,147	2,044	8,842	3,339
Lubricating oil ..	2,323	2,473	5,027	4,160	4,467	6,571	6,968
Asphalt and bitumen ..	48	29	382	1,121	1,457	2,110	8,803
Kenya (c)—							
Aviation spirit (d) ..	73,784	84,821	81,691	9,764	8,084	7,293	9,330
Motor spirit (d) ..				72,629	79,572	54,882	98,917
Kerosene—Power do. —Other ..	16,986	23,167	28,158	7,784	12,898	12,402	15,692
Gas oil and fuel oil (d) ..	55,983	114,388	118,704	5,364	17,785	8,822	22,234
Lubricating oil (d) ..	3,210	4,835	6,344	7,688	7,392	6,162	4,098
Greases ..	230	516	461	751	605	450	669
Petroleum jelly ..	(a)	(a)	(a)	82	107	12	31
Paraffin wax ..	(a)	(a)	(a)	72	65	40	73

\* Excluding the United Kingdom, the following rates have been used for converting Imperial gallons to long tons:—Aviation spirit 315, Motor spirit 305, Kerosene 275, Gas oil 260, Diesel oil 256, Fuel oil 240, Lubricating oil 250, Crude petroleum 245, Asphalt 220, Road oil 220.

(a) Information not available.

(b) Imported chiefly for bunkering purposes. See exports.

(c) Excess of re-exports. (d) Including imports for bunkering purposes. See exports.

(e) Including Uganda up to 1948 inclusive. (f) Natural.

## IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES (Cont.)</b>							
Mauritius—							
Aviation spirit .. .	1,875	6,106	6,138	7,770	2,225	163	(c) 93
Motor spirit .. .					7,322	10,727	11,316
Kerosene.. .	1,926	3,718	3,066	3,417	3,570	3,172	3,097
Lubricating oils, etc. ..	577	514	857	1,101	976	1,162	1,330
Fuel oil (b) .. .	(c) 76	11	81	1,785	5,465	9,040	9,608
Refined motor grease ..	31	84	60	126	94	116	168
Asphalt .. .	1,765	448	1,603	2,308	1,614	1,712	826
Nigeria—							
Aviation spirit .. .	36,160	29,315	44,815	9,886	6,723	13,654	14,552
Motor spirit .. .				103,955	47,265	81,090	82,452
Kerosene.. .	12,548	18,030	10,007	13,965	16,956	35,493	27,118
Gas oil (b) .. .				11,003	1,070	4,935	7,290
Diesel oil (b) .. .	4,387	11,601	16,032	832	8,061	13,784	6,331
Fuel oil (b) .. .				7,2/3	19,6 8	8,865	22,847
Lubricating oil .. .	1,015	2,037	4,763	3,722	3,714	5,221	7,734
Asphalt and bitumen ..	2,610	1,130	760	3,892	1,146	6,670	11,859
Northern Rhodesia—							
Motor spirit .. .	6,517	8,641	11,895	14,822	20,546	25,582	32,720
Kerosene—Power .. .	517	785	913	1,666	2,596	3,186	3,971
do. —Other .. .	784	1,105	1,104	1,575	1,991	2,396	2,915
Fuel oil .. .	(a)	(a)	(a)	(a)	3,486	5,677	8,145
Lubricating oil .. .	696	1,003	1,340	1,973	2,112	2,421	3,337
Asphalt and bitumen ..	279	296	558	3,068	2,641	3,121	1,840
Nyasaland—							
Motor spirit .. .	2,337	3,039	3,829	4,338	5,569	7,938	8,388
Kerosene.. .	597	818	770	1,114	1,251	2,188	1,362
Fuel oil .. .	859	1,173	1,352	2,202	2,748	4,525	4,648
Lubricating oil .. .	133	157	264	303	506	907	828
Seychelles—							
Motor spirit .. .	87	156	202	182	208	253	305
Kerosene.. .	150	172	166	563	191	337	202
Fuel oil .. .	142	152	222	250	273	154	374
Lubricating oil .. .	5	17	17	22	18	20	19
Sierra Leone—							
Aviation spirit (b) .. .	2,594	3,426	4,429	154	307	419	151
Motor spirit .. .				4,159	4,636	5,331	5,247
Kerosene.. .	1,987	2,253	2,807	2,844	3,722	3,926	4,733
Gas oil .. .	3,860	5,698	5,459	2,584	2,257	2,864	2,790
Diesel oil .. .		322	480	456	20	813	1,747
Fuel oil (b) .. .		322	480	456	2,848	3,937	3,951
Lubricating oil .. .	311	232	493	880	368	469	882
Asphalt and bitumen ..	432	771	307	129	99	8	713
Somaliland Protectorate—							
Motor spirit .. .	1,556	1,509	3,638	3,591	2,947	2,995	3,588
Kerosene.. .	294	367	433	454	424	417	439
Gas oil and diesel oil ..	1,010	1,006	1,027	772	(a)	(a)	793
Lubricating oil .. .	158	160	109	197	(a)	(a)	133
Southern Rhodesia—							
Aviation spirit .. .	(a)	2,814	3,787	5,996	5,453	4,602	6,526
Motor spirit .. .	22,909	34,059	46,246	53,414	65,605	80,449	91,680
Kerosene.. .	2,709	3,210	3,960	4,261	5,444	5,560	7,489
do. —Power .. .	2,499	3,590	4,859	6,449	11,454	13,597	19,024
Fuel oil .. .	6,216	7,770	9,716	11,280	13,864	20,011	26,285
Lubricating oil .. .	1,624	2,730	4,200	5,049	5,878	6,972	8,519
Other oils (total imports)	223	191	189	240	459	267	482
Paraffin wax .. .	633	463	398	395	400	513	467
Asphalt and bitumen ..	2,886	4,752	3,033	4,799	9,043	9,416	17,086
South West Africa—							
Motor spirit .. .	7,411	12,716	16,032	17,284	17,488	12,318	(a)
Kerosene.. .	3,487	3,114	3,541	3,793	5,202	(a)	(a)
Diesel oil .. .	(a)	4,029	9,106	15,026	12,685	(a)	(a)
Fuel oil .. .	(a)	73	123	—	97	(a)	(a)
Lubricating oil .. .	713	1,535	1,634	2,375	1,129	1,503	(a)
Asphalt and bitumen ..	10	48	114	230	247	288	(a)

(a) Information not available.

(c) Excess of re-exports.

(b) Including bunkers. See exports.

## IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES (Cont.)</b>							
Tanganyika—							
Aviation spirit (g) ..	17,066	18,056	26,900	{ 3,221	4,034	3,789	3,288
Motor spirit ..				{ 33,189	44,006	40,839	37,565
Kerosene—Power ..	1,290	1,378	1,049	1,629	2,607	1,595	2,226
do. —Other ..	7,681	7,859	8,697	9,700	12,220	7,361	15,220
Gas oil ..	5,793	5,361	9,745				
Diesel oil ..	2,659	3,167	2,431	{ 19,417	36,103	52,258	36,556
Fuel oil (g) ..	1,924	1,513	664				
Lubricating oil ..	1,532	2,148	4,474	4,650	5,379	5,233	4,984
Greases ..	107	132	456	604	1,043	425	268
Petroleum jelly ..	(a)	(a)	(a)	22	38	25	20
Paraffin wax ..	(a)	(a)	(a)	4	27	—	3
Uganda—							
Aviation spirit (e) ..					1,995	1,842	1,734
Motor spirit ..					{ 24,643	28,773	31,991
Kerosene—Power ..					464	707	809
do. —Other ..					6,900	7,600	10,692
Gas oil and fuel oil ..		(b)	(b)	(b)	{ 2,392	30,014	18,270
Lubricating oil ..					2,538	1,964	2,422
Greases ..					164	137	167
Petroleum jelly ..					24	11	20
Paraffin wax ..					4	2	1
Union of South Africa—							
Motor spirit (g) ..	419,268	681,254	751,033	876,554	1,008,594	1,022,063	(f) 1,058,242
Other spirit ..	5,152	5,128	7,234	5,779	9,447	8,727	(a)
Turpentine substitute ..	7,889	10,122	13,296	12,559	11,107	18,184	(a)
Kerosene—Power ..	76,240	115,680	109,248	147,291	186,420	213,631	
do. —Other ..	78,431	100,494	112,298	108,199	133,521	127,831	{ 406,549
Diesel oil (e) ..		{ 309,638	{ 126,899	217,102	292,065	299,196	(f) 466,545
Fuel oil (e) ..			{ 282,060	159,572	403,791	371,684	(f) 290,067
Lubricating oil ..			{ 34,358	51,266	73,156	60,234	(f) 89,535
Transformer oil ..			808	968	1,630	1,416	2,912
Road oil ..			2,362	4,364	8,762	10,263	4,730
Other oils ..			1,722	2,018	2,992	1,580	2,520
Paraffin wax ..			6,689	6,515	15,271	14,217	8,365
Asphalt and bitumen ..			15,574	13,532	22,595	19,307	22,115
Petroleum jelly ..			992	1,149	3,855	1,104	2,458
Zanzibar—							
Motor spirit, etc. ..	1,196	1,081	1,482	1,551	1,986	2,561	3,339
Kerosene, etc. ..	1,363	2,639	1,449	423	1,875	2,416	2,897
Fuel oil ..	1,472	1,373	1,424	2,232	1,457	2,561	1,233
Lubricating oil ..	72	111	132	(a)	(a)	(a)	(a)
Canada (c)—							
Crude petroleum ..	8,115,176	9,058,212	9,778,106	10,794,172	10,563,835	11,237,210	11,897,747
Tops for refiners ..	—	—	80,000	264,026	220,713	186,316	121,312
Aviation spirit ..		{ 257,543	571,656	738,931	1,057,071	{ 137,446	174,550
Motor spirit ..						{ 867,879	641,900
Kerosene, etc. ..			48,711	137,208	536,535	137,020	483,876
Lubricating oils ..			42,064	43,569	54,391	65,776	70,776
Diesel oil ..		{ 222,296	456,435	1,557,050	1,395,803	{ 150,407	278,266
Fuel oil ..						{ 776,658	2,031,892
do. (d) ..			147,482	53,843	46,545	52,101	55,531
Other petroleum oils ..			15,934	3,175	3,577	6,543	44,564
Liquefied petroleum gas ..		(a)	(a)	(a)	(a)	63,619	69,409
Petroleum jelly, etc. ..		(£110,479)	(£155,658)	(£154,933)	(£137,896)	(£157,134)	(£205,706)
Grease ..			4,688	4,432	4,958	4,534	4,909
Paraffin wax, etc. ..			8,355	9,535	18,181	19,461	10,945
Asphaltum oil, etc. ..		23	—	—	—	—	371
Asphalt ..		5,733	7,393	9,733	9,443	19,730	18,986
Petroleum coke ..		171,537	197,840	231,146	274,321	265,984	267,300
Other products ..		5,931	69,492	46,503	36,843	16,175	10,829

(a) Information not available.

(b) Included with Kenya.

(c) Including Newfoundland from April 1, 1949.

(d) Ex warehoused, for ships' stores.

(e) Imported chiefly for bunkering purposes. See exports.

(f) Total imports.

(g) Including imports for bunkering purposes. See exports.

## IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES (Cont.)</b>							
Newfoundland (d)—							
Motor spirit (e) .. .	73,382	66,353	78,537	92,586			
Kerosene .. .	5,291	6,595	8,123	7,472			
Lubricating oil .. .	2,926	3,503	4,000	2,562			
Fuel oil, etc. (c) .. .	67,069	68,281	74,328	153,703	(d)	(d)	(d)
Greases .. .	111	119	176	112			
Paraffin wax .. .	6	9	8	2			
Asphalt, etc. .. .	3,382	4,419	1,036	3,365			
British Guiana—							
Crude petroleum .. .	16,648	22,895	30,142	53,081	53,492	49,790	57,199
Aviation spirit (b) .. .	129	144	473	332	239	1,056	1,507
Motor spirit .. .	3,164	4,342	5,189	6,586	6,602	8,385	9,813
Kerosene .. .	2,139	2,264	3,042	3,805	3,002	4,995	4,948
Fuel oil, etc. .. .	6,745	14,425	9,185	17,584	12,290	23,231	18,405
Lubricating oil .. .	903	1,008	1,451	1,847	1,369	1,569	2,186
Tar and pitch .. .	210	327	278	288	248	344	309
Paraffin wax .. .	17	5	20	21	10	3	12
Asphalt .. .	113	110	249	348	35	257	242
British West Indies—							
Bahamas—							
Crude petroleum .. .	5,600	5,567	6,539	8,506	9,784	8,812	11,167
Motor spirit .. .	3,731	2,895	9,266	5,921	10,190	8,610	10,118
Kerosene .. .	1,429	1,618	2,135	2,284	2,716	2,618	3,335
Lubricating oil .. .	176	204	272	352	344	512	440
Barbados—							
Crude petroleum .. .	1,628	5,776	6,005	6,140	6,261	5,357	5,566
Motor spirit .. .	3,161	4,151	5,382	5,389	6,729	7,268	9,464
Kerosene .. .	1,720	2,592	2,280	3,130	3,783	4,835	5,676
Road oil .. .	64	117	129	138	154	108	120
Gas oil and diesel oil .. .	(f) 91	(f) 1,348	2,575	4,195	3,327	3,777	9,537
Fuel oil .. .	5,520	10,903	3,789	1,840	2,409	(f) 282	—
Lubricating oil .. .	197	286	444	450	465	687	644
Bermuda—							
Aviation spirit .. .	2,789	2,823	(a)	(b) 24,029	(b) 32,173	(b) 19,666	(b) 30,306
Motor spirit .. .	2,163	3,617	1,927	(b) 2,740	(b) 2,442	(b) 1,924	(b) 1,253
Kerosene .. .	3,495	1,871	2,026	(b) 11,674	(b) 9,580	(a)	(b) 11,784
Diesel oil .. .	2,445	9,186	(b) 10,534	(b) 20,530	(b) 10,599	(b) 6,121	(b) 8,329
Fuel oil .. .	14,082	9,130	435	(b) 767	(b) 775	(b) 794	(a)
Lubricating oil .. .	228	233	(a)	(b) 1,570	(f) 177	49	2,700
Asphalt .. .	(a)	(a)	(a)				
Dominica—							
Motor spirit .. .	234	259	273	305	333	405	496
Kerosene .. .	190	199	197	242	273	318	377
Fuel oil and diesel oil .. .	114	168	184	131	117	197	294
Lubricating oil .. .	13	15	17	18	22	29	32
Road oil .. .	167	(a)	130	401	182	132	(a)
Grenada—							
Motor spirit .. .	556	728	1,041	977	1,391	1,275	1,603
Kerosene .. .	457	512	499	661	565	602	711
Fuel oil .. .	253	242	266	313	286	377	311
Lubricating oil .. .	89	37	47	43	43	56	102
Road oil .. .	414	102	1,026	646	773	589	543
Jamaica (total imports)—							
Aviation spirit (b) .. .	2,142	2,522	7,047	10,044	10,082	9,899	7,125
Motor spirit (b) .. .	15,722	23,144	26,565	28,528	34,458	41,079	36,072
Kerosene .. .	6,403	8,472	8,317	8,371	10,655	10,617	9,744
Gas oil (c) .. .	7,607	10,073	7,376	2,893	14,678	2,625	(a)
Diesel oil (c) .. .	12,242	16,020	7,376	12,602	11,778	10,935	6,238
Fuel oil (c) .. .	11,883	41,060	69,430	106,680	108,370	93,719	55,200
Lubricating oil .. .	872	1,096	1,792	2,163	2,104	1,845	2,797
Grease .. .	179	188	317	279	304	379	290

(a) Information not available.

(b) Including imports for bunkering purposes. See exports.

(c) Imported chiefly for bunkering purposes. See exports.

(d) Years ended March 31 of year following that stated. Included with Canada from April 1, 1949.

(e) Including Aviation spirit.

(f) Excess of re-exports.

## IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES (Cont.)</b>							
British West Indies—(Cont.)							
Jamaica—(Cont.)							
Petroleum jelly ..	(a)	(a)	(a)	77	127	93	155
Paraffin wax ..	(a)	(a)	(a)	15	27	69	21
Asphalt ..	2,448	6,446	1,948	5,855	6,309	3,220	6,954
Leeward Islands—							
Motor spirit ..	1,479	1,391	1,811	1,620	1,971	1,805	1,951
Kerosene ..	616	550	738	670	768	879	867
Gas oil ..	235	620	583	627	551	944	693
Diesel oil ..	330	387	728	571	741	1,008	612
Fuel oil ..	659	96	293	158	188	192	111
Road oil ..	556	701	679	206	424	498	466
Lubricating oil ..	150	104	129	264	150	210	111
St. Lucia—							
Motor spirit ..	494	449	521	625	730	686	1,030
Kerosene ..	236	294	251	295	262	239	494
Fuel oil ..	—	405	370	372	492	442	909
Lubricating oil ..	36	52	35	72	115	128	89
Road oil ..	—	337	484	412	404	354	408
St. Vincent—							
Motor spirit ..	279	394	516	539	709	681	682
Kerosene ..	324	256	314	315	362	392	401
Fuel oil, etc. ..	61	285	332	440	(a)	(a)	(a)
Lubricating oil ..	43	20	39	47	51	48	40
Asphalt, tar and pitch ..	7	9	3	6	(a)	(a)	(a)
Trinidad and Tobago—							
Crude petroleum ..	303,909	411,930	842,288	1,265,332	1,613,696	1,607,463	2,248,962
Motor spirit ..	108,341	5	8	7	16,285	7	1
Kerosene ..	27,746	1,263	—	—	—	(c)	4
Gas oil ..	1,867	—	—	—	—	803	—
Fuel oil ..	—	—	—	—	—	537	(a)
Lubricating oil ..	2,404	2,238	2,601	3,020	3,306	3,255	3,917
Petroleum jelly ..	84	14	60	51	72	122	60
Paraffin wax ..	55	39	78	27	37	44	17
British Honduras—							
Aviation spirit ..	(a)	(a)	(a)	207	(c)	74	12
Motor spirit ..	2,199	2,045	2,776	2,412	2,285	2,971	3,716
Kerosene ..	980	923	1,163	1,188	1,347	1,309	1,349
Diesel oil ..	2,065	2,015	1,974	1,607	1,814	2,341	3,197
Lubricating oil ..	268	307	434	252	115	254	454
Asphalt ..	647	30	397	825	567	725	821
Falkland Islands—							
Motor spirit ..	75	108	220	161	211	274	243
Kerosene ..	65	123	106	61	86	122	128
Gas and diesel oils ..	158	406	655	50	454	1,188	168
Fuel oil (d) ..	44,343	56,901	66,839	72,924	88,679	107,383	131,720
Aden—							
Motor spirit ..	2,986	2,062	5,160	5,649	7,204	1,071	8,323
Kerosene ..	2,537	3,381	3,919	4,083	3,896	3,691	5,200
Gas oil ..	12,082	3,864	19,036	18	12,487	17,138	131,721
Fuel oil (b) ..	361,993	788,789	1,061,564	1,694,039	2,204,001	2,438,024	2,413,776
Lubricating oil ..	959	1,183	966	790	828	990	1,323
Other petroleum oils ..	—	—	—	—	—	—	—
Petroleum jelly ..	2	7	3	—	—	—	—
Paraffin wax ..	—	4	3	—	—	—	—
Asphalt and bitumen ..	—	224	472	5	764	118	92
British Borneo—							
Brunel—							
Motor spirit ..	974	1,690	2,600	3,089	(a)		
Kerosene ..	(a)	(a)	557	549	(a)		
Diesel oil ..	(a)	(a)	2,530	5,818	(a)		
Fuel oil ..	1,523	3,615	86	234	(a)		
Lubricating oil ..	236	480	589	1,596	(d)		

(a) Information not available.  
 (c) Excess of re-exports.

(b) Imported chiefly for bunkering purposes. See exports.

(d) Revised to include imports for bunkering purposes. See exports.

## IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
BRITISH COUNTRIES (Cont.)							
British Borneo (Cont.)							
North Borneo—							
Motor spirit .. ..				{ 2,151	3,732	3,732	4,633
Kerosene.. .. ..	(a)	(a)	(a)	{ 1,844	2,181	2,665	3,262
Fuel oil .. .. ..				{ 4,523	8,376	6,024	3,176
Lubricating oil .. ..				{ 247	458	517	477
Sarawak—							
Crude petroleum .. ..		{ (d) 232,068	1,689,965	2,641,516	3,290,440	4,057,462	4,895,640
Motor spirit .. .. ..		{ (d) 618	1,309	1,381	1,608	2,265	3,880
Kerosene .. .. ..		{ (d) 1,241	3,144	3,774	4,062	5,232	6,393
Diesel oil .. .. ..		{ (a)	(a)	847	2,279	4,537	5,100
Fuel Oil .. .. ..		{ (d) 2,177	3,909	3,505	2,434	588	787
Lubricating oil .. ..		{ (d) 106	452	394	428	619	712
Natural gas (1,000 cu. ft.) .. ..		{ (d) 71,000	564,989	1,260,123	1,663,614	1,822,776	1,744,904
Ceylon—							
Motor spirit .. .. ..	63,672	56,009	58,599	76,940	84,994	89,330	106,316
Kerosene .. .. ..	35,068	35,497	34,433	34,661	57,261	43,026	64,869
Gas oil (c) .. .. ..	8,109	10,301	13,150	12,529	24,804	17,427	17,422
Diesel oil (b) .. .. ..	121,960	97,459	94,718	108,426	162,989	103,402	141,953
Fuel oil (b) .. .. ..	596,237	287,586	270,259	292,133	464,140	507,853	536,226
Lubricating oil (c) .. .. ..	3,408	4,338	4,035	6,084	7,607	5,850	8,323
Other oils and greases .. .. ..	86	257	131	181	279	369	325
Asphalt .. .. ..	9,592	18,416	12,025	7,911	15,336	14,140	11,445
Cyprus—							
Motor spirit, etc. .. .. ..	7,606	10,344	13,353	15,790	17,806	21,246	30,212
Kerosene, etc. .. .. ..	4,755	9,876	13,448	13,738	14,113	18,789	19,152
Fuel oils .. .. ..	12,692	23,273	39,305	22,181	42,349	46,943	43,106
Lubricating oil .. .. ..	740	1,273	1,760	1,520	2,209	1,827	1,391
Paraffin wax .. .. ..	40	75	117	109	73	65	165
Asphalt and bitumen .. .. ..	2,273	2,476	2,234	3,149	2,673	2,958	2,473
Hong Kong (total imports)—							
Motor spirit .. .. ..		{ 48,095	74,676	74,213	147,974	77,999	52,422
Kerosene .. .. ..		{ 53,164	49,574	56,630	59,428	37,111	21,056
Fuel oil and gas oil .. .. ..		{ 2,169	135,166	{ 339,441	536,870	495,017	495,070
Diesel oil .. .. ..		{ 7,191	77,900				
Lubricating oil .. .. ..		{ 9,407	18,135	{ (a)	{ (a)	{ (a)	{ (a)
Greases .. .. ..		{ 403	682	{ (a)	{ (a)	{ (a)	{ (a)
Petroleum jelly .. .. ..		{ 2,773	1,114	1,124	1,509	1,825	2,918
Paraffin wax .. .. ..		{ 1,250	3,966	4,749	6,596	10,749	2,573
India (total imports)—							
Motor spirit .. .. ..	1,942,642	523,276	358,200	368,498	552,806	639,270	758,548
Other spirit .. .. ..	147,663	21,030	15,024	9,095	246	3,103	7,744
Kerosene .. .. ..	442,300	539,284	740,782	376,338	699,019	808,637	872,031
Diesel oil .. .. ..	507,561	412,484	415,315	269,191	499,181	509,523	599,778
Fuel oil (c) .. .. ..	1,042,120	1,013,533	892,088	657,999	849,507	787,828	856,020
White spirit, etc. .. .. ..	29	1,019	19,945	29,831	8,930	326	539
Lubricating oil .. .. ..	133,913	140,292	204,422	183,893	258,033	170,745	162,694
Turpentine substitute .. .. ..	4,569	3,991	1,986	8	41	2,169	2,113
Other oils .. .. ..	5,333	6,366	8,045	6,393	17,907	8,659	12,960
Greases .. .. ..	1,845	2,518	7,111	4,550	2,637	2,619	5,465
Paraffin wax .. .. ..	10	153	12	1,264	839	106	7
Asphalt .. .. ..	264,872	24,713	49,272	46,293	67,431	87,493	28,587
Malaya (total imports)—							
Aviation spirit .. .. ..		{ (a)	{ (a)	99,425	139,756	101,761	154,064
Motor spirit .. .. ..		{ 173,875	232,146	236,027	423,869	689,841	854,821
Kerosene .. .. ..		{ 103,716	146,481	93,146	121,014	172,930	150,535
Vapourising oil .. .. ..		{ (a)	{ (a)	8,645	30,338	59,387	130,201
Gas oil .. .. ..		{ (a)	{ (a)	139,070	148,819	305,792	512,634
Diesel oil .. .. ..		{ (a)	{ (a)	510,693	816,848	729,633	753,414
Fuel oil .. .. ..		{ 573,502	665,625	565,131	996,140	1,222,917	1,413,042
Lubricating oil .. .. ..		{ 11,993	28,603	16,674	15,070	22,264	32,578
Paraffin wax .. .. ..		{ 239	1,330	1,341	1,243	2,079	5,919
Asphalt and bitumen .. .. ..		{ 4,540	24,632	14,031	36,341	30,906	27,073
Other petroleum products .. .. ..		{ 38	223	119	44	1,387	2,283

(a) Information not available.

(b) Imported chiefly for bunkering purposes. See exports.

(c) Including imports for bunkering purposes. See exports.

(d) April 15 to December 31 only.

## IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES (Cont.)</b>							
Palestine—							
Crude petroleum ..	3,957,490	4,016,056	(a)	(a)			
Motor spirit ..	69	123	(a)	(a)			
Lubricating oil and grease ..	4,376	6,825	(a)	(a)			
Petroleum jelly ..	77	23	(a)	(a)			
Paraffin wax ..	255	189	(a)	(a)			
Asphalt ..	516	749	(a)	(a)			
Australia—							
Crude petroleum ..	(c) 6,710	158,511	306,711	379,408	571,904	784,147	800,380
Aviation spirit (b) ..	900,268	1,137,848	1,315,758	1,308,866	1,466,456	112,054	132,739
Motor spirit ..			(f) 27,927			1,663,166	1,869,987
Turpentine substitute ..	(f) 19,206	(f) 12,748	(f) 21,967	(f) 23,159	(f) 27,927	32,653	32,991
Kerosene ..					{ 106,379	142,842	172,627
do, power ..	280,769	306,770	406,039	401,153	{ 280,514	294,270	269,603
Lubricating oil ..	45,592	62,088	139,492	80,681	{ 145,940	131,066	137,865
Solar oil ..					{ 315,038	360,034	429,263
Residual oil ..	1,857,295	1,258,870	918,525	1,455,649	{ 1,419,234	1,344,777	1,715,847
Petroleum jelly ..	3,076	1,001	2,416	355	471	(f) 870	2,235
Paraffin wax, etc. ..	1,940	2,947	4,282	5,936	3,576	(f) 3,141	7,297
Mastic asphalt ..	9	—	—	3	—	—	—
Natural asphalt (f) ..	(a)	19,840	32,099	34,896	4,180	4,244	(h) 4,774
Bitumen and pitch (f) ..	(a)	68,205	61,766	100,891	18,779	(h) 30,583	(h) 33,388
Fiji—							
Aviation spirit (e) ..	(a)	1,679	2,154	3,679	4,060	4,014	5,028
Motor spirit ..	4,833	8,401	7,680	7,533	8,525	9,900	10,690
Kerosene ..	2,892	1,081	2,395	1,734	3,791	2,357	2,861
Diesel oil (b) ..		12,476	16,769	{ 12,209	9,284	11,302	12,653
Fuel oil (b) ..				{ 961	14,279	14,829	7,571
Lubricating oil ..	529	760	902	786	686	816	1,058
Greases ..	43	45	136	84	95	106	157
Bitumen and tar ..	242	477	1,421	746	686	1,447	292
New Guinea (f)—							
Motor spirit ..	(a)	(a)	(a)	5,504	9,331	4,240	3,892
Kerosene ..	(a)	(a)	(a)	616	2,842	922	1,846
Fuel oil ..	(a)	(a)	(a)	5,083	7,872	4,356	8,424
Lubricating oil ..	(a)	(a)	(a)	338	466	705	549
New Zealand—							
Motor spirit ..	230,581	280,919	329,312	381,019	467,315	472,221	460,182
Turpentine substitute ..	2,204	3,672	3,020	4,397	3,094	4,448	4,883
Kerosene ..	8,744	4,696	5,460	6,850	3,205	7,110	9,366
do, power ..	34,647	29,373	25,329	32,227	23,419	21,046	16,510
Gas oil ..					{ 17,431	24,177	28,550
Diesel oil ..	(b) 272,055	(b) 222,667	281,068	391,712	{ 172,743	184,307	212,767
Fuel oil ..					{ 56,610	284,158	208,637
Lubricating oil ..	11,555	13,992	23,591	25,622	16,491	28,539	23,887
Transformer oil ..	42	795	1,147	943	1,125	515	2,164
Other refined oils ..	1,524	2,696	4,418	5,047	262	2,296	4,276
Paraffin wax ..	915	311	1,430	1,742	341	1,091	1,517
Asphalt and bitumen ..	5,370	10,287	12,634	31,765	8,767	20,087	9,997
Solomon Islands (g)—							
Fuel oil, etc. ..	83	1,812	65	—	219	576	16
Motor spirit ..	26	56	35	69	420	377	383
Kerosene ..	73	72	138	151	135	309	229
Lubricating oil ..	8	10	39	16	38	89	177
Western Samoa—							
Motor spirit ..	(a)	(a)	(a)	1,931	1,140	1,588	(a)
Kerosene ..	(a)	(a)	(a)	432	623	241	(a)
Fuel oil ..	(a)	(a)	(a)	191	188	485	(a)
Lubricating oil ..	(a)	(a)	(a)	207	33	165	(a)

(a) Information not available.

(b) Including imports for bunkering purposes. See exports

(c) Excess of re-exports.

(d) See "Israel" under Foreign Countries.

(e) Imported chiefly for bunkering purposes. See exports.

(f) Years ended June 30 of that stated.

(g) Years ended March 31 following that stated.

(h) Calendar year.

## IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
Irish Republic—							
Aviation spirit .. ..	48,937	114,973	136,662	160,037	195,156	45,486	36,352
Motor spirit .. ..	42,027	58,374	67,276	86,535	90,800	156,366	190,210
Kerosene .. ..	25,136	48,849	171,841	205,336	197,560	76,466	99,463
Fuel oil and gas oil .. ..	4,716	11,610	13,176	10,903	14,071	247,192	361,598
Lubricating oil .. ..	1,728	1,371	3,041	1,898	753	14,056	17,326
Paraffin wax .. ..	387	16,029	14,709	25,958	15,690	2,347	2,802
Asphalt and bitumen .. ..						24,543	27,046
FOREIGN COUNTRIES							
Austria—							
Motor spirit .. ..			8,391	41,184	48,448	47,947	34,327
Gas oil .. ..		4,057	7,290	—	—	4,129	—
Fuel oil .. ..			2,325	3,460	1,453	20	
Lubricating oil, etc. .. ..			870	4,427	10,329	7,573	10,172
Petroleum jelly .. ..			165	95	374	223	122
Paraffin wax .. ..	(a)		66	1,025	2,304	502	3,389
Ozokerite and ceresin .. ..			50	209	775	(a)	200
Asphalt, bitumen, etc. .. ..			15	1,482	5,183	2,080	3,068
Petroleum coke .. ..			—	7,294	8,726	8,866	8,188
Tar and pitch .. ..			132	1,980	7,706	2,381	9,949
Belgium-Luxemburg E.U.—							
Crude petroleum .. ..	—	74,300	149,000	234,557	337,320	435,201	918,830
Motor spirit, etc. .. ..	107,300	335,900	344,000	506,670	545,618	670,836	728,830
Kerosene .. ..	14,500	12,100	14,000	16,855	20,132	32,369	48,287
Fuel oil and gas oil .. ..	77,560	109,206	1,290,000	846,417	987,361	1,116,658	1,675,895
Lubricating oil .. ..	40,700	58,700	126,000	103,000	108,106	138,531	162,939
Other heavy oils .. ..	(a)	(a)	(a)	(a)	(a)	1,766	416
Petroleum jelly .. ..	(a)	(a)	(a)	618	587	841	1,128
Paraffin wax .. ..	333	3,204	(a)	3,174	3,100	6,219	4,109
Ozokerite and ceresin .. ..	(a)	(a)	(a)	200	133	503	380
Asphalt, bitumen, etc. .. ..	524	4,485	(a)	3,440	3,815	5,740	12,290
Pitch .. ..	(a)	(a)	(a)	(a)	(a)	(a)	8,798
Bulgaria—							
Crude petroleum .. ..	4,571	6,571	—				
Motor spirit .. ..	28,365	34,608					
Kerosene .. ..	29,747	38,441					
Gas oil .. ..	15,710	26,630					
Fuel oil .. ..	4,553	1,211					
Lubricating oil, etc. .. ..	4,337	11,721	(a)				
Paraffin wax, ceresin, etc. .. ..	450	557					
Tar	—	—					
Petroleum jelly .. ..	40	112					
Ozokerite and ceresin .. ..	104	5					
Asphalt and bitumen .. ..	925	620					
Czechoslovakia—							
Crude petroleum, etc. .. ..		89,425	183,003	(b) 186,366			
Motor spirit and kerosene .. ..		12,756	2,984	(b) 2,174			
Fuel oil and gas oil .. ..		63,303	89,345	(b) 60,984			
Lubricating oil and greases .. ..	(a)	24,641	20,434	(b) 27,445	(a)		
Paraffin wax .. ..		185	2,239	(b) 3,542			
Ozokerite and ceresin .. ..		43	321	(b) —			
Petroleum jelly .. ..		75	196	(b) 165			
Asphalt products .. ..		237	886	(b) 383			
Denmark—							
Crude petroleum .. ..	5,913	22,562	17,054	19,306	40,022	33,219	20,828
Motor spirit .. ..	32,286	213,626	280,675	299,395	358,107	494,951	430,508
Kerosene .. ..	21,560	33,932	32,619	32,741	39,011	50,286	54,986
Turpentine substitute .. ..	608	5,221	8,351	5,664	7,588	10,359	8,722
Gas oil .. ..	87,536	336,323	765,591	712,583	777,040	1,131,111	1,314,620
Fuel oil .. ..		7,528	9,700	13,939	17,219		
Lubricating oil .. ..	12,182	35,266	26,146	45,540	25,816	38,113	53,448
Grease .. ..	21	262	219	372	324	469	543
Petroleum jelly .. ..	259	643	151	300	242	430	428
Ozokerite, etc. .. ..	180	747	292	409	108	521	468
Paraffin wax .. ..	238	1,005	1,398	1,549	1,458	2,700	2,018
Natural asphalt .. ..	406	6,193	2,868	6,822	4,707	3,784	3,023
Other asphalt .. ..	2,779	40,623	22,559	23,781	35,759	50,103	51,731

(a) Information not available.

(b) January to October only

## IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Finland (total imports)—							
Crude petroleum ..	22	28	—	—	—	53	—
Motor spirit ..	4,562	41,661	146,399	196,368	213,079	239,755	261,805
Kerosene ..	2,633	16,499	18,983	15,034	15,494	19,348	18,476
do. Power ..	7,058	24,333	18,386	27,927	21,217	46,988	33,822
Fuel oil ..	7,216	56,881	113,495	191,457	110,397	155,559	176,111
Lubricating oil ..	3,006	7,151	15,095	21,358	12,859	19,450	27,531
Petroleum jelly ..	15	101	134	607	55	131	164
Paraffin wax ..	243	529	1,429	1,663	1,184	1,306	2,555
Asphalt and tar ..	526	7,852	17,532	13,384	21,095	42,887	37,553
France—							
Crude petroleum ..	204,124	2,643,683	4,907,595	7,372,981	11,620,331	13,910,096	17,778,901
Motor spirit ..	666,466	1,084,395	686,001	233,112	110,064	60,675	162,466
Kerosene ..	70,951	74,213	40,209	279	2,500	90	2,374
Lubricating oil ..	126,852	216,463	111,155	78,007	64,494	63,092	161,280
Fuel oil ..	333,572	409,713	524,709	598,839	288,250	152,725	114,681
Gas oil ..	296,636	372,865	197,735	84,562	95,626	165,153	72,540
Road oil, etc. ..	26,057	197,647	152,077	(a)	(a)	(a)	(a)
Petroleum coke ..	27,373	65,063	88,568	58,917	42,020	20,189	39,621
Paraffin wax ..	1,512	4,002	10,832	5,561	4,967	699	4,882
Ozokerite and ceresin ..	—	—	—	1,234	1,016	1,690	4,183
Petroleum jelly ..	148	809	1,021	30	12	60	66
Pitch ..	1,585	2,469	34,318	(a)	(a)	(a)	(a)
Asphalt and bitumen ..	97	1,117	660	508	2,519	2,829	6,974
Germany (Federal)—							
Crude petroleum ..	(b)	—	(b) 39,000	247,329	1,068,752	1,902,839	3,154,889
Motor spirit ..		390,000	(b) 379,000	562,304	393,003	163,984	121,417
Kerosene ..		—	—	29,079	15	3,147	1
Gas oil ..		—	—	583,982	617,590	514,804	238,810
Fuel oil ..		435,000	(b) 501,000	66,472	45,374	63,900	77,868
Lubricating oil, etc. ..		—	(a)	2,181	5,325	11,820	21,747
Paraffin wax ..		—	(a)	1,011	13,779	3,697	2,267
Ozokerite, etc. ..		—	(a)	1	862	166	380
Asphalt ..		—	(a)	28	2,125	3,893	4,204
Greece—							
Motor spirit ..	21,474	62,547	122,089	140,328	172,900	224,267	245,550
Kerosene ..	7,538	6,930	14,823	21,294	37,637	72,450	80,676
Fuel oil and diesel oil ..	140	173,228	319,839	512,046	639,661	755,710	808,212
Other oils and greases ..	3,485	14,876	6,725	16,236	21,195	15,807	12,616
Petroleum jelly ..	47	160	105	46	176	69	100
Asphalt and bitumen ..	10,818	5,706	6,046	14,944	5,910	21,520	14,381
Hungary—							
Crude petroleum ..	(a)	3,800	10,000	(a)	(a)	(a)	(a)
Iceland—							
Aviation spirit ..	(a)	16,723	22,120	34,565	28,319	57,815	17,152
Motor spirit ..		822	1	3,161	2,802	3,987	24,588
Kerosene ..		16,236	36,776	59,168	91,386	119,866	3,170
Gas oil and fuel oil ..		1,618	1,846	3,085	2,313	2,661	1,883
Lubricating oil ..		77	50	190	90	116	3,245
Greases ..		23	26	48	21	57	123
Paraffin wax ..		7	1	(a)	(a)	3	33
Petroleum jelly ..		245	454	64	37	483	4
Asphalt ..							707
Italy—							
Crude petroleum ..	(a)	31,143	1,212,523	1,745,639	2,442,256	4,483,992	6,698,687
Motor spirit ..		197,142	253,004	44,160	9,926	21,632	34,440
Kerosene ..		75,600	106,953	16,608	2,273	6,366	190
Gas oil ..		166,385	223,130	39,862	8,385	4,546	12,735
Fuel oil ..		568,458	1,541,436	727,116	668,141	877,255	757,328
Lubricating oil ..		13,160	141,641	49,564	73,419	94,272	72,210
Petroleum jelly ..		(a)	1,953	459	912	674	2,013
Paraffin wax ..		(a)	11,232	5,925	10,870	20,641	12,039
Bitumen ..		(a)	43,571	3,566	301	47	78
Petroleum coke ..		—	(a)	34,377	9,604	16,325	45,776

(a) Information not available.

(b) Bizonal area only.

## IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Netherlands—							
Crude petroleum ..	257,213	847,337	1,172,327	2,080,870	4,724,254	6,070,214	
Motor spirit ..	375,575	236,750	210,962	250,141	177,492	129,344	
Kerosene ..	286,457	316,451	232,008	264,197	177,674	160,459	
Gas oil ..	253,675	368,616	291,968	264,184	381,691	222,688	
Fuel oil ..	419,536	658,373	387,727	461,851	410,625	440,916	
Lubricating oil ..	62,013	65,121	64,353	67,975	88,052	91,186	
Greases ..	1,019	1,175	1,960	300	315	156	
Petroleum jelly ..	1,307	1,484	372	542	1,435	1,727	
Paraffin wax ..	2,337	4,241	6,673	5,573	21,141	15,158	
Ozokerite and ceresin ..	100	353	236	324	217	243	
Asphalt ..	6,880	1,227	370	271	314	473	
Norway—							
Crude petroleum ..	12,532	—	—	—	16,053	(a)	
Motor spirit ..	36,144	214,025	226,998	202,349	270,935	244,281	253,683
Turpentine substitute ..	2,015	9,332	8,523	6,970	5,815	8,609	9,520
Kerosene ..	18,177	21,598	23,701	25,027	34,292	37,497	47,084
Diesel oil ..	12,687	89,624	182,056	273,119	178,954	194,188	240,769
Gas oil ..	81,340	160,922	233,494	305,723	336,544	344,991	372,988
Fuel oil ..	8,740	81,958	267,895	472,093	464,696	531,209	763,686
Lubricating oil ..	9,136	26,322	30,118	23,164	32,678	28,538	32,661
Paraffin wax ..	327	1,035	2,224	1,733	2,152	1,110	2,384
Petroleum jelly ..	449	2,218	1,917	774	1,280	814	1,272
Asphalt, etc. ..	6,279	32,276	24,025	33,608	29,674	36,784	28,228
Poland—							
Crude petroleum ..	(a)	19,405	43,353	(a)	(a)	(a)	(a)
Motor spirit ..	(a)	205,598	86,955	(a)	(a)	(a)	(a)
Kerosene ..	(a)	9,760	38,184	(a)	(a)	(a)	(a)
Gas oil ..	(a)	81,150	{ } 68,459	(a)	(a)	(a)	(a)
Lubricating oil ..	(a)	29,120					
Portugal—							
Crude petroleum ..	26,397	101,048	263,400	320,086	274,990	260,431	378,276
Motor spirit ..	44,337	60,305	68,080	82,465	78,382	61,579	76,509
Kerosene ..	33,020	45,354	43,267	57,163	49,191	52,444	62,595
Gas oil and diesel oil ..	31,132	36,719	46,185	31,788	49,478	64,369	59,506
Fuel oil ..	40,373	95,085	122,178	67,424	54,005	107,139	128,735
Lubricating oil ..	7,008	12,544	12,992	19,272	12,684	10,290	20,379
Other mineral oils ..	689	1,981	3,141	1,729	1,671	1,741	1,331
Petroleum jelly ..	175	128	190	124	117	73	239
Paraffin wax ..	785	923	1,974	1,833	1,855	1,504	121
Natural asphalt ..	5,681	14,835	28,504	21,821	488	7,686	15,079
Spain—							
Crude petroleum ..	94,472	130,842	—	—	—	279,745	64,106
Light petroleum ..	1,783	1,825	—	—	—	—	281,219
Motor spirit ..	230,641	334,108	367,123	355,623	414,670	401,465	426,277
Kerosene ..	6,762	21,962	26,134	6,143	18,384	21,763	10,948
Diesel oil ..	95,823	164,322	164,266	170,798	220,419	214,958	196,422
Lubricating oil ..	41,805	56,610	52,765	59,441	41,315	50,017	67,530
Fuel oil ..	102,808	136,493	325,074	349,285	433,719	370,072	403,848
Petroleum jelly ..	92	132	157	272	384	400	487
Paraffin wax ..	431	737	1,066	1,150	1,439	1,266	2,046
Asphalt ..	22,736	39,936	65,630	32,236	29,124	61,609	72,737
Sweden—							
Crude petroleum ..	14,086	452,554	469,107	565,890	459,171	888,718	1,038,706
Motor spirit ..	39,063	451,089	650,138	553,511	528,013	530,388	698,594
Kerosene ..	14,684	117,785	129,150	173,101	166,326	199,756	277,161
Fuel oil and gas oil ..	105,703	718,247	1,735,564	1,837,270	1,727,581	1,938,887	2,607,512
Lubricating oil ..	19,350	68,488	68,811	59,552	31,872	62,411	73,920
Petroleum jelly ..	506	1,201	970	786	412	481	(a)
Other oils ..	186	1,008	316	363	202	319	(a)
Paraffin wax ..	2,716	5,878	7,671	5,864	6,472	6,920	8,628
Ozokerite and ceresin ..	135	1,225	1,204	1,451	933	927	(a)
Asphalt ..	1,248	4,281	4,723	3,922	2,253	2,858	5,711
Pitch ..	19,171	25,396	21,705	11,984	3,655	5,174	12,899

(a) Information not available.

## IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Switzerland—							
Motor spirit .. ..	11,181	148,142	197,755	235,473	262,509	297,586	311,699
Kerosene .. ..	79	15,103	11,264	43,144	18,146	65,276	87,594
Fuel oil .. ..	18,376	216,980	427,882	397,457	506,310	585,666	611,409
Lubricating oil and grease .. ..	3,185	28,723	30,492	30,215	22,447	39,199	52,930
Other oils .. ..	8	7,036	67,653	94,051	74,153	91,529	90,598
Petroleum jelly .. ..	294	1,811	892	630	357	1,217	1,339
Paraffin wax and ceresin .. ..	48	3,193	2,644	2,630	1,579	4,835	3,215
Asphalt and bitumen .. ..	408	716	687	664	421	818	680
Yugoslavia—							
Crude petroleum .. ..						398,740	378,041
Aviation spirit .. ..						14,331	11,277
Motor spirit .. ..						39,748	25,243
Fuel oil .. ..						20	83
Lubricating oil .. ..			(a)	(a)	(a)	16,378	18,471
Greases .. ..						6	—
Paraffin wax .. ..						1,343	1,027
Petroleum jelly .. ..						270	589
Bitumen .. ..						651	—
Petroleum coke .. ..						968	2,097
Algeria—							
Aviation spirit .. ..	57,078	129,591	142,779	{ 7,757	6,832	4,517	6,517
Motor spirit .. ..				{ 145,512	156,617	189,227	202,866
Kerosene .. ..	2,472	38,500	45,541	{ 55,034	47,833	55,501	58,394
Gas oil .. ..	31,253	44,177	68,935	{ 88,343	96,089	125,465	143,239
Fuel oil and diesel oil .. ..	17,831	72,230	109,603	{ 130,868	151,780	185,020	238,424
Lubricating oil .. ..	7,067	13,869	13,181	{ 13,924	25,115	22,845	25,901
Road oil, etc. .. ..	3,859	22,241	17,261	{ 25,141	26,276	33,470	35,857
Paraffin wax .. ..	283	269	763	{ 443	350	389	605
Petroleum jelly .. ..	12	11	45	{ 8	16	9	38
Ozokerite and ceresin .. ..	6	111	160	{ 22	25	5	14
Asphalt, etc., natural .. ..				{ 83	29	611	248
Mastic asphalt .. ..	16	601	961	{ 1,148	3,184	2,786	3,962
Angola—							
Motor spirit .. ..	6,147	10,069	11,644	15,800	16,140	21,858	
Kerosene .. ..	1,056	1,465	1,125	1,900	2,296	2,619	
Gas oil and fuel oil .. ..	2,386	3,684	3,950	5,700	7,897	8,705	
Lubricating oil .. ..	431	1,395	1,678	1,540	1,843	2,434	
Belgian Congo—							
Motor spirit, etc. .. ..	33,592	43,494	55,854	57,251	88,150	103,669	
Kerosene .. ..	4,688	5,825	5,588	5,678	14,006	12,520	
Fuel oil, etc. .. ..	5,535	5,805	8,196	12,142	29,654	31,932	
Lubricating oil and greases .. ..	2,848	4,891	5,983	11,678	9,487	7,731	
Petroleum jelly .. ..	33	—	53	{ (a)	{ (a)	3	
Paraffin wax .. ..	1	18	5	{ (a)	{ (a)	2	
Asphalt .. ..	146	737	525	{ (a)	{ (a)	3,559	
Cameroon (French)—							
Motor spirit .. ..	5,923	7,889	8,014	17,034	19,308	23,235	29,355
Kerosene .. ..	991	1,624	1,774	4,458	4,117	5,841	5,234
Fuel oil .. ..	1,031	1,453	1,524	3,303	5,707	10,163	10,589
Lubricating oil .. ..	368	784	715	1,747	1,792	1,748	2,866
Canary Islands—							
Crude petroleum .. ..	152,286	454,143					
Aviation spirit .. ..		556					
Diesel oil .. ..	3,008	270,120	{ 945,834	1,921,173	2,014,628	2,142,101	2,527,985
Fuel oil .. ..	2,917	218,750					
Lubricating oil .. ..	980	840					
Ceuta—							
Petroleum products (b) .. ..	14,003	44,879	259,232	161,242	196,954	104,851	410,320

(a) Information not available.

(b) Imported chiefly for bunkering purposes. See exports.

## IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Egypt—							
Crude petroleum ..	—	5	—	—	—	2	
Motor spirit ..	149,281	31,962	30,028	19,741	32,216	70,584	
Turpentine substitute ..	1,011	1,062	606	808	1,048	(a)	
Kerosene ..	480,784	533,956	442,679	370,935	448,019	434,529	
Fuel oil ..	..	721,290	685,169	622,751	474,058		
Gas oil ..	..	183,309	133,416	138,929	150,615		
Diesel oil ..	..	132,345	136,657	132,207	102,330	603,405	
Lubricating oil ..	19,143	24,351	29,822	36,050	32,452	33,167	
Petroleum jelly ..	284	251	426	473	346	506	
Paraffin wax ..	394	156	366	628	1,026	419	
Ozokerite and ceresin ..	—	10	17	35	27	45	
Asphalt and bitumen ..	570	620	880	1,889	856	(a)	
Ethiopia (b)—							
Motor spirit ..	6,081	8,147	7,449	7,344	8,377	6,870	18,700
Kerosene ..	1,782	2,164	1,909	1,527	1,400	1,000	1,500
Fuel oil, gas oil, etc. ..	6,192	10,101	8,638	11,094	11,812	9,400	1,470
French Equatorial Africa—							
Aviation spirit ..	923	1,568	17,382	20,953	33,894	5,329	13,528
Motor spirit ..	9,856	12,773	—	—	—	30,470	32,327
Kerosene ..	1,238	1,939	1,982	2,336	4,799	4,138	7,001
Gas oil ..	1,302	1,238	2,661	6,584	12,149	8,539	13,957
Fuel oil ..	81	721	—	—	—	1,888	5,782
Lubricating oil ..	745	1,297	1,476	2,228	3,093	—	
Grease ..	17	56	(a)	(a)	179	3,539	4,950
French Somaliland—							
Motor spirit ..	..	1,781	2,524	3,430	59	996	2,718
Kerosene ..	..	..	..	..	1,051	206	725
Lubricating oil ..	..	..	..	..	1,347	1,285	425
French Togoland—							
Crude petroleum ..	34	7	(a)	82	55	79	108
Motor spirit ..	510	950	1,458	1,569	1,851	2,853	4,404
Kerosene ..	466	916	1,034	1,198	1,997	1,405	3,340
Fuel oil ..	309	817	475	889	1,060	1,282	999
Lubricating oil ..	57	118	148	342	128	255	427
French West Africa—							
Motor spirit ..	..	35,498	40,928	65,551	65,787	(c) 107,313	(c) 117,769
Kerosene ..	..	11,850	12,181	12,406	20,013	(c) 34,357	(c) 22,238
Fuel oil ..	..	19,661	12,265	23,851	53,081	(c) 520,642	(c) 1,043,910
Lubricating oil ..	..	3,771	6,585	7,532	7,638	(c) 32,856	(c) 19,441
Liberia—							
Aviation spirit ..	(a)	(a)	(a)	(a)	1,300	500	
Motor spirit ..	(a)	(a)	(a)	(a)	5,000	6,000	
Kerosene ..	(a)	(a)	(a)	(a)	700	2,600	
Gas oil ..	(a)	(a)	(a)	(a)	2,500	5,900	
Madagascar—							
Motor spirit ..	7,804	12,794	19,750	19,914	18,000	(a)	(a)
Kerosene ..	2,335	2,135	4,246	2,850	4,000	(a)	(a)
Fuel oil, gas oil, etc. ..	10,581	1,616	4,643	4,532	7,000	(a)	(a)
Road oil, etc. ..	—	1,196	1	4,011	—	(a)	(a)
Lubricating oil ..	1,120	1,540	1,923	3,866	2,000	(a)	(a)
Asphalt and bitumen ..	5	343	71	43	(a)	(a)	(a)
Melilla—							
Petroleum products ..	6,431	10,769	9,363	12,637	10,654	13,732	16,634
Morocco (French)—							
Crude petroleum ..	6,344	10,957	28,139	(a)	(a)	(a)	(a)
Motor spirit ..	32,546	61,586	168,553	108,213	150,000	236,614	204,326
Kerosene ..	..	(a)	(a)	18,327	23,800	24,900	24,691
Gas oil ..	17,894	25,476	49,222	57,750	90,500	80,231	85,615
Fuel oil ..	10,695	55,600	122,552	175,437	170,900	164,500	178,792
Lubricating oil ..	3,344	6,451	9,940	—	24,900	17,020	10,640
Grease ..	405	444	1,079	(a)	(a)	1,451	1,129
Paraffin wax ..	2,077	1,901	6,090	(a)	(a)	3,228	3,744
Asphalt and bitumen ..	63	9	919	(a)	(a)	(a)	(a)

(a) Information not available.

(c) Total imports.

(b) Years ended September 10.

## IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Morocco (Spanish)—							
Crude petroleum ..	(a)	983	173	(a)	(a)	(a)	(a)
Motor spirit ..	7,397	8,350	10,087	(a)	(a)	(a)	(a)
Kerosene ..	(a)	870	1,445	(a)	(a)	(a)	(a)
Gas oil ..	2,392	1,991	2,196	(a)	(a)	(a)	(a)
Fuel oil ..	132	149	265	(a)	(a)	(a)	(a)
Lubricating oil and grease ..	558	400	1,643	(a)	(a)	(a)	(a)
Paraffin wax ..	99	37	106	(a)	(a)	(a)	(a)
Asphalt ..	519	266	281	(a)	(a)	(a)	(a)
Mozambique—							
Motor spirit ..	10,085	13,103	17,110	20,573	21,551	22,919	24,845
Kerosene ..	4,123	5,097	6,192	7,341	8,931	10,323	10,146
Fuel oil ..	5,013	6,112	9,655	12,295	17,458	18,490	24,227
Lubricating oil ..	1,632	1,749	2,179	2,352	2,796	3,041	2,984
Paraffin wax ..	49	46	40	30	39	46	27
Petroleum jelly ..	10	12	12	11	22	29	41
Asphalt and bitumen (c) ..	355	2,337	673	961	852	1,388	2,296
Portuguese Guinea—							
Motor spirit ..	382	750	584	1,071	1,035	(a)	(a)
Kerosene ..	139	172	281	379	475	(a)	(a)
Fuel oil ..	158	271	204	415	216	(a)	(a)
Lubricating oil ..	25	72	118	25	228	(a)	(a)
Réunion—							
Motor spirit ..	695	987	3,841	2,656	2,384	4,232	5,753
Kerosene ..	395	326		497	1,006	1,235	1,407
Heavy oils ..	174	199		486	129	2,601	3,272
Grease ..	15	6		—	—	(a)	(a)
Tunis—							
Crude petroleum ..	(a)	(a)	(a)	(a)	10,703	—	(a)
Motor spirit ..	19,342	32,317	39,101	50,264	60,028	68,429	72,400
Kerosene ..	8,713	15,746	14,887	28,023	33,928	27,632	37,000
Fuel oil ..	2,685	5,438	19,287	16,532	41,141	59,410	105,900
Gas oil ..	20,836	28,677	52,608	53,148	56,796	64,121	80,000
Lubricating oil ..	4,563	6,608	4,606	10,577	9,463	8,208	(a)
Petroleum jelly ..	18	26	9	3	251	—	(a)
Paraffin wax ..	194	9	117	105	(a)	(a)	(a)
Costa Rica (b)—							
Motor spirit ..	17,147	16,385	12,900	22,503	21,248	29,000	27,500
Kerosene ..	2,927	(a)	2,800	137	2,164	4,200	5,000
Diesel oil ..	18,417	16,906	23,254	28,022	24,707	20,600	30,600
Fuel oil ..	26,856	29,028	40,103	38,410	33,185	38,000	37,800
Lubricating oil ..	1,413	2,157	2,008	1,821	3,204	2,100	2,000
Grease ..	103	117	36	170	111		
Petroleum jelly ..	24	18	486	(a)	(a)	(a)	(a)
Paraffin wax ..	267	584	850	1,145	394	(a)	(a)
Asphalt ..	59	955	5,000	1,064	1,870	(a)	(a)
Cuba (b)—							
Crude petroleum ..	114,767	137,252	206,600	193,356	230,137	283,000	
Aviation spirit ..	(a)	(a)	15,333	22,000	19,000	25,000	
Motor spirit ..	36,093	73,566	151,127	177,281	221,551	259,000	
Kerosene ..	511	(a)	—	166	1	(a)	
Fuel oil ..	..	1,031,254	1,357,760	1,213,479	1,064,270	1,101,939	1,290,000
Gas oil ..	..		11,621	13,826	13,079	(a)	
Lubricating oil ..	..	11,212	11,772	23,805	20,332	(a)	
Residual oils ..	..	—		12,402	16,327	(a)	
Petroleum jelly ..	..	—		695	762	(a)	
Greases ..	..	7		1	—	(a)	
Paraffin wax ..	..	1,211	(a)	(a)	(a)	(a)	
Asphalt rock ..	..	200		26	23	(a)	
Other asphalt ..	..	24		296	76	(a)	
Bitumen ..	..	229		—	4	(a)	
Petroleum coke ..	..	2,980		386	536	(a)	

(-) Information not available.

(b) Total imports.

(c) Including coal tar and pitch.

## IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Dominican Republic (d)—							
Motor spirit .. ..	11,873		30,035	39,361	35,170	35,622	
Kerosene .. ..	3,832		6,504	7,042	6,254	6,283	
Fuel oil .. ..	21,810	(a)	42,849	59,347	65,230	58,463	(a)
Lubricating oil .. ..	1,532		6,506	7,437	3,492	2,636	
Other oils .. ..	696		3,329	3,972	2,593	2,352	
French West Indies—							
Guadeloupe—							
Motor spirit and kerosene .. ..	3,947	6,027		9,231	9,269	13,916	13,651
Fuel oil and lubricating oil .. ..	3,354	5,228	10,558	6,336	2,615	(a)	(a)
Martinique—							
Motor spirit .. ..	3,348	4,468	6,201	7,771	11,431	8,383	(a)
Kerosene .. ..	871	1,055	1,817	1,350	1,998	1,958	(a)
Fuel oil .. ..	4,054	4,455	5,441	6,012	5,854	6,203	(a)
Lubricating oil .. ..	658	444	304	461	1,038	(a)	(a)
Guatemala—							
Crude petroleum, etc. .. ..	79,000	93,000	134,813	174,776	162,580	194,991	166,296
Aviation spirit .. ..	900	5,600	7,386	6,456	7,560	5,678	7,880
Motor spirit .. ..	5,000	19,000	23,984	31,744	36,741	39,010	35,244
Kerosene .. ..	2,800	3,000	4,341	5,800	5,877	6,943	9,337
Diesel oil .. ..	25,000	22,000	18,032	26,349	18,272	19,145	19,782
Fuel oil .. ..	(a)	(a)	(a)	57	323	1,057	1,363
Lubricating oil .. ..	1,800	(a)	2,302	3,217	3,406	2,353	4,1/2
Grease .. ..	174	(a)	66	255	204	217	231
Asphalt .. ..	344	(a)	2,539	3,172	763	14,449	2,234
Paraffin wax, etc. .. ..	870	(a)	1,281	1,596	1,300	2,036	2,303
Haiti (b)—							
Motor spirit .. ..	9,400	11,200	14,500	13,000	16,456	16,456	18,276
Kerosene .. ..	2,990	3,800	3,970	3,500	5,730	(a)	(a)
Fuel oil, etc. .. ..	3,900	7,000	9,130	8,400	(a)	(a)	(a)
Lubricating oil .. ..	580	500	540	560	560	(a)	(a)
Honduras (c)—							
Motor spirit .. ..	7,886	9,536				16,600	
Kerosene, etc. .. ..	932	962				2,100	
Fuel oil .. ..	85,000	95,371	(a)	(a)	(a)	126,300	
Lubricating oil .. ..	4,502	1,494				1,540	
Mexico—							
Crude petroleum .. ..	11,023	23,277	28,057	46,579	6,424	3	(a)
Motor spirit .. ..	54,740	118,625	145,166	182,507	148,946	142,680	111,776
Kerosene .. ..	5,512	10,165	7,117	1,580	3,996	6,664	(a)
Gas oil .. ..	13,760	15,750	26,356	10,419	18,392	18,103	(a)
Fuel oil .. ..	47,419	101,094	128,467	151,931	137,855	117,204	52,474
Lubricating oil .. ..	39,862	37,472	45,755	41,424	49,543	56,795	61,475
Grease .. ..	2,772	3,738	3,819	3,411	4,430	4,894	3,576
Paraffin wax .. ..	4,736	12,689	12,612	16,243	23,047	30,856	25,544
Petroleum jelly .. ..	670	1,048	569	598	780	1,023	(a)
Asphalt .. ..	357	3,050	5,962	3,987	8,600	6,342	(a)
Asphalt rock .. ..	2	13	10	2,492	583	325	(a)
Natural gas (1,000 cu. ft.)	18,451,916	17,704,679	17,595,653	(a)	16,639,535	20,869,095	(a)
Netherlands West Indies—							
Crude petroleum .. ..	30,539,124	32,500,712	38,239,068	38,381,729	37,258,468	(a)	
Aviation spirit .. ..	105,983	10,224	106,300	199,020	220,660	(a)	
Motor spirit .. ..	65	33,412	6,230	244	8	(a)	
Kerosene .. ..	4,960	615	96	341	167	(a)	
Fuel oil .. ..	1,833,914	1,782,577	1,761,400	2,205,130	1,998,781	(a)	
Diesel oil .. ..	141,733	8,842	1	30,980	131,105	(a)	
Gas oil .. ..	16,972	22,781	10,045	8,794	55,992	(a)	
Lubricating oil .. ..	1,930	1,726	4,296	10,422	7,631	(a)	
Asphalt .. ..	134	52	160	28	15	(a)	

(a) Information not available.

(b) Years ended September 30.

(c) Years ended June 30 of year following that stated.

(d) Total imports.

## IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
FOREIGN COUNTRIES (Cont.)							
Nicaragua (b)—							
Motor spirit .. ..	10,026	11,397	14,000	16,000	(a)	(a)	
Kerosene .. ..	1,557	2,391	2,800	3,300	(a)	(a)	
Fuel oil .. ..	31,209	23,630	19,000	22,000	(a)	(a)	
Lubricating oil .. ..	1,581	1,502	1,677	1,900	(a)	(a)	
Panama—							
Motor spirit .. ..	39,000	35,000	39,000	42,000	39,000	48,000	57,000
Kerosene .. ..	8,000	8,000	9,000	10,000	11,000	13,000	13,000
Diesel oil .. ..	14,000	18,000	21,000	19,000	17,000	23,000	24,000
Fuel oil .. ..	72,000	75,000	73,000	82,000	79,000	83,000	84,000
Lubricating oil .. ..	6,580	6,720	2,800	1,500	2,200	2,700	2,400
St. Pierre and Miquelon—							
Motor spirit .. ..	549	869	312	1,020	780	{ 408	479
Gas oil and fuel oil .. ..						361	464
Salvador—							
Motor spirit .. ..	6,100	11,246	14,229	17,300	21,000	(a)	37,000
Kerosene .. ..	1,780	2,545	2,800	3,400	3,900	(a)	6,500
Fuel oil .. ..	9,900	21,583	8,021	31,000	36,000	(a)	(a)
Diesel oil .. ..	4,370	7,383	8,066	14,700	10,000	(a)	13,000
Lubricating oil and grease .. ..	650	790	1,700	1,260	1,400	(a)	4,700
Asphalt .. ..	800	—	1,217	1,665	(a)	(a)	5,400
United States—							
Crude petroleum .. ..	10,571,973	12,500,987	14,187,878	18,369,642	22,118,025	24,676,627	25,353,445
Aviation spirit .. ..	125,566	5,566	3	113	380	2	—
Motor spirit, etc. .. ..	360,426	9,337	6,278	48,863	1,711	22,661	46,143
Naphtha .. ..	—	7	37,374	23	151	3,470	9,092
Kerosene .. ..	30,183	—	32	19,381	2	34,329	23
Fuel oil .. ..	4,955,227	6,931,885	8,546,931	8,219,709	11,287,386	17,872,337	17,766,055
Gas oil and diesel oil .. ..	2,748,894	1,257,391	584,957	346,209	320,888	381,996	394,453
Unfinished distillates and topped oils .. ..	150	3,325	18,135	24,954	617,395	1,051,685	737,116
Lubricating oil, etc. .. ..	920	12,661	6,321	14,316	30	105	37
Road oil, etc. .. ..	3,526	22,425	19,695	30,526	16,674	12,785	17,699
Paraffin wax, etc. .. ..	832	131	435	3,445	106	85	27
Ozokerite and ceresin .. ..	—	—	10	85	8	47	36
Petroleum jelly .. ..	—	1	43	1	—	—	1
Asphalt (petroleum) .. ..	127,502	86,789	163,714	220,693	174,028	275,856	377,094
Asphalt and bitumen (natural) .. ..	4,595	3,962	5,181	5,951	3,669	5,235	5,629
Natural gas (1,000 cu. ft.) .. ..	—	—	—	1,188	—	—	—
Argentina—							
Crude petroleum .. ..	140,937	896,493	1,149,061	1,714,192	1,476,604	2,907,050	2,773,100
Motor spirit .. ..	308	14,596	105,782	211,621	137,372	116,721	32,000
Kerosene .. ..	172	11,512	(a)	10,000	42,000	(a)	(a)
Gas oil .. ..	2,411	2,450	6,083	14,180	12,700	(a)	(a)
Fuel oil .. ..	317,115	2,017,763	2,374,103	2,575,078	2,368,788	2,017,229	2,705,977
Diesel oil .. ..	60,282	190,191	77,555	76,374	85,035	61,710	45,077
Lubricating oil .. ..	2,400	7,778	13,248	20,221	24,458	42,949	41,325
Petroleum jelly .. ..	499	441					
Grease .. ..	53	99					
Paraffin wax .. ..	180	868					
Ozokerite and ceresin .. ..	4	175					
Asphalt for paving .. ..	5	10					
Asphalt for roofing .. ..	75	220					
Other asphalt and bitumen .. ..	—	265					
Pitch .. ..	25	22					
Bolivia—							
Crude petroleum, etc. .. ..	65,000	58,040	71,867	65,846	(a)	(a)	(a)
Aviation spirit .. ..	2,400	(a)	4,634	4,699	(a)	(a)	(a)
Motor spirit .. ..	16,800	15,742	18,180	31,987	(a)	(a)	(a)
Kerosene .. ..	3,500	2,051	2,291	3,499	(a)	(a)	(a)
Lubricating oil and grease .. ..	2,400	2,950	2,898	2,715	(a)	(a)	(a)
Paraffin wax .. ..	960	961	1,190	1,276	(a)	(a)	(a)
Tar, pitch, etc. .. ..	2,460	778	1,342	985	(a)	(a)	(a)

(a) Information not available.

(b) Total imports.

## IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Brazil (total imports)—							
Crude petroleum ..	9,823	36,135	8,558			58,000	(a)
Motor spirit ..	405,083	613,996	918,182	1,114,523	1,392,507	1,592,454	1,944,858
Kerosene ..	53,311	105,775	135,548	189,081	205,018	232,748	(a)
Gas oil ..	13,083	14,718	7,654	10,761	9,901		
Diesel oil ..	98,587	137,651	252,608	420,784	422,156		
Fuel oil ..	296,112	659,726	1,034,537	1,278,901	1,363,200	1,703,000	
Lubricating oil ..	67,475	51,011	88,523	94,193	75,304	113,701	180,534
Transformer oil ..	1,154	1,021	2,480	1,339	2,102	(a)	(a)
Petroleum jelly ..	2,133	855	586	493	683	(a)	(a)
Greases ..	604	854	1,159	550	503	(a)	(a)
Paraffin wax ..	1,681	1,418	2,873	3,166	2,817	(a)	(a)
Asphalt and bitumen ..	9,230	6,331	13,585	19,217	30,297	53,037	(a)
Chile—							
Motor spirit ..	101,249	160,420	202,076	222,788	246,377	249,900	267,000
Kerosene ..	16,097	22,187	24,436	30,000	35,636	42,000	61,000
Diesel oil ..	90,248	66,672	76,715	160,683	103,025	86,610	129,915
Fuel oil ..	78,895	22,186	732,083	760,229	585,812	(a)	781,000
Residual fuel oil ..	571,083	831,739	790,453	866,970	824,765	488,166	890,707
Lubricating oil ..	14,314	14,027	18,200	16,940	18,900	14,700	26,000
Petroleum jelly ..	114	58	(a)	274	314	(a)	(a)
Greases ..	641	660	1,289	1,163	924	800	1,694
Ozokerite ..	3	7	(a)	(a)	(a)	(a)	(a)
Natural asphalt ..	85	485	(a)	(a)	(a)	(a)	(a)
Paraffin wax ..	6,687	4,377	5,750	5,482	8,590	5,739	7,947
Tar and pitch ..	6,401	6,371	3,163	3,438	(a)	(a)	(a)
Colombia—							
Aviation spirit ..	(a)	(a)	(a)	(a)	17,000	32,000	(a)
Motor spirit ..	24,773	66,222	100,410	172,820	133,000	123,000	(a)
Kerosene ..	24	36	(a)	25	45	(a)	(a)
Fuel oil and gas oil ..	15,375	23,206	19,429	57,585	21,930		
Diesel oil ..	—	247	3,000	4,281	4,290		
Lubricating oil ..	6,093	6,011	9,240	7,797	9,163	1,260	(a)
Petroleum jelly ..	140	148	(a)	(a)	163	(a)	(a)
Paraffin wax ..	5,910	6,285	6,158	9,117	10,590	(a)	(a)
Asphalt ..	409	294	(a)	(a)	(a)	(a)	(a)
Ecuador—							
Aviation spirit ..	(a)	(a)	(a)	(a)	8,555	7,444	(a)
Motor spirit ..	1,951	3,442	4,800	{	1,377	(a)	(a)
Lubricating oil and greases ..	1,680	2,240	2,240	{	2,240	2,508	(a)
Asphalt and bitumen ..	590	665	(a)	{	2,377	3,461	(a)
French Guiana—							
Motor spirit ..	329	380	{			772	(a)
Kerosene ..	142	253	{			373	
Fuel oil, etc. ..	183	373	{			804	
Paraguay—							
Motor spirit ..	4,980	8,721	{				
Kerosene ..	1,038	2,673	{				
Fuel oil, etc. ..	—	437	{				
Gas oil ..	426	269	{				
Lubricating oil ..	140	280	{				
Paraffin wax ..	9,448	98	{				
Asphalt, tar, etc. ..	608	(a)	{				
Peru—							
Crude petroleum ..	6	4	{				
Motor spirit and gas oil ..	2,292	5,499	23,087	{		30,266	
Kerosene ..	—	1	{				
Lubricating oil ..	3,954	5,912	6,003	{		6,445	
Petroleum jelly ..	173	265	122	{		46	
Paraffin wax ..	3,144	1,851	2,760	{		3,963	
Asphalt and bitumen ..	301	74	21	{		16	
Greases ..	204	356	317	{		5	
Ozokerite ..	16	9	18	{		—	

(a) Information not available.

## IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Uruguay—							
Crude petroleum ..	241,056	257,399	302,757	372,166	537,439	325,189	
Motor spirit, etc. ..	18,440	16,660	22,180	25,312	29,000	30,059	
Kerosene ..	—	—	8,341	1,481	—	(a)	
Gas oil ..	—	—	—	2,147	985	—	
Diesel oil ..	16,005	15,521	1,921	3,951	6,319	6,274	
Fuel oil ..	84,038	195,859	181,608	45,055	19,691	438	
Lubricating oil and greases ..	7,185	10,823	22,166	9,204	8,561	9,367	
Paraffin wax ..	(a)	(a)	(a)	229	87	406	
Venezuela—							
Motor spirit ..	1,418	6,453	20,698	45,071			
Turpentine substitute ..	34	22	17	29			
Kerosene ..	—	—	669	39,930			
Gas oil ..	20	239	799	6,304			
Fuel oil ..	—	—	1	20,996			
Lubricating oil ..	9,660	10,080	(a)	(a)			
Paraffin wax ..	781	2,231	3,202	3,101			
Petroleum jelly ..	115	80	256	157			
Natural gas ..	1,579	1,720	(a)	(a)			
Asphalt, bitumen, etc. ..	3,248	630	812	3,013			
Afghanistan—							
Motor spirit ..	(b)	4,900	(d)	3,400	(a)	18,820	15,033
Kerosene ..	(b)	1,000	(d)	400	(a)	1,782	636
Diesel oil ..	(b)	120	(d)	80	(a)	1,500	3,800
Lubricating oil ..	(b)	140	(d)	280	(a)	2,100	840
China—							
Motor spirit ..	5,164	(a)	(a)	(a)	(a)	(a)	(a)
Kerosene ..	1,782	234,308	303,824	(a)	(a)	(a)	(a)
Fuel oil and diesel oils ..	1,413	337,750	1,249,208	(a)	(a)	(a)	(a)
Lubricating oil ..	560	56,009	55,970	(a)	(a)	(a)	(a)
Paraffin wax ..	—	5,096	5,623	(a)	(a)	(a)	(a)
Asphalt ..	(a)	12,699	17,076	(a)	(a)	(a)	(a)
French Indo-China—							
Motor spirit ..		7,700	20,000	35,751	62,381	68,769	99,542
Kerosene ..		1,600	10,000	20,277	22,782	23,449	30,145
Fuel oil ..		(a) 5,000	11,000	12,846	20,331	19,595	57,434
Gas oil ..		(a) 5,000	5,000	4,383	9,280	7,010	
Lubricating oil ..		1,400	(a)	5,326	6,484	5,226	5,647
Indonesia—							
Crude petroleum ..		(a)	(a)	904,000	1,634,000	1,379,000	695,000
Motor spirit ..		64,834	37,524	28,574	1,500	2,300	(a)
Kerosene ..		(a) 7,000	16,163	7,636	8,400	3,000	(a)
Fuel and gas oils ..		54,824	(a)	8,194	4,662	3,700	(a)
Lubricating oil ..		4,340	17,640	28,840	20,860	29,000	(a)
Asphalt ..		(a)	20,464	30,147	43,540	21,780	(a)
Iran (b) (c)—							
Crude petroleum ..		(a)	(a)	(a)	(a)	(a)	(a)
Motor spirit ..		6,500	6,100	1,300	(a)	(a)	(a)
Kerosene ..		28,200	13,900	5,979	(a)	(a)	(a)
Gas oil ..		7,300	5,200	1,441	(a)	(a)	(a)
Fuel oil ..		(a) 9,800	3,800	4,5	4	170	(a)
Lubricating oil ..		4,000	2,400	3,645	1,629	3,628	(a)
Greases ..		(a)	(a)	(a)	(a)	(a)	(a)
Paraffin wax ..		390	850	288	887	(a)	(a)
Petroleum jelly ..		98	280	123	226	206	(a)
Asphalt, tar and bitumen ..		—	1,000	3	—	—	(a)

(a) Information not available.

(b) Years ended March 20 of year following that stated.

(c) Total imports.

(d) March 21 to December 22 only.

## IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Iraq—							
Crude petroleum ..	131,234	a)	(a)	(a)	(a)	(a)	(a)
Motor spirit ..	9,546	14,918	15,262	(a)	(a)	(a)	(a)
Kerosene ..	17,284	(a)	(a)	(a)	(a)	(a)	(a)
Fuel oil ..	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Lubricating oil ..	6,307	7,840	9,100	(a)	(a)	(a)	(a)
Greases ..	70	(a)	(a)	(a)	(a)	(a)	(a)
Asphalt and bitumen ..	1,315	(a)	(a)	(a)	(a)	(a)	(a)
Israel—							
Crude petroleum ..					137,346	192,966	
Aviation spirit ..					—	9,373	
Motor spirit ..					92,547	115,098	
Kerosene ..					61,730	67,566	
Fuel oils ..					316,511	325,524	
Lubricating oils ..					8,694	9,121	
Paraffin wax ..					624	437	
Petroleum jelly ..					58	14	
Asphalt ..					4,015	23,814	
Turpentine substitute ..					328	208	
Japan—							
Crude petroleum ..	718,857	—	48,224	145,467	227,557	1,797	120,155
Motor spirit ..	—		—	—	(a)	1,108,691	
Kerosene ..	3,182	18,152	13,584	—	(a)	2	
Other refined products ..	18,725	260,285	327,323	1,000,000	(a)	(a)	
Jordan—							
Motor spirit ..	(a)	(a)	9,225	18,169	18,006	21,341	
Kerosene ..	(a)	(a)	9,802	8,180	15,518	24,058	
Diesel oil, etc.	(a)	(a)	(a)	(a)	(a)	9,531	
Lubricating oil ..	(a)	(a)	(a)	(a)	(a)	1,181	
Petroleum jelly ..	(a)	(a)	(a)	(a)	(a)	1,230	
Macao—							
Motor spirit ..	65	827	3,470	5,696	(a)	(a)	(a)
Kerosene ..	261	3,583	12,375	26,758	(a)	(a)	(a)
Philippine Republic—							
Motor spirit ..	—	84,485	284,000	436,000	413,000	(a)	(a)
Kerosene ..	—	44,992	81,000	110,000	127,000	(a)	(a)
Diesel oils ..	—	81	182,000	233,000	243,000	(a)	(a)
Fuel oil ..	—	10,019	103,600	233,000	259,000	(a)	(a)
Lubricating oils ..	23	9,762	36,900	29,000	31,000	(a)	(a)
Grease ..	—	729	2,115	2,419	2,800	(a)	(a)
Petroleum jelly ..	258	1,684	1,015	2,289	1,629	(a)	(a)
Paraffin wax ..	153	991	2,354	3,516	3,926	(a)	(a)
Asphalt ..	60	23,641	3,211	24,657	27,096	(a)	(a)
Portuguese India—							
Motor spirit ..	984	1,328	1,258	1,633	2,867	(a)	(a)
Kerosene ..	1,693	2,360	2,797	2,105	2,851	(a)	(a)
Lubricating oils ..	325	281	3,02	337	209	(a)	(a)
Other oils ..	1,128	1,338	1,777	1,982	2,362	(a)	(a)
Syria and Lebanon—							
Crude petroleum ..	2,093,127	—	(a)	(a)	(a)	(a)	(a)
Motor spirit ..	17,327	8,951	29,720	39,500	98,100	(a)	(a)
Kerosene ..	24,089	13,967	19,000	22,000	56,800	(a)	(a)
Fuel oil and diesel oil ..	40,968	30,794	33,979	38,181	190,392	(a)	(a)
Lubricating oil ..	3,277	2,548	5,600	6,300	8,500	(a)	(a)
Paraffin wax ..	57	70	(a)	(a)	(a)	(a)	(a)
Petroleum jelly ..	11	48	(a)	(a)	(a)	(a)	(a)
Asphalt and bitumen ..	13	3,334	10,815	4,789	9,653	(a)	(a)

(a) Information not available.

(b) See "Palestine" under British Countries.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (*Cont.*)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
FOREIGN COUNTRIES ( <i>Cont.</i> )							
Turkey—							
Motor spirit .. ..	38,383	65,518	94,369	138,877	190,234	192,568	241,227
Kerosene .. ..	41,732	44,906	63,223	79,800	109,298	122,956	168,315
Fuel oil .. ..	57,137	56,116	74,261	81,081	133,605	150,342	197,627
Heavy oils .. ..	9,846	18,396	25,186	24,721	37,075	24,201	34,906
Paraffin wax and petroleum jelly .. ..	640	1,125	1,273	656	559	458	1,724
Ozokerite and ceresin .. ..	1	—	4	1	5	18	16
Asphalt .. ..	(a)	(a)	(a)	(a)	(a)	(a)	7,717
French Oceania—							
Motor spirit .. ..	}	3,334	3,718	4,289	6,010	5,587	7,659
Kerosene .. ..							
Other oils .. ..							7,156
New Caledonia—							
Motor spirit .. ..	2,295	3,756	6,833	5,314	5,298	2,716	6,795
Kerosene .. ..	764	498	1,674	942	835	867	2,040
Fuel oil .. ..	1,504	1,894	5,361	6,722	3,444	119	6,364
Lubricating oil, etc. .. ..	140	163	436	487	560	377	46

(a) Information not available.

PHOSPHATES

PRODUCTION OF PHOSPHATE-ROCK  
(Including Apatite)  
(Long tons)

Producing Country							Estimated Tribasic Phosphate of Lime Content or equivalent.					
	1945	1946	1947	1948	1949	1950	1951	1945	1946	1947	1948	1949
<b>BRITISH COUNTRIES</b>												
Seychelles (exports) (b)	..	6,867	20,726	14,061	21,237	13,727	9,691	4,404	(a)	(a)	(a)	(a)
Southern Rhodesia	..	—	1,638	2,188	1,022	66	36	—	(a)	(a)	(a)	(a)
South West Africa (b)	..	27	—	275	217	942	571	772	(a)	(a)	(a)	(a)
Tanganyika (c)	..	9	7,099	6,495	—	128	460	340	6	—	—	—
Uganda	..	8,511	—	—	39,030	55,579	—	2,207	(a)	130	180	250
Union of South Africa	..	26,911	37,096	41,171	—	—	51,025	9,400	13,000	(a)	(a)	200
Canada	..	267	51	—	17,4765	174,451	18	80,348	14,400	13,700	19,500	28,200
Christmas Island (c)	..	32,750	104,451	893	1,114	243	315,361	333,343	200	40	—	—
India	..	524	—	—	420	—	589	3,025	5,000	30,000	89,000	207,000
Sarawak (guano) ..	..	9,197	—	(a)	20	5,317	500	643	416	160	(a)	(a)
Australia	..	—	57,650	174,890	355,700	2,135	11	1,627	649	—	(a)	(a)
Nauru Island (c)	..	—	29,200	209,100	260,900	124,850	—	7,929	5,200	11	791	—
Ocean Island (c)	..	—	11,947	200	—	—	—	—	50,000	150,000	462,000	679,000
New Zealand	..	7,956	—	—	—	—	—	—	180,000	180,000	107,000	212,000
Total	..	66,000	199,000	559,000	901,000	1,366,000	1,683,000	1,611,000	—	—	—	—
Irish Republic	..	21,761	11,545	10,610	—	(a)	(a)	(a)	13,300	5,500	5,100	—
<b>FOREIGN COUNTRIES</b>												
Belgium (f)	..	70,154	52,468	97,761	89,779	26,564	49,993	110,493	(a)	21,000	(a)	(a)
France	..	74,267	95,749	102,424	83,249	64,602	91,279	18,000	—	—	15,000	(a)
Germany (d)	..	—	500	—	—	—	—	270	—	—	—	—
Norway	..	—	1,296	—	—	—	—	—	890	—	—	—
Poland (d)	..	—	5,000	10,000	—	—	—	—	1,900	3,700	—	—
Spain	..	—	20,031	18,318	—	22,652	22,728	23,707	—	12,000	13,000	—
Sweden	..	168,424	49,929	7,574	19,884	1,418	1,579	24,499	109,700	35,000	5,200	15,000
U.S.S.R. (d)	..	1,600,000	1,600,000	2,000,000	2,300,000	2,500,000	2,500,000	2,750,000	1,070,000	1,060,000	1,320,000	1,500,000
									1,070,000	1,060,000	1,060,000	1,600,000

(a) Information not available.  
(b) Phosphatic guano.  
(c) Exports.

(d) Estimated by International Superphosphate Manufacturers' Association.  
(e) Bat guano.

(f) Including Phosphatic chalk.

249

PRODUCTION OF PHOSPHATE-ROCK (Cont.)

Producing Country	1945	1946	1947	1948	1949	1950	1951	Estimated Tribasic Phosphate of Lime Content or equivalent.						
								1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>														
Algeria ..	395,000	575,600	702,517	660,000	638,000	666,400	764,300	237,000	374,000	457,000	422,000	415,000	433,000	482,000
Egypt ..	..	343,698	289,403	365,363	371,051	344,945	390,934	492,956	224,000	188,000	237,000	241,000	224,000	254,000
French West Africa (f) ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Morocco (French) ..	1,627,995	2,739,675	2,913,966	3,175,300	3,634,635	3,811,084	4,642,300	1,180,000	1,970,000	2,100,000	2,342,000	2,617,000	2,744,000	3,342,000
Tunis ..	695,200	1,377,700	1,727,500	1,834,300	1,419,200	1,500,700	1,652,400	438,000	868,000	1,090,000	1,171,000	894,000	946,000	1,008,000
Netherlands West Indies ..	10,256	77,432	77,978	57,900	111,230	90,500	(b) 166,896	7,800	56,000	60,000	43,000	82,000	67,000	79,000
United States ..	5,399,739	7,168,839	9,110,989	9,388,160	8,877,474	11,114,159	10,775,032	3,796,000	5,061,000	6,420,000	6,631,000	6,264,000	7,790,000	7,441,000
Brazil ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chile ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
China (d) ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Indonesia ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Japanese Islands ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Jordan ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Angaur Island ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
French Oceania ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
<b>Total ..</b>	<b>10,700,000</b>	<b>14,430,000</b>	<b>17,500,000</b>	<b>18,350,000</b>	<b>18,230,000</b>	<b>19,300,000</b>	<b>19,596,000</b>	<b>22,520,000</b>	<b>23,490,000</b>	<b>21,880,000</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>
<b>WORLD'S TOTAL ..</b>	<b>10,790,000</b>	<b>14,640,000</b>	<b>18,100,000</b>	<b>19,300,000</b>	<b>19,596,000</b>	<b>22,520,000</b>	<b>23,490,000</b>							

(a) Information not available.

(b) Exports.

(c) Estimated.

(d) Estimated by International Superphosphate Manufacturers' Association.

(e) Included with "Japanese Islands".

(f) In addition, the following amounts of aluminium phosphates were produced (long tons):—1947—640; 1948—3,901; 1949—5,585; 1950—11,722; 1951—24,113.

# PRODUCTION OF SUPERPHOSPHATES

(Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom .. ..	906,600	962,200	966,400	1,103,646	1,123,679	1,048,188	782,058
Union of South Africa* .. ..	221,430	275,686	288,395	305,992	403,511	517,857	399,302
Canada (c) .. .. ..	210,797	205,000	228,922	222,857	215,625	(e) 220,000	(e) 210,000
India .. .. ..	—	—	5,000	21,358	46,724	51,708	61,018
Australia (c) .. .. ..	829,453	1,105,304	1,170,489	1,186,062	1,423,137	1,483,458	1,547,823
New Zealand (d) .. .. ..	426,826	534,224	553,889	557,653	616,382	635,955	595,792
Irish Republic .. ..	(b) 82,840	(b) 129,795	(b) 141,648	149,100	138,925	162,255	160,199
<b>FOREIGN COUNTRIES</b>							
Belgium .. .. ..	307,800	448,717	603,107	381,019	335,995	366,817	394,946
Czechoslovakia* .. .. ..	390	78,864	199,897	207,926	(e) 200,000	(e) 250,000	(e) 230,000
Denmark .. .. ..	62,884	296,533	369,247	413,979	426,107	410,787	411,305
Finland .. .. ..	19,359	111,762	97,404	127,168	193,275	225,831	235,914
France .. .. ..	125,005	1,095,761	1,392,116	1,653,085	1,182,605	1,175,813	1,243,000
Germany* .. .. ..	(h) 15,445	(e) 160,000	(e) 345,000	(e) 500,000	(e) 600,000	(e) 650,000	(e) 650,000
Greece (g)* .. .. ..	21,629	73,236	71,758	69,860	97,473	70,666	152,308
Hungary* .. .. ..	853	2,136	(e) 16,000	37,283	(e) 40,000	(e) 40,000	(e) 75,000
Italy .. .. ..	173,661	616,148	1,018,765	1,179,924	1,458,019	1,454,554	1,668,678
Netherlands (g) .. .. ..	83,175	580,525	623,565	780,458	836,029	869,588	863,544
Norway .. .. ..	11,299	18,278	25,456	34,006	35,135	65,146	74,294
Poland .. .. ..	(e) 25,000	(f) 156,633	(f) 188,387	(f) 275,215	(f) 392,034	(f) 382,183	270,000
Portugal .. .. ..	289,492	235,564	239,763	298,062	298,661	308,783	390,998
Spain .. .. ..	527,503	283,180	351,780	696,913	822,683	924,713	1,040,343
Sweden .. .. ..	297,969	332,388	295,871	383,962	428,893	461,649	485,239
Switzerland .. .. ..	12,043	24,297	21,751	20,400	17,960	(e) 18,000	15,800
U.S.S.R. (e)* .. .. ..	1,600,000	1,600,000	2,000,000	2,300,000	2,500,000	2,500,000	3,000,000
Yugoslavia (e)* .. .. ..	17,000	40,000	40,000	40,000	40,000	25,000	30,000
Canary Islands .. .. ..	10,202	5,088	3,822	9,813	16,000	16,000	15,956
Egypt* .. .. ..	15,835	14,972	21,707	37,365	58,306	67,634	87,088
Algeria .. .. ..	48,500	90,482	97,669	107,029	81,475	83,756	108,072
Morocco (French) .. .. ..	26,430	48,059	52,000	54,000	54,100	68,900	82,700
Tunis .. .. ..	8,810	24,428	40,429	31,528	42,900	48,800	53,199
Cuba* .. .. ..	(a)	(a)	(a)	(e) 18,000	23,276	25,000	30,000
Mexico* .. .. ..	(a)	(a)	9,000	7,938	(e) 16,000	(e) 16,000	21,000
United States (g)* .. .. ..	7,289,326	7,769,053	9,209,566	9,424,474	9,387,564	9,720,537	9,497,770
Brazil* .. .. ..	27,060	30,692	39,929	25,000	26,000	26,000	71,000
Israel* .. .. ..	12,500	14,100	3,300	(e) 3,000	5,531	10,198	11,283
Japan .. .. ..	10,830	168,512	697,739	939,476	1,142,485	1,385,759	1,481,813
Turkey .. .. ..	5,277	3,744	4,397	5,482	8,457	12,926	18,518
World's Total (g) .. ..	13,724,000	17,539,000	21,434,000	23,609,000	24,735,000	25,800,000	26,466,000

\* Source : International Superphosphate Manufacturers' Association's "Superphosphate Statistics."

(a) Information not available.

(b) Including phosphate in compounds.

(c) Years ended June 30 of that stated.

(d) Superphosphate content of all fertilizers made during years ended March 31 of the year following that stated.

(e) Estimated.

(f) Including bone meal.

(g) Including Triple superphosphate converted to ordinary superphosphate.

(h) P<sub>2</sub>O<sub>5</sub> content for Western Germany only. Comparable figures for later years are as follows (long tons) :—1946—19,379; 1947—43,207; 1948—54,566; 1949—62,559; 1950—73,290; 1951—71,553.

## PRODUCTION OF BASIC SLAG

(Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Great Britain (b) .. ..	537,685	587,156	538,546	577,215	634,956	658,908	622,195
<b>FOREIGN COUNTRIES</b>							
Belgium .. .. ..	100,776	395,194	536,333	(a)	(a)	(a)	(a)
France .. .. ..	165,522	578,268	686,490	961,254	1,230,219	1,150,106	1,123,200
Germany .. .. ..	(a)	(a)	(a)	601,000	1,053,000	1,339,000	1,442,000
Luxemburg .. .. ..	61,000	258,000	426,000	550,000	525,000	488,000	597,000
Sweden .. .. ..	12,972	12,780	13,324	13,953	12,277	(a)	(a)

Basic slag has also been produced in Czechoslovakia, Italy, Poland, U.S.S.R., United States and Japan.

(a) Information not available.

(b) Estimated amount ground and used as fertilizers during the years ended June 30 of that stated.

EXPORTS OF PHOSPHATES, ETC.

*(Domestic Produce)*

(Long tons)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Superphosphates .. ..	10,869	1,436	4,052	18,655	1,936	3,186	1,564
Basic slag .. ..	196	1,621	1,053	2,043	(a)	(a)	(a)
Seychelles—							
Phosphatic guano .. ..	6,867	20,726	14,061	21,237	13,727	9,691	4,404
South West Africa—							
Phosphatic guano .. ..	27	1,638	2,191	1,022	938	568	772
Uganda—							
Phosphates .. ..	—	—	—	—	—	—	2,207
Union of South Africa—							
Superphosphates .. ..	(a)	15,076	15,628	22,088	25,413	(a)	(a)
Canada—							
Phosphatic fertilizer .. ..	144,016	126,019	145,867	120,249	130,815	108,224	127,276
Christmas Island (d)—							
Phosphate-rock .. ..	(b) 6,000	32,750	104,451	174,765	243,475	315,361	333,343
Palestine—							
Phosphatic fertilizer .. ..	4,537	4,347	(a)	(a)	(a)	(a)	(a)
Australia—							
Superphosphates .. ..	80	202	566	858	1,221	356	987
New Zealand—							
Superphosphates .. ..	—	—	—	1	1	1	2
Nauru Island—							
Phosphate-rock .. ..	—	57,650	174,800	535,700	789,400	1,053,450	928,050
Ocean-Island—							
Phosphate-rock .. ..	—	29,200	209,100	124,850	260,900	247,250	252,400
<b>FOREIGN COUNTRIES</b>							
Belgium-Luxemburg E.U.—							
Phosphate-rock .. ..	4,435	(a)	(a)	33,441	1,648	9,609	6,579
Superphosphates .. ..	(a)	(a)	(a)	339,470	360,089	329,202	323,484
Di-calcium superphosphate .. ..	(a)	(a)	(a)	77,000	50,784	50,720	80,210
Basic slag .. ..	(a)	(a)	618,082	817,718	899,624	818,302	1,094,598
Czechoslovakia—							
Superphosphates .. ..	(a)	—	30	(c) 9,994	(a)	(a)	(a)
Denmark—							
Superphosphates .. ..	—	152	54	12,231	17,362	12,031	7,928
France—							
Phosphate-rock .. ..	1,156	3,384	2	45	24	599	2,816
Superphosphates .. ..	298	21,448	36,034	82,128	160,775	118,577	122,842
Basic slag .. ..	5,804	56,076	65,192	91,919	292,776	334,492	235,241
Di-calcium phosphates .. ..	(a)	(a)	(a)	834	818	628	810
Germany (Federal)—							
Phosphate-rock .. ..	(a)	(a)	(a)	—	257	—	3,445
Superphosphates .. ..	(a)	(a)	(a)	—	—	7,374	16,491
Italy—							
Superphosphates, including bone superphosphates .. ..	(a)	(a)	995	83,281	218,511	54,778	15,840
Netherlands—							
Superphosphates .. ..	(a)	27,207	207,627	321,927	364,360	468,995	464,120
Basic slag .. ..	(a)	36	5	—	—	—	—
Portugal—							
Superphosphates .. ..	43,688	44,087	1,575	144	29,128	51,512	52,236

(a) Information not available.

(b) Estimated.

(c) January to October only.

(d) Including exports to the Federation of Malaya.

EXPORTS OF PHOSPHATES, ETC. (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Spain— Superphosphates, etc. ..	11,887	87,395	5,944	5,569	35,760	29,222	88,439
Sweden— Phosphate-rock ..	—	308	1,200	1,069	1,476	—	—
Superphosphates ..	11,318	2,953	—	—	—	—	—
Switzerland— Basic slag .. ..	—	36	5	—	5	—	—
U.S.S.R.— Apatite .. ..	(c)						
Other phosphate-rock ..	}	}	}	}	}	}	}
Algeria— Phosphate-rock .. ..	311,405	501,945	667,894	599,419	560,965	598,188	684,414
Superphosphates .. ..	8,691	8,467	5,192	13,908	4,900	7,087	18,423
Egypt— Phosphate-rock .. ..	267,352	307,092	337,589	329,440	143,323	492,000	(a)
French West Africa— Aluminium phosphates ..	—	—	—	—	5,202	9,385	30,215
Morocco (French)— Phosphate-rock .. ..	1,431,793	2,338,278	3,125,347	3,081,944	3,483,382	4,076,890	4,379,922
Morocco (Spanish)— Superphosphates .. ..	155	168	40	(a)	(a)	(a)	(a)
Tunis (including re-exports)— Phosphate-rock .. ..	566,106	1,650,368	1,677,595	1,858,003	1,764,127	1,547,000	2,064,594
Hyperphosphates .. ..	—	—	—	—	114,373	142,274	140,900
Netherlands West Indies— Phosphate-rock .. ..	8,631	72,431	77,978	57,900	91,546	90,500	106,895
United States— Phosphate-rock .. ..	493,591	633,340	753,317	1,141,364	1,257,962	1,832,048	1,726,979
Superphosphates (b) .. ..	184,961	241,335	232,586	382,840	315,988	242,562	266,689
Angaur Island— Phosphate-rock .. ..	(a)	(a)	175,000	109,000	240,000	150,000	142,161
French Oceania— Phosphate-rock .. ..	228,064	228,134	205,027	180,212	235,749	250,802	224,259
Japan— Superphosphates .. ..	—	—	109,110	72,899	(a)	(a)	(a)
Jordan— Phosphate-rock .. ..	4,867	3,960	5,962	—	—	(a)	(a)

(a) Information not available.

(b) Including concentrated superphosphate.

(c) Imports of phosphate-rock into certain countries from U.S.S.R. were as follows (long tons):—

	1945	1946	1947	1948	1949	1950	1951
United Kingdom .. ..	29,339	—	—	—	(a)	—	—
Belgium .. ..	(a)	(a)	87,359	—	(a)	—	—
France .. ..	(a)	(a)	—	—	—	—	—
Germany .. ..	(a)	(a)	(a)	(a)	—	—	—
Netherlands .. ..	(a)	—	47,954	33,667	—	—	—
Norway .. ..	25,116	15,979	26,866	23,812	16,277	34,243	(a)
Sweden .. ..	7,693	14,742	35,873	53,156	31,156	(a)	(a)
United States .. ..	12,804	—	—	—	—	—	(a)

IMPORTS OF PHOSPHATES, ETC.

(Less Re-exports)

(Long tons)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
BRITISH COUNTRIES							
United Kingdom—							
Phosphate-rock .. ..	642,702	864,035	905,730	983,869	1,086,653	1,109,294	1,030,083
Superphosphates .. ..	70,672	204,203	37,126	91,443	87,829	168,573	294,457
Basic slag .. ..	—	10,152	60,821	97,423	219,551	258,173	171,190
Kenya—							
Superphosphates, basic slag, etc. .. ..	(a)	(a)	(a)	(b) 2,949	3,782	10,940	7,202
Mauritius—							
Phosphatic guano .. ..	2,067	2,934	2,996	2,575	2,842	2,775	2,921
Superphosphates .. ..	—	—	1,000	12	100	100	256
Southern Rhodesia—							
Superphosphates .. ..	12,486	17,078	14,198	22,427	21,364	28,910	46,404
South West Africa—							
Superphosphates .. ..	(a)	840	873	642	655	(a)	(a)
Tanganyika—							
Superphosphates, basic slag, etc. .. ..	(a)	(a)	(a)	68	132	2,741	1,383
Uganda—							
Superphosphates, basic slag, etc. .. ..	(a)	(a)	(a)	(c)	4	7	39
Union of South Africa—							
Phosphate-rock .. ..	190,710	188,380	212,969	168,868	237,435	308,306	(a)
Superphosphates .. ..	—	5,000	45,638	35,830	22,526	45	(a)
Canada—							
Phosphate-rock .. ..	283,656	333,641	433,385	430,365	554,293	438,416	446,170
Superphosphates .. ..	59,740	85,297	126,764	106,592	149,618	163,234	167,779
Basic slag .. ..	21,567	41,001	44,614	49,740	33,433	30,900	36,139
British West Indies—							
Jamaica—							
Phosphatic fertilizers..	370	546	275	231	251	720	1,184
Trinidad and Tobago—							
Superphosphates .. ..	142	1,466	3,742	498	102	10	1,315
Basic slag .. ..	(a)	(a)	(a)	(a)	—	75	—
British Guiana—							
Superphosphates, basic slag, etc. .. ..	(d) 180	384	1,727	4,839	(a)	(a)	1,070
Ceylon—							
Phosphate-rock .. ..	19,196	17,959	16,842	22,335	24,609	31,548	38,346
Superphosphates .. ..	—	1,211	3,414	108	493	716	474
Basic slag .. ..	—	100	99	433	322	99	124
Cyprus—							
Superphosphates .. ..	(a)	(a)	8,862	14,321	17,290	20,881	24,805
Hong Kong (total imports)—							
Superphosphates, basic slag, etc. .. ..	(a)	(a)	(a)	(a)	1,968	1,176	30
India—							
Superphosphates .. ..	901	60	330	350	948	—	2,965
Ammonium phosphate ..	1,786	4,504	6,002	4,737	18,666	—	—
Other phosphates .. ..	1,500	2,505	995	21,844	9,608	53,445	45,070
Malaya (total imports)—							
Phosphate-rock .. ..	(a)	165	75	—	—	—	6,689
Phosphatic fertilizers ..	(a)	—	1,001	12,833	529	1,784	1,371
Palestine—							
Phosphate-rock .. ..	6,530	7,628	3,883	(a)	(e)	(e)	(e)
Australia—							
Phosphate-rock .. ..	575,353	689,098	746,518	738,139	1,016,291	1,224,779	1,050,462
Superphosphates .. ..	—	—	3,965	700	—	12,267	2,017
New Zealand—							
Phosphate-rock .. ..	214,788	310,502	281,365	309,902	402,425	206,050	397,190
Phosphatic guano .. ..	46	—	—	8,000	8,330	267	—
Basic slag .. ..	—	9,930	15,785	13,430	42,096	65,319	69,190
Other phosphates .. ..	26,557	26,432	71,646	51,380	37,719	69,115	55,938

(a) Information not available.

(d) Including Sulphate of potash.

(b) Including Uganda.

(e) See "Israel" under Foreign Countries.

(c) Included with Kenya.

## IMPORTS OF PHOSPHATES, ETC. (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES (Cont.)</b>							
Irish Republic—							
Phosphate-rock .. ..	18,240	79,224	73,300	112,746	127,865	140,791	136,394
Superphosphates .. ..	106	11	2,507	19,675	37,849	48,092	93,838
Basic slag .. ..	89	8,587	12,014	23,229	27,038	27,306	33,279
<b>FOREIGN COUNTRIES</b>							
Austria—							
Phosphate-rock .. ..	a)	9,547	—	—	493	60	315
Superphosphate .. ..	(a)	(a)	28,515	40	74,181	67,873	79,939
Basic slag .. ..	(a)	(a)	3,826	15,668	125,178	92,699	142,749
Belgium-Luxemburg E.U.—							
Phosphate-rock .. ..	(a)	304,194	488,086	398,679	347,861	391,601	450,827
Superphosphates .. ..	(a)	(a)	(a)	2	1	2	5
Di-calcium superphosphates .. ..	(a)	(a)	(a)	60	35	139	220
Basic slag .. ..	(a)	(a)	(a)	1,554	—	5,398	1,287
Czechoslovakia—							
Phosphate-rock .. ..	{ (a)	{ 13,838	65,642	(b) 52,516	(a)	(a)	(a)
Superphosphates .. ..		{ 3,974	—	—	(a)	(a)	(a)
Denmark—							
Phosphate-rock .. ..	67,693	192,640	208,475	227,971	275,344	233,917	244,863
Superphosphates .. ..	—	—	—	—	1,952	62,536	49,426
Finland (total imports)—							
Phosphate-rock .. ..	27,398	71,351	150,356	177,295	219,809	194,099	302,360
Superphosphates .. ..	5,390	14,766	57,657	29,722	16,871	7,081	42,527
Basic slag .. ..	—	2	14,755	—	—	3	—
Di-calcium phosphates .. ..	(a)	(a)	(a)	14,673	4,105	7,209	6,965
France—							
Phosphate-rock .. ..	428,975	1,013,742	1,153,345	1,396,256	940,907	1,096,400	1,319,089
Superphosphates .. ..	156	78	1	357	1,397	1,905	196
Basic slag .. ..	—	23	12,965	438	—	—	59
Di-calcium phosphates .. ..	(a)	(a)	(a)	(a)	(a)	8,496	7,875
Germany (Federal)—							
Phosphate-rock, etc. .. ..	(a)	259,159	(d) 445,000	554,451	461,189	586,147	642,381
Superphosphates .. ..	(a)	(a)	(c)(d) 52,000	396,461	318,583	62,349	—
Basic slag .. ..	(a)	(a)	(a)	31,007	145,624	144,217	248,235
Greece—							
Phosphate-rock .. ..	(a)	57,778	38,477	55,496	60,000	42,000	75,000
Hungary—							
Phosphate-rock .. ..	(a)	—	15,413	25,934	27,000	61,000	47,000
Iceland—							
Superphosphates .. ..	—	—	1,072	1,422	633	2,165	2,388
Italy—							
Phosphate-rock .. ..	{ (a)	{ 439,940	581,120	702,584	761,511	862,295	1,104,346
Superphosphates .. ..		{ (a)	—	—	492	677	—
Basic slag .. ..		{ (a)	21,345	22,899	29,151	29,500	46,509
Netherlands—							
Phosphate-rock .. ..	{ (a)	{ 335,498	476,152	508,130	558,975	542,673	589,560
Superphosphates .. ..		{ 11,251	2,744	9,747	12,645	51,262	249
Basic slag .. ..	{ (a)	{ 141,533	247,400	231,134	156,728	309,203	297,658
Norway—							
Phosphate-rock .. ..	21,807	16,074	26,866	23,812	22,460	67,907	66,705
Superphosphates .. ..	20,274	87,037	66,422	71,272	122,246	90,292	65,610
Basic slag .. ..	—	10,416	4,824	7,801	4,782	3,899	7,745
Poland—							
Phosphate-rock .. ..	(a)	92,155	131,411	176,675	227,000	192,000	284,000
Portugal—							
Phosphate-rock .. ..	124,735	247,518	167,726	197,068	173,984	178,700	198,889
Basic slag .. ..	(a)	4,851	6,312	2,444	—	1,026	4,671
Spain—							
Phosphate-rock .. ..	266,244	153,362	246,350	429,220	414,953	410,596	579,166
Superphosphates, etc. .. ..	2,761	365	—	20	10	—	—
Basic slag .. ..	—	—	4,892	—	—	—	—

(a) Information not available.  
 (d) Bizonal area only.

(b) January to October only.

(c) P<sub>2</sub>O<sub>5</sub> content.

## IMPORTS OF PHOSPHATES, ETC. (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Sweden—							
Phosphate-rock .. ..	51,183	178,580	186,785	217,015	253,732	335,675	422,285
Superphosphates .. ..	—	—	—	—	10,202	68,859	33,353
Basic slag .. ..	—	1	3,547	2,224	—	932	7,483
Switzerland—							
Phosphate-rock (b) .. ..	13,076	47,568	41,120	17,327	9,535	22,344	60,749
Superphosphates, etc. .. ..	1,783	8,132	5,291	6,240	7,190	11,470	11,768
Basic slag .. ..	12,961	106,732	137,057	116,497	114,707	122,385	111,563
Yugoslavia—							
Phosphates .. ..	(a)	(a)	(a)	(a)	(a)	13,562	35,720
Algeria—							
Phosphate-rock .. ..	1,057	—	—	—	—	—	—
Superphosphates .. ..	—	113	1,084	1,151	49	394	1,202
Basic slag .. ..	—	—	507	—	3,711	1,850	3,189
Egypt—							
Superphosphates .. ..	—	—	40,747	8,434	51,000	42,701	(a)
Tunis—							
Superphosphates .. ..	8,670	8,331	2,715	12,068	(a)	(a)	(a)
Cuba—							
Superphosphates .. ..	18,590	(a)	(a)	18,452	10,989	15,488	(a)
Calcium phosphate .. ..	(a)	(a)	(a)	6,138	19,741	(a)	(a)
Mexico—							
Superphosphates .. ..	—	61	127	1,265	(a)	39	684
United States—							
Phosphate-rock .. ..	141,658	59,739	43,477	48,104	64,891	87,173	89,823
Superphosphates .. ..	1,773	2,495	6,066	3,229	1,273	4,508	2,615
Basic slag .. ..	—	—	—	29	93	179	96
Ammonium phosphates .. ..	82,819	81,351	93,919	96,632	112,745	95,215	120,575
Brazil—							
Phosphate-rock .. ..	1,640	14,309	10,051	4,398	16,815	(a)	(a)
Superphosphates .. ..	20,378	17,064	44,696	42,548	50,660	127,401	(a)
Chile—							
Superphosphates .. ..	107	619	(a)	862	1,432	10	44
Colombia—							
Superphosphates .. ..	(a)	1,598	(a)	(a)	4,710	1,490	(a)
Di-calcium phosphates .. ..	(a)	2,110	(a)	(a)	(a)	(a)	(a)
French Indo-China—							
Phosphate-rock .. ..	(a)	(a)	6,053	(a)	12,185	9,762	(a)
Israel—							
Phosphate-rock .. ..	(c)	(c)	(c)	(c)	4,924	4,985	7,100
Japan (total imports)—							
Phosphate-rock .. ..	(a)	193,930	1,116,402	406,433	466,000	986,788	1,057,000
Superphosphates .. ..	(a)	(a)	2,644	(a)	(a)	(a)	(a)
Syria and Lebanon—							
Phosphates .. ..	1,626	803	(a)	(a)	(a)	(a)	(a)
Turkey—							
Phosphate-rock .. ..	(a)	3,050	4,444	3,937	5,905	4,528	18,873

(a) Information not available.

(b) Estimated on imports from producing countries.

(c) See "Palestine" under British Countries.

**PLATINUM**  
**PRODUCTION OF PLATINUM METALS**  
(Troy ounces)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Sierra Leone—							
Crude platinum ..	16	105	431	109	38	—	—
Union of South Africa—							
Crude ( <i>Pt metals content</i> )	22,884	21,877	23,332	22,549	30,470	61,845	58,323
Matte ( <i>Pt metals content</i> ) ..	52,030	50,575	55,508	46,374	56,904	94,140	132,575
Osmiridium (crude) (b) ..	6,259	6,100	6,071	5,520	6,031	6,450	6,359
Canada—							
Recovered from Ontario nickel-copper ores (c)—							
Platinum ..	208,234	121,771	94,570	121,404	153,784	124,571	154,956
Other platinum metals ..	458,674	117,566	110,332	148,343	182,233	148,741	162,480
Australia—							
New South Wales—							
Concentrates( <i>Pt content</i> ) ..	2	—	—	—	—	16	8
Tasmania—							
Osmiridium .. ..	109	95	99	92	39	46	33
New Zealand—							
Crude platinum .. ..	—	14	—	—	—	—	8
<b>FOREIGN COUNTRIES</b>							
Finland—							
Platinum and palladium ..	(a)	(a)	(a)	39	—	—	—
U.S.S.R.—							
Crude platinum (d) ..	150,000	175,000	150,000	125,000	100,000	100,000	100,000
Belgian Congo—							
Palladium .. ..	—	—	—	209	106	—	—
Ethiopia (estimated)—							
Crude platinum .. ..	3,000	3,000	3,000	3,000	3,000	3,000	3,000

(a) Information not available.

(b) It is estimated by the Department of Mines, Union of South Africa, that the osmiridium sold during these years contained the following amounts of the metals mentioned below (fine ounces):—

	1945	1946	1947	1948	1949	1950	1951
Osmium .. ..	1,976	1,970	1,859	1,679	2,213	1,710	1,774
Iridium .. ..	1,768	1,691	1,677	1,483	1,964	1,594	1,692
Ruthenium .. ..	881	876	826	717	993	792	864
Platinum .. ..	847	853	785	671	891	724	802
Rhodium .. ..	49	47	42	37	56	52	57

(c) From 1945 inclusive the figures refer to the metal content of concentrates produced from nickel-copper ores.  
Prior to that year the figures represented refined metals recovered plus the content of concentrates sold.

The 1945 figures include an accumulated revision of previous years.

(d) U.S. Bureau of Mines estimate.

PRODUCTION OF PLATINUM METALS (*Cont.*)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
United States (b)—							
Crude platinum ..	26,551	22,949	13,836	13,741	17,169	22,346	25,965
Ore ( <i>Pt metals content</i> ) ..	—	—	—	—	—	—	—
New platinum metals recovered by refineries from gold and copper ores of domestic origin—							
Platinum .. ..	1,068	555	1,098	1,251	1,844	3,722	5,825
Palladium .. ..	3,396	2,735	3,471	4,261	5,794	11,533	5,161
Iridium, osmiridium, etc. .. ..	31	73	1	—	—	254	195
Colombia—							
Crude platinum .. ..	34,758	43,835	43,035	40,047	20,797	26,445	(c) 32,000
Bolivia—							
Platinum .. ..	(a)	253	—	—	—	—	—
Japan—							
Platinum .. ..	(a)	(a)	(a)	31	34	1,938	—
WORLD'S TOTAL (c)		998,000	567,000	505,000	532,000	578,000	605,000
							687,000

(a) Information not available.

(b) Secondary platinum metals recovered in the United States were as follows (troy ounces):—

	1945	1946	1947	1948	1949	1950	1951
Platinum .. ..	58,942	40,385	54,190	58,527	41,734	33,894	22,799
Palladium .. ..	32,968	27,856	27,492	28,418	37,209	21,167	28,073
Iridium .. ..	812	2,002	2,089	2,214	1,101	1,064	—
Other platinum metals	3,400	2,394	3,317	4,742	3,403	1,988	2,904

(c) Estimated.

(d) Exports.

**EXPORTS OF PLATINUM\***

(Domestic Produce)

(Troy ounces)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
<b>United Kingdom—</b>							
Platinum—							
Ingots, grain and powder ..	3,078	17,504	17,306	57,476	102,417	158,257	129,871
Other kinds, including alloys ..	1,623	33,939	30,790	25,939	23,245	31,725	26,156
Other platinum metals and alloys ..	119,477	21,273	9,940	111,501	221,644	265,774	202,012
<b>Sierra Leone—</b>							
Unrefined platinum ..	8	59	319	104	—	—	—
<b>Union of South Africa—</b>							
Osmiridium ..	6,341	6,142	5,958	5,081	6,351	6,368	5,960
Crude platinum metals ..	56,729	61,310	56,288	64,579	85,820	105,251	145,395
<b>Canada—</b>							
Concentrates, etc. (b) ..	(\$2,988,238)	(\$3,634,264)	(\$2,893,008)	(\$4,162,961)	(\$4,791,495)	(\$6,973,943)	(\$10,284,817)
Scrap ..	407	933	325	537	634	192	185
<b>Australia—</b>							
Platinum and platinum group metals ..	—	159	402	12	492	31	582
<b>New Zealand—</b>							
Platinum, etc. (jewellers' sweepings) ..	29	31	11	339	73	175	66
 <b>FOREIGN COUNTRIES</b>							
<b>Czechoslovakia—</b>							
Unwrought platinum and scrap ..	(a)	237	96	—	(a)	(a)	(a)
<b>Denmark—</b>							
Rods, sheets, wire, scrap, etc. ..	—	96	547	547	3,762	514	3,633
<b>France—</b>							
Unwrought platinum and scrap ..	—	611	1,350	675	1,833	1,382	997
Drawn or rolled platinum ..	225	257	129	32	—	—	836
<b>Germany (Federal)—</b>							
Platinum metals and alloys ..	(a)	(a)	(a)	—	900	4,088	2,986
<b>Italy—</b>							
Sheets, bars, dust, scrap, etc. ..	(a)	—	—	—	—	27	—
<b>Netherlands—</b>							
Unwrought platinum ..	(a)	482	2,604	4,533	7,363	2,792	17,458
<b>Portugal—</b>							
Bars ..	—	64	—	—	—	—	(a)
<b>Sweden—</b>							
Unwrought platinum ..	418	386	354	611	546	1,479	1,447
<b>Switzerland—</b>							
Unwrought platinum ..	32	—	643	707	161	2,636	739

\* Official figures which, in many cases, do not include platinum sent by letter post.

(a) Information not available.

(b) Value of platinum and platinum metals contained in concentrates and other forms.

EXPORTS OF PLATINUM (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
U.S.S.R. .. .. ..	(b)						
Cuba—							
Platinum .. ..	418	(a)	(a)	(a)	(a)	(a)	(a)
Palladium .. ..	193	(a)	(a)	(a)	(a)	(a)	(a)
United States—							
Ores, etc. ( <i>Pt. content</i> ) ..	—	134	42	5	165	82	732
Ingots, sheets, wire, etc.	7,781	15,468	17,766	15,471	18,150	12,753	8,760
Palladium, rhodium, etc., and alloys .. ..	10,951	4,294	7,783	20,994	22,628	24,946	52,088
Colombia—							
Platinum .. ..	30,883	43,854	38,715	40,047	20,797	24,452	17,157

(a) Information not available.

(b) Exports of platinum metals from U.S.S.R. are not published, but imports into the undermentioned countries from U.S.S.R. were (troy ounces):—

	1945	1946	1947	1948	1949	1950	1951
United Kingdom ..	—	14,136	12,636	3,201	—	(a)	(a)
United States ..	77,741	106,851	94,367	67,705	—	45,896	16,075

**IMPORTS OF PLATINUM\***

(Less Re-exports)

(Troy ounces)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom (b)—							
Ingots, grain and powder	363	14,936	12,790	2,926	695	2,360	6,963
Other kinds, including alloys .. ..	1,294	2,439	1,271	412	275	24	62
Other platinum metals and alloys .. ..	150	1,646	3,054	(c)	796	68	13,056
Union of South Africa—							
Platinum .. ..	(a)	2,230	608	973	977	(a)	(a)
Canada—							
Platinum, palladium and iridium .. ..	(\$912,664)	(\$2,031,358)	(\$1,869,090)	(\$2,664,532)	(\$2,846,300)	(\$7,019,709)	(\$5,789,129)
Palestine—							
Platinum .. ..	(\$8,267)	(\$56,860)	(a)	(a)	(f)	(f)	(f)
Palladium .. ..	(\$12,460)	(\$24,139)	(a)	(a)	(f)	(f)	(f)
Australia—							
Platinum bars, rods, etc.	484	(d) 51	(d) 347	{ 544	202	355	515
Other platinum metals ..				1,181	377	520	(a)
New Zealand—							
Bars, sheets, wire, etc. ..	187	1,022	1,518	2,158	851	1,150	876
<b>FOREIGN COUNTRIES</b>							
Austria—							
Ingots, sheets, wire, etc.	(a)	(a)	96	1,415	(a)	(a)	(a)
Czechoslovakia—							
Unwrought platinum and scrap .. ..	{ (a)	{ —	675	(e) 642	(a)	(a)	(a)
Bars, plates, sheets and wire .. ..			225	(e) 1,445	(a)	(a)	(a)
Denmark—							
Rods, sheets, wire and scrap .. ..	96	804	289	1,832	707	1,125	1,190
Finland (total imports)—							
Unwrought platinum ..	19	167	84	138	—	3	6
France—							
Unwrought platinum and scrap .. ..	12,314	11,446	3,183	129	1,768	482	3,729
Drawn or rolled platinum		932	643	—	—	—	514
Germany (Federal)—							
Platinum metals and alloys	(a)	(a)	(a)	1,929	37,423	76,742	57,539
Italy—							
Bars, dust and scrap ..	—	64	75	280	97	2,739	4,565
Sheets and foil and wire	—	64	32	305	39	163	707
Netherlands—							
Unwrought platinum ..	(a)	1,640	2,476	2,861	4,951	6,912	4,501
Norway—							
Unwrought platinum ..	—	3,582	1,645	2,020	644	855	1,689
	257	409	1,439	845	1,166	903	(a)

\* Official figures, which in many cases do not include platinum sent by letter post.

(a) Information not available.

(b) Imports of ores and concentrates containing platinum are not separately recorded. The values of platinum and platinum metals contained in concentrates and other forms exported from Canada to the United Kingdom were as follows:—1945—£1,213,179; 1946—£2,058,786; 1947—£1,793,731; 1948—£2,768,196; 1949—£3,182,112; 1950—£3,799,238; 1951—£5,193,010.

In addition Crude platinum metals and Osmiridium exported from the Union of South Africa to the United Kingdom (for further refining in the case of the former), were as follows (troy ounces):—

	1945	1946	1947	1948	1949	1950	1951
Crude platinum metals	56,729	61,310	56,288	64,579	85,820	105,750	145,395
Osmiridium .. ..	6,341	6,142	5,958	5,081	6,351	5,892	6,883

(c) Excess of re-exports.

(d) Total imports for years ended June 30 of the year stated.

(e) January to October only.

(f) See "Israel" under Foreign Countries.

## IMPORTS OF PLATINUM (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Portugal—							
Sheets, wire, etc. ..	27	144	385	227	107	206	260
Palladium .. ..	—	804	739	—	675	96	(a)
Spain—							
Bars, sheets, wire etc. ..	—	180	225	10	449	379	—
Sweden—							
Unwrought platinum ..	535	640	765	407	144	478	(a)
Switzerland—							
Unwrought platinum ..	547	450	1,222	322	1,254	2,218	2,251
Yugoslavia—							
Unwrought platinum ..	(a)	(a)	(a)	(a)	(a)	129	32
Egypt—							
Ingots, bars, sheets, etc.	1,772	7,592	1,374	316	311	(a)	(a)
Cuba—							
Ingots and bars .. ..	(a)	(a)	(a)	707	457	(a)	(a)
Palladium .. ..	(a)	(a)	(a)	—	103	(a)	(a)
Mexico—							
Ingots and bars .. ..	164	763	156	18	(a)	(a)	(a)
Sheets and wire .. ..	947	2,616	(a)	(a)	(a)	(a)	(a)
United States—							
Ore (b) .. ..	138,089	26,614	4,486	1,943	505	628	197
Grains and nuggets (b) ..	33,875	51,330	51,116	28,263	27,728	35,793	34,425
Sponge and scrap (b) ..	2,368	49,929	50,980	68,907	69,768	106,663	135,177
Ingots, bars, sheets (b) ..	70,849	65,801	55,929	40,295	28,180	105,910	158,876
Iridium .. ..	6,197	12,402	5,011	5,472	4,221	6,457	3,144
Osmium and osmiridium ..	982	2,645	2,588	1,995	2,857	4,759	3,603
Palladium .. ..	118,267	195,555	133,962	119,949	73,770	142,673	239,151
Rhodium and ruthenium ..	13,028	9,419	5,749	8,604	11,255	19,506	26,724
Argentina—							
Platinum .. ..	922	5,496	(a)	(a)	(a)	(a)	(a)
Brazil (total imports)—							
Ingots, sheets and wire ..	734	1,455	—	33	23	(a)	(a)
Chile—							
Ingots, bars, scrap, etc.	233	613	(a)	(a)	(a)	(a)	(a)
Uruguay—							
Ingots .. ..	{ (a)	(a)	(a)	1,480	1,767	820	(a)
Palladium .. ..							
Venezuela—							
Unwrought platinum ..	64	(a)	129	32	(a)	(a)	(a)
Israel—							
Platinum .. ..	(c)	(c)	(c)	(c)	754	1,267	(a)
Palladium .. ..	(c)	(c)	(c)	(c)	2,635	22,323	(a)
Syria and Lebanon—							
Unwrought platinum ..	379	843	(a)	(a)	(a)	(a)	(a)
Turkey—							
Sheets .. ..	161	—	—	64	—	—	198

(a) Information not available.

(b) Platinum content.

(c) See " Palestine " under British Countries.

**POTASH MINERALS**  
**PRODUCTION OF POTASH**

(Long tons)

Producing Country and Description	1945	1946	1947	1948	1949	1950	1951	K <sub>2</sub> O Content or Equivalent					
								1945	1946	1947	1948	1949	1950
<b>BRITISH COUNTRIES</b>													
Palestine— Muriate (chloride) ..	92,146	89,141	121,218	9,570	—	—	—	46,100	44,600	59,870	5,742	—	—
India— Nitrate ..	(b) 7,467	(b) 3,457	4,144	2,972	6,354	5,501	6,384	3,700	1,700	2,000	1,500	3,000	2,700
Australia— Alumite ..	..	22,259	35,852	34,731	39,832	32,694	1,301	449	455	574	1,725	1,850	1,480
<b>TOTAL (estimated)</b>								50,300	46,900	64,000	9,000	5,500	2,760
<b>FOREIGN COUNTRIES</b>													
France (c)— Sylvinitic 12-22% K <sub>2</sub> O Fertilizer salts ..	842,215	3,502,554	4,102,886	4,409,508	4,886,091	5,747,803	5,687,329	{ 20,770	27,972	62,882	79,625	80,157	88,199
30-40% K <sub>2</sub> O ..								73,969	168,580	361,735	386,986	345,301	340,576
Chloride ..								{ 47,931	369,870	198,232	206,177	365,894	459,240
50% K <sub>2</sub> O and over Germany (Federal)— Kainite, sylvinitic, etc. (a)	2,607,000	3,401,000	5,193,000	7,175,400	8,786,200	10,676,168	(a)	284,000	337,000	530,000	877,000	1,077,000	1,303,000

(a) Information not available.

(b) Exports plus consumption in tea gardens.

(c) Crude salts as mined.

## PRODUCTION OF POTASH (Cont.)

Producing Country and Description	1945	1946	1947	1948	1949	1950	1951	K <sub>2</sub> O Content or equivalent						
								1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>														
Spain— Camallite, sylvinit, etc.	699,275	780,791	612,327	977,064	903,655	997,430	1,042,156	119,480	133,339	151,380	149,709	146,414	174,890	193,054
Eritrea— Chloride ..	(a)	(a)	(a)	115	420	546	(a)	(a)	(a)	(a)	(a)	200	200	260
United States— Mariate (chloride) — 60-62% K <sub>2</sub> O (c) ..	1,123,511	1,117,043	1,244,823	1,360,658	1,351,007	1,648,624	1,828,387	139,104	139,310	139,625	919,531	1,017,751	998,567	1,149,734
48-50% K <sub>2</sub> O ..	105,069	109,158	111,714	130,067	153,996	155,310	159,310	17,636	17,625	17,625	780,574	831,975	1,268,146	
Fertilizer salts ..	103,391	87,797	155,487	232,446	158,317	19,225	19,225	224,558	224,558	224,558	199,204			
Sulphate, etc. (b) ..	86,159	192,988	189,562	186,198	172,958									
Chile— Chloride ..	(a)	(a)	(a)	6,550	4,941	(a)	(a)	(a)	(a)	(a)	(a)	1,400	1,400	1,419
China— Nitrate ..	(a)	(a)	(a)	(a)	(a)	(a)	(a)							
Japan— Alunite ..	(a)	(a)	(a)	(a)	(a)	3,488	3,342	(a)	(a)	(a)	(a)	210	210	(a)
Korea (Southern)— Alunite (impure) ..	—	—	—	—	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
<b>Total (d) ..</b>	<b>..</b>							2,100,000	2,500,000	2,990,000	3,600,000	3,900,000	4,500,000	4,800,000
<b>World's Total (d)</b>								2,150,000	2,650,000	3,054,000	3,610,000	3,910,000	4,500,000	4,800,000

Note.—Potash is produced in Poland, the U.S.S.R., the Russian Zone of Germany and certain other countries, but statistics are not available. An allowance has been made for these countries in the world's total.

(a) Information not available.

(b) Including sulphate of potash-magnesia.

(c) Including refined potash and some 93-96% KCl.

(d) Estimated.

# EXPORTS OF POTASH SALTS

*(Domestic Produce)*

*(Long tons)*

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Chromate and bichromate	238	460	24	424	697	653	200
Nitrate .. ..	546	2,752	2,133	2,854	1,195	1,868	2,364
Sulphate .. ..	6	35	86	25	34	50	68
Other compounds ..	950	2,393	2,232	1,741	1,515	2,014	2,251
Hong Kong (re-exports)—							
Nitrate .. ..	{(a)}	{(a)}	120	2,275	(a)	(a)	(a)
Chlorate .. ..			630	1,529		2,500	2,709
India—							
Nitrate .. ..	143	1,135	816	36	15	64	227
Malaya (including re-exports)—							
Fertilizer salts .. ..	(a)	(a)	3	8	(a)	1	19
Nitrate .. ..			—	5		5	14
Palestine—							
Fertilizer salts .. ..	5,100	201	(a)	(a)	(a)	—	—
Chloride .. ..	88,260	67,315		117,888	14,548		
Chlorate .. ..	36	3		(a)	(a)		
<b>FOREIGN COUNTRIES</b>							
Belgium-Luxemburg E.U.—							
Fertilizer salts .. ..	{(a)}	{(a)}	{(a)}	46,094	97,984	125,205	42,768
Carbonate .. ..				2,793	2,782	2,790	1,657
Caustic potash .. ..				5,367	2,566	3,641	3,748
Chloride .. ..				167,388	280,323	401,263	380,217
Chlorates .. ..				(a)	30	6	238
Chromates, including those of sodium .. ..				215	124	387	712
Nitrate .. ..	{(a)}	{(a)}	{(a)}	998	1,729	1,111	1,328
Sulphate .. ..				92,828	92,684	80,317	123,994
Czechoslovakia—							
Carbonate .. ..	(a)	33	1	(c)	40	(a)	(a)
Manganate and permanganate, including those of sodium .. ..	(a)	411	100	(c)	77	(a)	(a)
Finland—							
Chlorate .. ..	—	—	689	953	488	983	1,475
France—							
Sylvinit, etc. .. ..	123,378	539,694	326,953	379,272	522,693	535,502	366,385
Chloride .. ..	28,179	363,184	360,215	(e) 246,635	(e) 333,599	(e) 501,244	(e) 485,526
Carbonate .. ..	4	3,478	6,831	5,362	4,534	6,065	7,676
Caustic potash .. ..	835	3,228	7,555	2,932	4,061	5,541	10,140
Chlorate .. ..	303	1,970	2,788	1,595	2,436	2,095	3,515
Nitrate .. ..	46	1,144	4,310	3,165	4,157	4,551	3,705
Sulphate .. ..	1,170	20,343	43,491	(b)	(b)	(b)	(b)
Germany (Federal)—							
Fertilizer salts .. ..	{(a)}	{(a)}	{(d) 22,000}	33,614	113,834	343,806	331,546
Carbonate and wool grease ash .. ..				(a)	—	645	5,619
Caustic potash .. ..				(a)	127	579	4,398

(a) Information not available.

(c) January to October only.

(d) K<sub>2</sub>O content.

(b) Included with chloride.

(e) Including other fertilizer salts.

EXPORTS OF POTASH SALTS (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Germany (Cont.)—							
Chlorate .. ..				(a)	55	491	(b) 207
Manganates .. ..					65	236	(b) 48
Nitrate .. ..	(a)	(a)	(a)		88	946	1,784
Chloride .. ..				(a)	36,965	263,031	389,762
Sulphates .. ..				69,439	46,410	98,482	175,732
Netherlands—							
Caustic potash .. ..		1	3		61	165	723
Chloride .. ..	(a)	370	580	1,188	994	1,206	920
Nitrate .. ..		—	—	1	5	17	25
Sulphate .. ..		75	489	409	589	547	539
Spain—							
Fertilizer salts .. ..	124,470	146,726	193,462	205,827	235,929	184,160	246,093
Chlorate .. ..	17	16	52	43	22	23	116
Sweden—							
Carbonate .. ..	4	18	25	—	—	30	34
Caustic potash .. ..	368	493	999	1,579	1,837	1,210	2,316
Switzerland—							
Nitrate (crude) .. ..	41	271	298	14,172	1,256	15,449	8,686
United States—							
Chloride .. ..	76,200	69,872	76,587	75,214	82,235	82,024	84,245
Sulphate .. ..	8,055	—	(a)	(a)	(a)	(a)	(a)
Other fertilizer salts .. ..	9,215	16,576	15,322	17,800	17,011	14,380	13,200
Chromates .. ..	665	1,745	1,000	1,147	1,270	372	1,611
Caustic potash .. ..	7,468	7,980	8,315	9,704	2,380	1,801	3,578
Carbonates, etc. .. ..	2,559						
Chlorates, etc. .. ..	1,439						
Nitrates, etc. .. ..	3,363						
Other compounds .. ..	1,125						
Chile—							
Chloride .. ..	2,283	2,590	2,174	—	(a)	(a)	(a)
Nitrate .. ..	715	701	165,669	103,177	52,655	73,619	52,388
Chlorate .. ..	155	101	169	551	(a)	(a)	(a)

(a) Information not available.

(b) January to September only.

**IMPORTS OF POTASH SALTS**

(Less Re-exports)

(Long tons)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Fertilizer salts .. ..	—	—	—	—	664	691	9,321
Carbonate .. ..	—	148	215	354	476	3,946	6,660
Caustic potash and lyes .. ..	2,471	1,834	834	1,213	229	1,356	2,554
Chlorate .. ..	3	265	532	607	859	815	794
Chloride .. ..	164,685	223,281	315,675	438,036	394,192	396,847	445,047
Nitrate .. ..	(c) 5	297	110	25	(c) 37	244	489
Sulphate .. ..	—	2,964	17,315	18,177	20,901	13,850	13,681
Other compounds .. ..	47	277	531	278	1,201	489	1,123
Kenya—							
Fertilizer salts .. ..	(a)	(a)	(a)	(a)	123	178	109
Mauritius—							
Nitrate .. ..	—	500	—	1,976	991	988	1,482
Northern Rhodesia—							
Compounds .. ..	91	52	62	74	11	44	68
Southern Rhodesia—							
Compounds .. ..	52	35	56	65	109	56	95
Tanganyika—							
Fertilizer salts .. ..	(a)	(a)	(a)	6	60	50	146
Uganda—							
Fertilizer salts .. ..	(a)	(a)	(a)	(a)	1	12	46
Union of South Africa—							
Fertilizer salts .. ..	(b) 4,696	3,404	8,760	3,846	129	(a)	(a)
Nitrate .. ..	—	112	22	60	65	(a)	(a)
Caustic potash .. ..	(b) 159	210	261	265	244	219	(a)
Other compounds .. ..	(b) 377	461	3,153	1,285	1,141	(a)	(a)
Canada—							
Fertilizer salts .. ..	10,328	6,611	7,141	7,634	6,181	2,043	1,545
Caustic potash .. ..	1,178	1,951	2,335	3,156	1,578	2,141	2,168
Chlorate .. ..	1	147	40	24	26	32	71
Crude chloride .. ..	62,693	69,863	86,366	92,150	90,136	87,954	92,650
Nitrate .. ..	655	366	261	355	439	448	634
Crude sulphate .. ..	3,522	3,809	2,596	4,634	5,635	7,195	10,012
Other compounds .. ..	809	765	772	687	1,046	1,124	1,436
British West Indies—							
Barbados—							
Fertilizer salts .. ..	332	2,783	5,167	3,250	3,687	6,289	4,396
Jamaica—							
Fertilizer salts .. ..	508	342	406	1,305	2,083	1,624	3,584
St. Vincent—							
Chloride .. ..	—	10	—	—	10	(a)	(a)
Sulphate .. ..	—	(a)	—	—	(a)	(a)	(a)
Trinidad and Tobago—							
Chloride and sulphate .. ..	271	160	1,062	.960	1,241	630	1,467
Ceylon—							
Chloride .. ..	3,893	6,740	7,484	5,540	12,966	18,535	24,081
Nitrate of potash refuse .. ..	—	—	—	—	—	3	—
Sulphate .. ..	—	10	38	675	124	149	50
Hong Kong (total imports)—							
Nitrate .. ..	(a)	202	446	(a)	(a)	(a)	(a)
Chlorate .. ..	(a)	1,560	3,526	1,571	3,541	3,283	2,681
India—							
Bichromate .. ..	7	—	50	3	—	—	2
Chlorate .. ..	185	12	435	930	523	574	860
Chloride .. ..	1,530	1,108	2,933	1,528	4,561	4,613	13,561
Other compounds .. ..	558	800	889	2,288	4,148	1,133	2,825
Malaya (total imports)—							
Fertilizer salts .. ..	(a)	136	3,815	280	4,824	2,078	4,808
Nitrate .. ..	(a)	53	4	—	41	10	84
Palestine—							
Chlorate .. ..	—	20	(a)	(a)	(a)	(a)	(a)

(a) Information not available.

(b) Total imports.

(c) Excess of re-exports.

## IMPORTS OF POTASH SALTS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES (Cont.)</b>							
Australia—							
Bichromate .. .	125	61	5	37	78	(c) 53	(a) 894
Carbonate .. .	229	831	494	665	454	569	605
Caustic potash .. .	196	660	686	1,503	222	230	23
Chlorate .. .	130	—	104	3	17	6	9,716
Chloride .. .	(c) 3,329	(c) 7,245	(c) 6,356	(c) 10,707	13,423	12,992	805
Nitrate .. .	95	124	139	35	218	269	865
Sulphate .. .	—	—	—	(c) 150	196	734	—
New Zealand—							
Caustic potash and pearl-ash .. .	39	5	70	146	50	33	81
Chlorate .. .	55	23	40	32	259	45	47
Chloride .. .	5,558	3,661	7,941	2,146	5,272	10,599	13,217
Nitrate .. .	2	1	22	11	10	94	64
Sulphate .. .	215	223	645	550	2,476	1,854	1,408
Other fertilizer salts .. .	17	36	17	4	—	130	190
Compounds other than fertilizer (£N.Z.) .. .	(£8,226)	(£9,070)	(£16,968)	(a)	147	4	44
Irish Republic—							
Kainite .. .	—	—	1	2,668	—	—	—
Fertilizer salts (20-40% K <sub>2</sub> O)	1	—	1	1,367	6,039	3,002	—
Chlorate .. .	52	21	45	68	81	101	80
Chloride .. .	1,538	2,662	13,414	11,490	9,108	22,512	29,935
Nitrate .. .	55	46	55	40	141	215	95
Sulphate .. .	1	—	370	421	535	845	530
Other compounds .. .	33	35	43	87	48	77	126
<b>FOREIGN COUNTRIES</b>							
Austria—							
Fertilizer salts .. .	8,135	7,941	66,639	43,037	88,257		
Caustic potash .. .	37	116	109	79	458		
Carbonate .. .	64	138	207	179	959		
Chromates .. .	33	225	99	169	66		
Nitrate .. .	37	41	119	205	206		
Belgium-Luxemburg E.U.—							
Fertilizer salts .. .	19,715	(a)	(a)	253,135	447,221	408,726	161,523
Carbonate .. .				1,131	1,179	3	1,025
Caustic potash .. .				1,323	946	3,188	1,142
Chlorates .. .				2,049	631	820	4,718
Chloride .. .				304,640	414,390	574,478	773,902
Chromates, including those of sodium .. .	(a)	(a)	(a)	250	610	784	813
Manganate and perman-ganate .. .				59	(a)	160	214
Nitrate .. .				41	27	113	124
Sulphate .. .				4,168	6,340	3,396	7,249
Bulgaria—							
Carbonate .. .	14	55					
Caustic potash .. .	42	13					
Chloride .. .	41	216	(a)	(a)	(a)	(a)	(a)
Chromates .. .	—	19					
Nitrate .. .	103	118					
Czechoslovakia—							
Kainite .. .	20	—	(b) —				
Fertilizer salts (38-44% K <sub>2</sub> O) .. .	86,157	100,146	(b) 80,770				
Fertilizer salts (other) .. .	4,921	—	(b) —				
Carbonate and nitrate .. .	—	690	(b) 515				
Chloride .. .	—	13,759	(b) 10,837				
Sulphate .. .	2,953	—	(b) —				

(a) Information not available.

(c) Years ended June 30 of that stated.

(b) January to October only.

## IMPORTS OF POTASH SALTS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Denmark—							
Kainite . . .	2,160	—	—	150,203	190,275	223,091	228,889
Fertilizer salts . . .	26,398	65,290	207,374	—	—	—	—
Carbonate . . .	35	311	138	456	558	931	602
Caustic potash . . .	253	919	605	1,161	1,194	1,557	825
Chlorate . . .	78	99	80	139	187	170	154
Chloride . . .	—	533	82	921	213	43	523
Chromates . . .	52	46	—	45	36	30	54
Nitrate . . .	12	462	380	335	587	739	939
Sulphate . . .	—	1	4	2	11	10	10
Finland (total imports)—							
Fertilizer salts . . .	4,898	36,106	73,791	82,373	91,991	55,000	72,166
Carbonate . . .	17	103	139	186	303	178	218
Caustic potash . . .	39	65	31	62	79	34	134
Chloride . . .	295	758	1,461	591	1,446	2,108	1,973
Nitrate . . .	—	17	33	37	55	30	100
France—							
Fertilizer salts . . .	(a)	(a)	(a)	—	3,935	2,724	10,969
Carbonate . . .	4	22	—	—	—	—	—
Caustic potash . . .	33	7	15	15	14	5	12
Chlorate . . .	—	—	—	—	—	37	—
Chloride . . .	—	—	—	1	—	—	(a)
Sulphate . . .	1,170	—	—	—	6	4	(a)
Germany (Federal)—							
Fertilizer salts . . .					11,508	—	—
Carbonate and wool grease ash . . .					761	358	4
Caustic potash . . .					153	2	197
Chlorate . . .					(a)	421	596
Manganates . . .					26	157	30
Nitrate . . .					—	34	—
Greece—							
Carbonate . . .	263	8	146	618	393	2,162	481
Caustic potash . . .	102	20	13	83	63	22	11
Nitrate . . .	(a)	125	55	10	31	126	123
Iceland—							
Fertilizer salts . . .	246	450	(a)	(a)	886	1,561	1,783
Carbonate . . .	13	8	(a)	(a)	(a)	(a)	(a)
Caustic potash . . .	22	29	(a)	(a)	38	10	54
Italy—							
Fertilizer salts . . .	(a)	(a)	18,098	26,471	44,751	48,562	67,695
Carbonate . . .	(a)	(a)	1,216	683	1,294	1,986	2,986
Caustic potash . . .	(a)	(a)	1,346	2,813	2,813	2,861	4,082
Netherlands—							
Kainite . . .				62,622	18,393	47,147	48,657
Fertilizer salts (20% K <sub>2</sub> O) . . .	30,829	42,699	22,482	61,143	44,896	36,458	—
do. (40% K <sub>2</sub> O) . . .	98,429	162,614	181,379	274,008	298,199	282,331	—
do. (50% K <sub>2</sub> O) . . .	22,673	1,614	2,036	166	—	—	—
Caustic potash . . .	(a)	590	649	6,129	1,619	3,958	4,992
Chloride . . .	—	7,281	11,851	24,762	16,551	3,263	5,484
Nitrate . . .	—	156	198	220	169	1,891	1,647
Sulphate . . .	—	3,228	13,429	31,907	24,806	48,370	10,420
Patent potash . . .	—	—	1,716	—	—	—	41,724
Norway—							
Fertilizer salts . . .	2,282	52,150	55,991	83,492	113,532	78,255	109,794
Carbonate . . .	343	353	291	396	486	377	417
Caustic potash and lyes . . .	400	704	979	1,406	2,188	1,077	1,554
Chloride . . .	10	7,251	3,569	8,403	16,551	10,700	7,480
Nitrate . . .	210	122	115	93	169	106	(a)
Portugal—							
Carbonate . . .	14	53	111	51	15	42	86
Caustic potash . . .	2	47	44	70	19	15	97
Chlorate . . .	177	171	231	240	138	290	305
Chloride . . .	20,488	9,858	11,850	4,639	10,139	7,910	9,803

(a) Information not available.

(b) January to September only.

## IMPORTS OF POTASH SALTS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Portugal (Cont.)—							
Chromate .. ..	6	140	28	3	3	1	(a)
Nitrate .. ..	278	198	249	122	173	(a)	1,821
Sulphate .. ..	(a)	(a)	(a)	(a)	(a)	(a)	
Sweden—							
Fertilizer salts (20% K <sub>2</sub> O)	—	10	—	—	—	—	
do. (40% K <sub>2</sub> O)	1,821	93,274	130,075	102,966	120,443	142,827	159,250
do. (other) ..	—	17,945	197	156	10	43	499
Carbonate .. ..	238	804	1,052	1,065	761	934	1,367
Caustic potash .. ..	247	857	510	346	59	91	144
Chloride .. ..	—	7,087	16,631	13,958	7,516	9,609	14,726
Nitrate .. ..	108	592	412	223	610	542	(a)
Switzerland—							
Fertilizer salts .. ..	52,811	42,365	46,013	44,617	43,519	58,434	64,886
Carbonate .. ..	88	746	649	628	676	948	1,231
Caustic potash .. ..	599	1,435	2,395	2,234	1,105	2,230	2,389
Chloride .. ..	433	2,150	2,566	2,721	1,264	2,183	3,181
Nitrate, crude .. ..	—	49	—	—	—	—	—
Nitrate, purified, including sodium nitrate .. ..	39	707	737	878	319	932	547
Yugoslavia—							
Fertilizer salts .. ..	(a)	(a)	(a)	(a)	(a)	{	4,921
Carbonate .. ..							26
Caustic potash .. ..							54
Chlorate and chloride .. ..							159
Nitrate .. ..							98
Sulphate .. ..							69
Algeria—							
Fertilizer salts .. ..	7,314	22,666	21,489	31,579	21,306	24,214	24,282
Carbonate .. ..	2	50	—	77	7	6	29
Caustic potash .. ..	61	45	40	83	35	39	27
Nitrate .. ..	12	20	15	100	16	38	22
Sulphate .. ..	—	3,495	9,058	182	(a)	(a)	(a)
Egypt—							
Fertilizer salts .. ..	—	—	—	1	45	449	(a)
Carbonate .. ..	2	83	37	113	163	(a)	(a)
Caustic potash .. ..	146	59	144	87	4	(a)	(a)
Chlorate .. ..	93	124	77	166	124	(a)	(a)
Chromates, including those of sodium .. ..	193	632	600	572	293	(a)	(a)
Manganates .. ..	8	26	23	40	20	(a)	(a)
Madagascar—							
Fertilizer salts .. ..	(a)	611	373	530	(a)	(a)	(a)
Caustic potash .. ..	1	5	1	24	(a)	(a)	(a)
Mozambique—							
Carbonate .. ..	—	15	15	—	30	6	1
Tunis—							
Carbonate .. ..	4	1	3	5	(a)	(a)	(a)
Caustic potash .. ..	—	16	—	3	(a)	(a)	(a)
Chlorate .. ..	8	1	1	53	(a)	(a)	(a)
Chloride .. ..	37	2,121	632	1,979	(a)	(a)	(a)
Nitrate .. ..	1	6	12	16	(a)	(a)	(a)
Sulphate .. ..	1	492	251	1,476	(a)	(a)	(a)
Cuba—							
Nitrate, including nitrate of soda .. ..	22,190	(a)	(a)	18,954	13,143	(a)	(a)
Chlorate .. ..	86	(a)	(a)	309	169	(a)	(a)
Chloride .. ..	(a)	(a)	(a)	2,944	8,037	(a)	(a)
Sulphate .. ..	(a)	(a)	(a)	2,713	8,323	(a)	(a)
Mexico—							
Nitrate .. ..	15,694	11,236	(a)	(a)	(a)	(a)	(a)
Caustic potash .. ..	369	3,015	3,084	9,227	(a)	(a)	(a)
Chlorate .. ..	712	830	(a)	(a)	(a)	(a)	(a)
Carbonate .. ..	35,568	24,693	(a)	(a)	(a)	(a)	(a)
Sulphate .. ..	2	2	(a)	(a)	(a)	(a)	(a)

(a) Information not available.

## IMPORTS OF POTASH SALTS (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
United States—							
Fertilizer salts ..	—	—	71	476	912	1,287	520
Carbonate ..	—	2	8	3	2	4,710	1,987
Caustic potash ..	18	40	30	81	32	726	1,469
Chlorates ..	333	469	179	37	140	306	330
Chloride ..	6,126	3,082	31,504	31,789	26,005	264,216	439,850
Cyanide ..	—	—	20	22	—	636	835
Nitrate ..	—	—	—	—	6	175	5,866
Potassium-sodium nitrate mixtures ..	—	3,929	2,232	—	6,074	18,240	7,365
Sulphate ..	—	—	8,956	10,540	563	38,388	46,746
Argentina—							
Bichromate ..	2	87	(a)	(a)	(a)	(a)	(a)
Carbonate ..	—	134					
Caustic potash ..	167	570					
Chlorate ..	374	273					
Cyanide ..	17	28					
Nitrate ..	757	124					
Sulphate ..	—	—					
Brazil (total imports)—							
Caustic potash ..	91	217	881	167	84	(a)	(a)
Nitrate ..	975	703	906	1,168	881	(a)	(a)
Chloride ..	3,266	3,655	16,466	11,462	16,448	(a)	(a)
Sulphate ..	132	441	1,396	1,626	1,002	(a)	(a)
Carbonate ..	204	211	375	91	316	(a)	(a)
Chlorate ..	415	1,149	656	1,064	857	(a)	(a)
Chile—							
Bichromate ..	10	86	(a)	(a)	(a)	(a)	(a)
Carbonate ..	17	46	(a)	(a)	(a)	(a)	(a)
Caustic potash ..	31	61	(a)	(a)	(a)	(a)	(a)
Chlorate ..	108	81	(a)	(a)	(a)	(a)	(a)
Nitrate ..	—	—	(a)	(a)	(a)	(a)	(a)
Colombia—							
Carbonate ..	8	4	(a)	(a)	(a)	(a)	(a)
Caustic potash ..	13	19					
Chlorate ..	134	259					
Nitrate ..	79	249					
Sulphate ..	—	57					
Peru—							
Caustic potash ..	19	8	(a)	(a)	(a)	(a)	(a)
Other salts ..	303	355	(a)	(a)	(a)	(a)	(a)
Uruguay—							
Nitrate ..	(a)	(a)	(a)	(a)	234	609	321
Caustic potash ..	(a)	(a)	(a)	(a)	31	11	52
Venezuela—							
Carbonate ..	(a)	1	(a)	(a)	13		
Caustic potash ..	38	42	78	45			
Chlorate ..	(a)	49	(a)	(a)	21		
Nitrate ..	31	66	51	427			
Japan—							
Fertilizer salts ..	(a)	56,454	62,525	52,657	(a)	(a)	(a)
Syria and Lebanon—							
Fertilizer salts ..	592	898	(a)	(a)	(a)	(a)	(a)
Caustic potash ..	3	1	(a)	(a)	(a)	(a)	(a)
Turkey—							
Carbonate ..	855	164	623	231	1,150	826	871
Caustic potash ..	1	86	27	97	72	89	106
Chlorates ..	—	165	291	3	25	7	129
Chromates ..	43	18	80	43	89	89	59
Nitrate ..	2	263	105	50	356	287	16
Other salts ..	15	42	47	25	25	65	161

(a) Information not available.

PYRITES

PRODUCTION OF PYRITES\*  
(including Cupreous Pyrites)

(Long tons)

Producing Country							Estimated Sulphur Content						
	1945	1946	1947	1948	1949	1950	1951	1945	1946	1947	1948	1949	1950
<b>BRITISH COUNTRIES</b>													
Great Britain	23,069	20,628	9,946	3,862	16,919	13,288	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Kenya	..	..	24,117	407	16,873	13,016	16,701	13,592	27,822	14,500	5,700	7,300	12,200
Southern Rhodesia	..	..	37,947	37,443	34,271	35,424	34,966	35,457	32,851	16,480	16,292	14,927	14,245
Union of South Africa	..	..	180,299	191,948	159,164	164,348	223,639	279,120	(a)	98,396	86,195	73,783	104,983
Canada (sales) (c)	..	..	263,324	26,365	427,879	407,662	660,162	596,736	624,569	12,919	95,014	210,944	134,363
Cyprus (saleable)	..	..	116,000	117,800	89,412	88,060	118,078	151,388	55,200	55,000	41,564	40,373	306,799
Australia	..	..	..	..	..	..	..	..	..	..	..	..	71,619
<b>Total</b>	..	..	440,000	573,000	766,000	714,000	1,040,000	1,056,000	1,130,000	..	..	..	..
<b>FOREIGN COUNTRIES</b>													
Austria	..	..	(c)	3,768	6,163	7,747	11,440	13,315	10,075	(a)	(a)	2,896	4,000
Czechoslovakia	..	..	(a)	7,00	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Finland (b)	..	..	108,578	124,315	149,863	174,708	177,197	159,491	228,873	48,000	55,000	66,000	79,000
France (e)	..	..	167,000	216,821	195,434	178,814	202,149	243,74	276,400	67,400	86,000	80,466	83,900
Germany (Federal)	..	..	(a)	d 315,800	d 377,000	423,600	516,900	524,758	(a)	126,400	151,000	174,000	188,500
Greece	..	..	6,410	63,177	57,256	19,022	20,654	86,293	178,400	(a)	30,300	27,300	37,400
Italy	..	..	101,710	394,193	618,868	821,839	852,499	881,316	883,840	(a)	190,000	382,000	397,000
Norway	..	..	243,557	531,324	708,643	723,412	733,000	736,967	685,056	104,889	229,035	303,418	312,956
Poland	..	..	(a)	27,807	39,033	(f) 54,000	(g) 613,092	(a)	(a)	(a)	(a)	(a)	(a)
Portugal	..	..	168,267	310,000	382,686	552,274	603,301	718,103	75,720	139,501	172,209	248,524	275,892

\* See also Sulphur (page 293).

(a) Information not available.

(b) Pyrite concentrate only.

(c) Produced as a by-product in the treatment of copper and copper-zinc ores.

(d) British and U.S. Zones only.

(e) In addition the sulphur content of manganite and auriferous pyrites was as follows (long tons).—1945—5,771; 1946—5,839; 1947—6,496; 1948—7,351; 1949—9,240.

(f) Estimated.

273

## PRODUCTION OF PYRITES (Cont.)

Producing Country	1945	1946	1947	1948	1949	1950	1951	1945	1946	1947	1948	1949	1950	1951	
<b>FOREIGN COUNTRIES (Cont.)</b>															
Spain ..	885,538	1,157,403	995,014	1,359,532	1,234,991	1,509,564	1,775,045	429,000	561,000	659,000	599,000	732,000	732,000	861,000	
Sweden ..	..	257,846	275,783	305,666	385,841	417,310	400,507	129,026	134,621	145,271	179,113	201,846	199,105	199,200	
Yugoslavia ..	..	..	48,000	75,000	90,000	72,000	115,317	151,350	(a)	20,000	31,000	32,000	(a)	(a)	
Algeria ..	..	..	34,780	39,723	33,690	32,180	24,700	30,950	11,738	16,244	14,000	13,500	13,220	10,250	
Morocco (French) ..	..	..	28,818	—	—	—	—	—	—	—	—	—	—	12,850	
Tunis ..	..	..	—	453	2,731	6,570	3,164	197	2,884	1,130	—	—	700	870	
United States (b) ..	..	..	722,956	813,372	940,652	928,531	888,388	931,163	1,017,769	296,364	337,549	392,252	378,453	392,788	
Japan ..	..	..	397,598	474,557	819,588	1,119,909	1,510,950	1,898,286	2,215,232	175,000	202,000	348,000	476,000	790,000	
Korea ..	..	..	61,084	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	
<b>Total*</b> ..	3,151,000	4,700,000	5,658,000	6,800,000	5,658,000	7,247,000	8,180,000	9,150,000	—	—	—	—	—	—	
<b>World's Total*</b> ..	3,591,000	5,273,000	6,419,000	7,544,000	8,287,000	9,235,000	10,280,000	10,280,000	589,000	2,284,000	2,858,000	3,380,000	3,691,000	4,110,000	
														4,590,000	

\*Excluding pyrites produced in Roumania, U.S.S.R., China, Brazil and Manchuria.

(a) Information not available.

(b) Includes by-product pyrites.

EXPORTS OF PYRITES

(Domestic Produce)

(Long tons)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Southern Rhodesia—							
Iron pyrites .. ..	30,465	26,437	17,308	12,246	16,665	12,329	24,728
Canada—							
Pyrites ( <i>S content</i> ) .. ..	67,392	60,754	50,299	44,860	80,851	99,689	158,963
Cyprus—							
Iron pyrites .. ..	100,075	256,203	352,946	369,925	401,768	533,501	614,864
Cupreous pyrites .. ..	—	—	—	—	77,820	111,210	99,060
Australia .. .. ..	(a)	(a)	(a)	(a)	9	177	6,420
<b>FOREIGN COUNTRIES</b>							
Austria .. .. ..	(a)	(a)	(a)	(a)	7,975	20,098	95,648
Belgium-Luxemburg E.U.	(a)	(a)	(a)	3,282	—	362	3,531
Finland—							
Concentrate .. ..	75,309	—	11,731	5,462	30,222	—	—
France .. .. ..	9,546	—	934	33	7	—	6
Germany (Federal)—							
Pyrites, etc. .. ..	(a)	(a)	(a)	—	—	6,496	19,686
Greece .. .. ..	(a)	7,660	21,028	29,506	4,990	46,327	149,878
Italy .. .. ..	(a)	(a)	72,082	81,549	87,209	88,408	146,091
Norway—							
Iron pyrites .. ..	47,952	168,058	164,005	206,236	172,372	183,381	159,871
Cupreous pyrites .. ..	66,318	156,708	227,378	274,429	234,526	199,540	129,154
Portugal—							
Cupreous pyrites .. ..	92,678	238,798	299,110	406,116	339,390	489,370	561,922
Spain—							
Iron pyrites .. ..	491,197	622,049	987,893	1,093,550	1,054,809	1,199,493	1,516,428
Cupreous pyrites .. ..	(a)	(a)	(a)	—	9,499	27,495	36,463
Sweden .. .. ..	48,690	124,586	109,985	64,653	54,478	60,689	4,036
Yugoslavia .. .. ..	(a)	(a)	(a)	(a)	(a)	172,922	158,583
Algeria .. .. ..	(a)	(a)	3,898	5,336	—	—	610
Japan—							
Iron pyrites .. ..	41,394	(a)	(a)	(a)	(a)	(a)	(a)

(a) Information not available.

**IMPORTS OF PYRITES**

(Less Re-exports)

(Long tons)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom— Iron and cupreous pyrites	132,618	161,905	175,055	212,803	230,323	191,636	347,688
Irish Republic .. ..	23,150	30,752	30,582	41,193	38,487	45,293	42,303
<b>FOREIGN COUNTRIES</b>							
Austria .. ..	(a)	(a)	20,981	26,766	25,480	75,649	138,835
Belgium-Luxemburg E.U.	(a)	(a)	(a)	364,691	308,543	321,129	404,554
Czechoslovakia .. ..	(a)	249,063	197,779	(b) 168,077	(a)	(a)	(a)
Denmark .. ..	29,564	72,740	110,852	136,944	128,829	144,857	148,007
France .. ..	95,277	563,243	511,270	594,057	635,144	548,091	693,161
Germany (Federal)— Pyrites, etc. .. ..	(a)	(a)	(a)	454,580	278,942	628,961	785,468
Hungary .. ..	(a)	—	11,686	(a)	(a)	(a)	(a)
Italy— Iron-pyrites .. ..	(a)	(a)	17,145	18,388	53,231	85,982	183,199
Cupreous pyrites .. ..	(a)	(a)	(a)	—	5,224	—	12,359
Netherlands .. ..	(a)	139,987	253,987	258,549	252,023	312,851	375,944
Sweden .. ..	20,055	108,810	101,077	79,261	95,801	97,690	73,088
Algeria .. ..	—	—	—	2,972	3,030	3,144	11,261
United States .. ..	186,507	182,893	126,553	107,411	120,937	208,766	221,512
Japan .. ..	—	(a)	(a)	(a)	(a)	11	(a)

(a) Information not available.

(b) January to October only.

**SALT**  
PRODUCTION OF SALT  
(Long tons)

Producing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Great Britain—							
Rock-salt .. ..	16,792	20,490	39,997	40,400	41,000	41,449	54,200
Brine-salt .. ..	820,409	875,281	851,625	902,537	875,020	922,720	1,003,071
Salt in brine (b) .. ..	2,396,050	2,456,779	2,247,277	2,831,917	2,807,418	3,234,475	3,577,798
Northern Ireland—							
Brine-salt .. ..	12,479	13,261	12,404	13,036	12,768	12,958	13,042
Mauritius—							
Sea-salt .. ..	2,960	3,115	3,928	3,350	5,118	2,565	3,350
South West Africa—							
Rock-salt .. ..	2,795	3,477	2,744	4,366	2,430	3,854	4,632
Other salt .. ..	10,690	10,423	9,705	10,249	13,514	12,699	39,250
Anglo-Egyptian Sudan ..	43,769	40,335	36,408	35,665	42,349	40,110	46,215
Kenya .. ..	15,242	15,388	13,836	16,547	18,523	18,426	19,084
Tanganyika .. ..	9,352	13,162	10,367	11,398	14,743	12,276	15,853
Uganda .. ..	(a)	5,589	6,892	2,992	7,283	7,296	7,745
Union of South Africa ..	(c) 138,272	(c) 141,407	(a)	(a)	160,362	104,716	147,430
Canada (sales)—							
Rock-salt .. ..	(d) 33,772	(d) 34,260	21,357	23,132	38,663	49,258	64,996
Other salt (e) .. ..	567,189	446,084	629,129	638,708	630,100	717,573	795,323
British West Indies—							
Sea-salt—							
Bahamas (exports) ..	33,500	82,357	72,607	31,499	54,607	22,929	48,321
Leeward Islands (exports) ..	7,596	5,157	6,935	4,087	4,783	5,518	6,884
Turks and Caicos Islands ..	19,470	29,045	—	38,000	47,000	60,000	
Aden .. ..	139,945	113,042	194,549	271,058	303,432	255,865	304,302
Burma .. ..	(a)	43,916	51,736	(f)	(f)	(f)	(f)
Ceylon .. ..	41,695	42,920	22,791	77,000	28,211	66,859	25,835
Cyprus .. ..	—	3,375	15,375	—	—	4,068	10,752
India—							
Rock-salt .. ..	1,943,593	{ 259,041	4,532	4,058	4,229	5,049	5,443
Other salt .. ..		{ 1,659,065	1,895,588	2,333,548	2,039,000	2,615,867	2,728,095
Pakistan—							
Rock-salt .. ..	(g)	(g)	198,110	153,988	167,700	(a)	(a)
Palestine—							
Rock-salt .. ..	2,110	1,546	(a)	(a)	(a)	(a)	(a)
Sea-salt .. ..	16,092	22,797	(a)	(a)	(a)	(a)	(a)
Australia (h)—	.. ..	(a)	(a)	260,000	245,000	265,000	310,000
of which							
South Australia ..	171,067	158,214	155,074	173,087	168,450	190,702	218,910
Western Australia ..	(a)	(a)	(a)	7,000	6,000	7,000	6,000
Total* .. ..	6,400,000	6,370,000	6,600,000	8,000,000	7,500,000	8,700,000	9,500,000
<b>FOREIGN COUNTRIES</b>							
Austria—							
Rock-salt .. ..	83	545	4,278	1,724	708	1,068	681
Evaporated salt .. ..	52,079	77,752	80,958	80,052	74,569	90,058	93,815
France—							
Rock-salt .. ..	262,208	387,448	471,794	543,976	447,629	347,653	
Salt in brine .. ..	370,024	1,103,103	1,642,419	1,905,749	1,296,446	1,678,943	2,291,000
Sea-salt .. ..	505,919	469,220	460,028	439,487	730,989	595,000	497,000

\* See page 279.

(a) Information not available.

(b) Used for purposes other than salt-making.

(c) Years ended June 30 of that stated.

(d) Including a small amount of other salt.

(e) Including salt in brine.

(f) Included under Foreign Countries.

(g) Included with India.

(h) Estimated.

## PRODUCTION OF SALT (Cont.)

Producing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Germany (Federal) ..	(a)	1,593,536	1,796,232	2,003,537	1,770,600	2,429,000	2,714,266
Greece—							
Sea-salt .. .. ..	(a)	(b) 75,000	(b) 85,000	(b) 55,000	85,405	100,713	81,132
Italy—							
Rock-salt and brine-salt ..	150,836	440,450	711,719	715,600	791,730	705,930	(a)
Sea-salt .. .. ..	969,912	780,320	937,070	870,085	(a)	(a)	(a)
Netherlands (brine-salt) ..	57,625	191,630	247,454	251,534	326,507	406,054	473,526
Poland—							
Rock-salt and brine-salt ..	(a)	{ 269,758	333,723	412,968	443,326	654,000	(a)
Salt in brine .. ..		{ (a)	276,226	301,343	(a)	(a)	(a)
Portugal—							
Rock-salt .. ..	70	45	68	48	40	41	38
Sea-salt (exports) .. ..	7,646	81,663	24,675	10,492	16,636	30,279	28,911
Spain—							
Rock-salt .. ..	224,423	258,508	261,059	288,255	284,333	269,562	349,106
Sea-salt .. .. ..	553,570	502,064	560,350	685,598	538,248	897,998	899,002
Switzerland .. ..	81,352	90,635	106,055	107,106	(a)	(a)	112,000
Yugoslavia .. .. ..	(a)	(a)	(a)	(a)	(a)	129,000	94,000
Algeria—							
Brine-salt and sea-salt ..	49,181	65,519	80,759	71,884	95,369	75,054	95,593
Angola .. .. ..	48,769	60,683	38,170	58,902	40,634	39,834	48,451
Belgian Congo .. .. ..	875	629	756	(a)	800	540	540
Canary Islands (sea-salt) ..	16,044	13,443	6,846	13,000	5,200	5,976	15,481
Cape Verde Islands .. ..	7,761	14,149	9,100	13,417	18,996	(a)	(a)
Egypt .. .. ..	(b) 350,000	(b) 350,000	(b) 350,000	(b) 350,000	344,352	530,503	597,452
Eritrea (sea-salt) .. ..	26,629	40,320	45,000	60,000	79,040	53,070	(a)
Ethiopia (b) .. .. ..	10,000	10,000	10,000	10,000	10,000	10,000	10,000
French Somaliland .. ..	45,400	31,700	47,000	58,700	67,000	79,000	54,300
Morocco (French)—							
Rock-salt, etc. .. ..	6,092	8,345	9,864	10,602	{ 33,531	59,052	44,266
Brine-salt .. ..	27,499	40,328	33,557	23,902			
Morocco (Spanish)—							
Sea-salt (b) .. .. ..	250	250	250	250	250	250	250
Mozambique—							
Rock-salt .. .. ..	{ 5,723	{ 70	74	76	76	61	87
Sea-salt .. .. ..		{ 6,919	9,936	9,865	10,755	9,724	(a)
Tunis (sea-salt) .. .. ..	60,322	91,925	112,979	103,578	96,535	92,616	144,193
Cuba (sea-salt) .. .. ..	51,508	55,885	50,416	54,465	(a)	(a)	49,473
Dominican Republic—							
Rock-salt .. .. ..	(a)	2,732	2,051	2,328	2,373	2,267	2,238
Sea-salt .. .. ..	14,900	15,497	14,682	12,872	8,012	12,398	7,964
Haiti (b) .. .. ..	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Honduras .. .. ..	(a)	(a)	(a)	(a)	(a)	4,327	4,577
Mexico (b) .. .. ..	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Netherlands West Indies .. ..	2,549	876	214	475	(a)	(a)	(a)
Nicaragua—							
Sea-salt .. .. ..	(b) 6,000	(b) 6,000	(b) 6,000	9,455	11,342	11,152	12,044
Panama (sea-salt) .. .. ..	4,796	15,664	8,722	3,320	4,278	9,826	11,689
Porto Rico (sea-salt) (b) ..	15,000	15,000	15,000	15,000	15,000	15,000	15,000
Salvador .. .. ..	17,852	68,135	16,452	21,172	(a)	(a)	(a)
United States (sales)—							
Rock-salt .. .. ..	3,130,125	3,046,436	3,352,101	3,434,684	3,075,304	3,506,488	4,162,673
Salt in brine .. .. ..	7,773,063	7,563,107	8,236,878	8,347,361	7,895,994	8,368,977	10,616,187
Evaporated salt .. ..	2,841,580	2,901,301	2,820,284	2,863,753	2,932,465	2,972,579	3,263,221
Argentina—							
Rock-salt .. .. ..	3,221	(a)	(a)	(a)	(a)	(a)	(a)
Brine-salt .. .. ..	426,276	(a)	(a)	(a)	(a)	(a)	(a)
Bolivia .. .. ..	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Brazil (sea-salt) .. .. ..	423,368	599,577	553,685	768,993	792,000	860,000	(a)
Chile .. .. ..	47,324	61,738	58,472	52,905	38,905	46,676	48,145

(a) Information not available.

(c) Exports.

(b) Estimated.

## PRODUCTION OF SALT (Cont.)

Producing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Colombia—							
Rock-salt .. ..	89,196	91,000	89,126	93,027	100,376	105,229	108,346
Sea-salt .. ..	14,217	31,403	25,708	24,258	22,925	34,492	27,623
Costa Rica .. ..	6,000	8,000	6,153	6,500	8,100	8,300	5,359
Ecuador (sea-salt) .. ..	27,200	34,500	24,500	22,300	14,900	15,500	(a)
Guatemala—							
Sea-salt .. ..	(a)	(a)	(a)	(a)	(a)	11,300	11,800
Peru—							
Rock-salt .. ..	10,238	9,064	10,207	9,618	9,344	7,865	(a)
Sea-salt .. ..	35,404	37,101	43,300	47,430	42,476	52,105	(a)
Brine-salt .. ..	8,631	9,556	5,650	4,897	3,264	5,481	(a)
Venezuela (sea-salt) .. ..	56,552	89,125	35,229	34,972	70,790	55,547	38,305
Afghanistan .. ..	(a)	(a)	(a)	(a)	(a)	(a)	17,248
Burma—							
Sea-salt .. ..	(e)	(e)	(e)	42,705	29,609	18,020	60,675
Brine-salt .. ..	(e)	(e)	(e)	2,140	1,582	(b) 3,000	2,496
China (c) .. ..	1,900,000	1,656,000	1,975,000	2,440,000	2,000,000	(a)	(a)
Formosa .. ..	66,682	213,709	161,007	360,026	249,937	172,297	270,000
French Indo-China .. ..	99,388	(d) 14,502	40,900	63,100	111,786	74,526	92,425
Indonesia (g) .. ..	128,391	29,385	(a)	350,414	313,863	160,169	473,000
Iraq .. ..	13,982	9,362	12,435	13,120	9,025	11,673	15,413
Japan—							
Government-licensed plants .. ..	(f) 181,385	(f) 209,000	(f) 113,097	(f) 287,491	389,500	413,000	431,000
Others .. ..	(f) 18,633	(f) 143,759	(f) 130,460	(f) 47,012	(a)	(a)	(a)
Jordan (brine-salt) .. ..	(a)	(a)	(a)	100	(b) 5,000	(b) 10,000	(b) 10,000
Korea (Southern) .. ..	(a)	(a)	(a)	(a)	185,830	(a)	(a)
Lebanon (sea-salt) .. ..	(a)	(a)	(a)	(b) 5,000	(b) 2,500	(b) 6,500	(b) 7,000
Macao (exports) .. ..	38,784	7,446	4,695	4,104	(a)	(a)	(a)
Philippine Republic—							
Sea-salt .. ..	(a)	(a)	(a)	(a)	51,450	55,394	51,454
Portuguese India .. ..	(a)	(a)	20,000	(a)	(a)	(a)	(a)
Siam .. ..	40,739	135,427	(b) 150,000	(b) 200,000	(b) 150,000	(b) 200,000	(b) 400,000
Syria .. ..	1,064	15,193	20,401	20,000	20,809	20,000	5,306
Turkey—							
Rock-salt .. ..		{ 19,896	26,552	27,742	17,637	20,009	22,474
Lake and spring salt .. ..		{ 30,176	74,296	70,979	105,064	101,149	84,531
Sea-salt .. ..		{ 152,973	171,622	164,005	188,647	179,263	159,518
<b>TOTAL*</b> .. ..	<b>27,000,000</b>	<b>30,000,000</b>	<b>33,000,000</b>	<b>35,000,000</b>	<b>34,000,000</b>	<b>36,000,000</b>	<b>40,000,000</b>
<b>WORLD'S TOTAL*</b> .. ..	<b>33,000,000</b>	<b>36,000,000</b>	<b>39,500,000</b>	<b>43,000,000</b>	<b>41,500,000</b>	<b>44,700,000</b>	<b>49,500,000</b>

\* Salt is also produced in many countries for which statistics are not available, e.g., Gold Coast, Nigeria, Belgium, Bulgaria, Czechoslovakia, Roumania and U.S.S.R.; an allowance has been made for these and other countries where information is not yet available.

(a) Information not available.

(b) Estimated.

(c) U.S. Bureau of Mines.

(d) Cochin-China only.

(c) Included under British Countries.

(f) Years ended March 31 following that stated.

(g) Government production of brine-salt.

# EXPORTS OF SALT

*(Domestic Produce)*

*(Long tons)*

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Rock-salt .. ..	3,415	7,332	5,550	7,692	6,716	9,507	5,451
Other salt .. ..	135,579	170,315	142,413	194,817	209,118	250,988	274,906
Anglo-Egyptian Sudan .. ..	3,770	20,768	46,745	5,755	6,645	14,042	12,321
Gold Coast .. ..	1	1	1,579	403	1,214	727	1,099
Kenya .. ..	457	176	60	83	16	9	365
Southern Rhodesia .. ..	157	132	201	292	387	321	454
South West Africa—							
Rock salt .. ..					215	463	1,167
Coarse salt .. ..					214	2,781	22,847
Other .. ..					148	413	927
Tanganyika .. ..	2,648	3,427	3,110	2,937	2,952	3,874	3,811
Uganda .. ..	1,455	1,823	1,556	1,309	1,489	2,131	2,295
Union of South Africa .. ..	2,626	15,119	16,603	17,819	20,031	16,093	7,665
Canada .. ..	4,745	5,236	10,010	5,026	3,100	3,660	4,073
British West Indies—							
Bahamas (c) .. ..	33,500	82,357	72,607	31,499	54,607	22,929	48,321
Leeward Islands .. ..	7,596	5,157	6,935	4,087	4,783	5,518	6,884
Turks and Caicos Islands .. ..	11,892	19,541	70,340	70,685	52,718	9,553	(a)
Aden .. ..	62,305	84,187	317,740	278,649	228,048	235,516	337,569
Ceylon .. ..	260	27	213	2	83	158	1
Hong Kong (including re-exports) .. ..	(a)	10,504	14,638	11,850	10,236	5,946	2,461
India (d) .. ..	38,975	32,696	7,635	8,590	270	7,838	17,659
Malaya (including re-exports) .. ..	(a)	18,236	51,297	39,124	10,726	8,354	7,943
Australia—							
Rock-salt .. ..	7	108	3	85	6	353	24
Refined salt (£ Australian) .. ..	£14,288	£8,023	£111,825	543	10,311	2,126	856
Other salt .. ..	24,718	14,574	10,969	22,771	14,048	19,228	13,389
<b>FOREIGN COUNTRIES</b>							
Austria .. ..	1,281	6,705	7,604	5,597	3,379	6,428	6,048
Belgium-Luxemburg E.U.—							
Common salt .. ..	(a)	(a)	(a)	1	39	14	132
Refined salt .. ..	(a)	(a)	(a)	17	31	57	21
Denmark—							
Refined salt, etc. .. ..	11	54	240	71	417	178	81
France .. ..	30,635	128,670	183,614	295,342	190,394	108,341	122,452
Germany (Federal)—							
Rock-salt, sea-salt, etc. .. ..	(a)	(a)	(a)	388,138	534,310	583,574	691,434
Italy—							
Rock-salt and sea-salt .. ..	(a)	(a)	302,033	534,310	567,300	121,378	260,205
Netherlands—							
Rock-salt and sea-salt .. ..	(a)	—	85	—	—	—	—
Refined salt and waste .. ..	(a)	65,288	129,539	150,963	180,371	255,799	293,483
Norway—							
Common salt .. ..	—	3,271	6	59	2,298	1,552	(a)
Refined salt .. ..	5	4	30	4	1	18	(a)

(a) Information not available.

(b) Exports of salt are not separately recorded but imports into the Union of South Africa from S.W. Africa were (long tons):—1945—92; 1946—122.

(c) Converted from bushels at the rate of 28 bushels = 1 long ton.

(d) Includes trade by land as recorded. Sea-borne trade only from 1947 inclusive.

EXPORTS OF SALT (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Poland .. . . .	(a)	(a)	28,956	70,999	(a)	(a)	(a)
Portugal .. . . .	7,646	81,663	24,675	10,492	16,636	30,279	28,911
Spain .. . . .	192,991	327,412	339,195	360,177	263,985	176,004	362,638
Sweden .. . . .	13,959	2,437	2,218	658	947	2,801	2,342
Algeria .. . . .	1,828	10,022	15,629	43,004	42,891	22,288	14,213
Angola .. . . .	22,110	17,173	21,732	(a)	16,471	18,370	(a)
Egypt—							
Common salt .. . . .	251,373	222,519	613,263	354,397	455,817	201,042	341,404
French Somaliland .. . . .	23,112	25,324	48,016	58,200	110,246	52,069	60,502
French West Africa .. . . .	353	2,023	3,225	(a)	(a)	(a)	(a)
Madagascar .. . . .	1,522	583	18	246	(a)	(a)	(a)
Mozambique .. . . .	2,857	860	128	995	1,403	1,742	1,047
Morocco (French) .. . . .	—	6,294	65	(a)	(a)	(a)	(a)
Morocco (Spanish) .. . . .	347	800	398	(a)	(a)	(a)	(a)
Tunis (including re-exports)							
Rock-salt and sea-salt .. . . .	65,062	14,909	60,436	175,797	152,609	(a)	(a)
Cuba .. . . .	(a)	(a)	(a)	453	363	(a)	(a)
Mexico .. . . .	1	—	1,939	10	2,050	45	(a)
Netherlands West Indies .. . . .	1,564	876	214	475	248	(a)	933
Salvador .. . . .	415	871	1,538	1,729	(a)	(a)	1,208
United States .. . . .	170,111	199,488	168,131	327,394	321,229	169,979	392,068
Argentina .. . . .	38,551	34,404	(a)	(a)	(a)	(a)	(a)
Brazil .. . . .	1,188	482	209	238	41	(a)	(a)
Chile .. . . .	166	148	99	—	(a)	(a)	(a)
Ecuador .. . . .	(a)						
China—							
Refined salt .. . . .	24,048	9,842	(a)	(a)	(a)	(a)	(a)
Other salt .. . . .	220,252	164,477	31,974	(a)	(a)	(a)	(a)
Formosa .. . . .	(a)	91,180	98,617	28,050	233,672	140,062	237,253
French Indo-China .. . . .	(a)	(a)	—	22,699	39,640	(a)	(a)
Iran (including re-exports)(b)	(a)	1,255	1,035	1,180	930	2,039	(a)
Japan .. . . .	(a)	(a)	3,248	(a)	(a)	(a)	304
Macao .. . . .	38,784	7,446	4,695	4,104	(a)	(a)	(a)
Portuguese India .. . . .	9,072	7,863	11,026	11,177	9,551	(a)	(a)
Siam (including re-exports)	2,373	(a)	(a)	(a)	(a)	(a)	(a)
Turkey .. . . .	—	52,723	35,093	28,738	48,058	(a)	76,576

(a) Information not available.

(b) Years ended March 20 of year following that stated.

IMPORTS OF SALT

(Less Re-exports)

(Long tons)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Rock-salt .. ..	923	—	—	1	—		
Other salt .. ..	7	15,808	104,252	42,420	39,968	23,572	26,347
Malta—							
Refined salt .. ..	(£2,068)	(£1,772)	(£1,189)	(£1,464)	(£2,007)	(£1,618)	(£1,925)
Other salt .. ..	687	2	1	—	(£228)	(£202)	1
Anglo-Egyptian Sudan ..	286	259	217	269	194	223	57
Gambia .. .. ..	175	2	147	869	648	924	270
Gold Coast—							
Refined salt .. ..	14	15	36	20	26	38	75
Other salt .. ..	8	406	471	850	1,099	2,127	3,823
Kenya (c) .. .. ..	(b)	182	2,117	7,030	6,436	688	778
Mauritius .. .. ..	500	—	—	—	—	—	804
Nigeria .. .. ..	56,560	67,723	79,364	77,410	75,806	63,417	94,801
Northern Rhodesia ..	3,543	4,475	3,677	5,083	5,711	6,116	6,468
Nyassaland .. .. ..	4,698	5,552	2,735	3,233	5,202	4,474	3,608
Seychelles .. .. ..	187	—	86	312	157	706	84
Sierra Leone .. .. ..	2,968	3,868	2,988	4,160	6,159	2,875	5,047
Somaliland .. .. ..	1,320	1,310	(a)	(a)	(a)	(a)	5
South West Africa ..	372	488	986	536	442	451	(a)
Southern Rhodesia ..	10,270	4,853	11,044	12,494	15,191	13,377	19,272
Tanganyika .. .. ..	814	584	194	577	3,209	1,568	1,614
Uganda .. .. ..	(d)	(d)	(d)	(d)	5,585	4,753	6,158
Union of South Africa—							
Rock-salt .. ..	29	76	205	117	197	196	(a)
Common salt and refined salt .. .. ..	841	1,891	767	2,173	2,791	2,890	(a)
Zanzibar .. .. ..	665	*3,078	822	2,298	1,220	1,187	1,717
Canada (total imports) (c)—							
Salt for use of fisheries ..	21,164	44,516	45,663	26,172	74,334	51,410	52,750
Refined salt .. ..	—	1,365	36	—	—	—	17
Other salt .. .. ..	96,843	157,959	150,622	139,611	136,994	161,303	178,324
Newfoundland (f)—							
Salt in bulk .. ..	56,960	60,819	60,328	59,608	(f)	(f)	(f)
Refined salt .. ..	737	731	848	682	(f)	(f)	(f)
British Honduras .. .. ..	298	453	457	403	323	382	409
British West Indies—							
Barbados .. .. ..	1,538	2,957	2,069	2,237	2,416	2,294	2,348
Bermuda .. .. ..	174	118	156	134	174	158	(a)
Dominica .. .. ..	301	247	342	398	212	415	144
Grenada .. .. ..	284	707	836	1,109	340	680	781
Jamaica—							
Rock-salt .. .. ..	(b)	1	16	116	20	18	45
Other salt .. .. ..	8,088	9,937	8,880	10,836	6,028	9,654	9,531
Leeward Islands .. .. ..	2	264	409	197	242	264	469
St. Lucia—							
Common salt .. .. ..	384	476	482	420	375	469	1,040
Refined salt .. .. ..	—	17	3	11	13	15	32
St. Vincent—							
Unrefined salt .. .. ..	660	360	537	310	363	(a)	(a)
Refined salt .. .. ..	60	28	113	18	(a)	(a)	(a)
Trinidad and Tobago—							
Rock and coarse salt .. .. ..	885	147	606	207	545	732	581
Refined salt .. .. ..	1,750	2,598	4,752	3,739	4,365	4,489	4,690
British Guiana—							
Rock-salt .. .. ..	102	543	608	409	597	496	688
Refined salt, etc. .. .. ..	455	1,432	1,307	1,840	1,318	1,870	1,793

(a) Information not available.

(b) Excess of re-exports.

(c) Including Uganda up to 1948 inclusive.

(d) Included with Kenya.

(e) Including Newfoundland from April 1, 1949.

(f) Years ended March 31 following that stated. Included with Canada from April 1, 1949.

IMPORTS OF SALT (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES (Cont.)</b>							
Aden .. .	—	1	5	7	8	7	12
Brunei .. .	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Burma .. .	1,548	1,548	1,548	1,548	1,548	1,548	1,548
Ceylon—							
Refined salt .. .	4	2	1	3	14	8	18
Other salt .. .	12,011	15	10	24	21	30	22
Cyprus .. .	1	15	6	44	25	17	56
Hong Kong (total imports) .. .	(a)	25,249	55,086	49,412	76,371	45,072	29,174
India .. .	278,093	85,505	306,349	345,576	248,865	146,875	2,351
Malaya (total imports)—							
Refined salt .. .	{ (a)	{ 477	52	59	83	110	135
Other salt .. .		{ 80,866	80,441	91,629	66,350	77,332	66,399
North Borneo .. .	(a)	(a)	(a)	175	2,017	2,012	2,242
Palestine .. .	—	814	(a)	(a)	(a)	(a)	(a)
Sarawak .. .	(a)	2,617	2,413	3,359	3,416	3,356	3,489
Australia—							
Rock-salt .. .	1,918	2,850	2,669	3,865	5,020	6,332	4,049
Refined salt .. .	(£A5,818)	1,012	1,562	2,562	1,880	1,951	4,561
Other salt .. .	979	26	115	220	1,830	3,420	7,678
Fiji .. .	785	1,240	1,524	1,621	890	867	1,179
New Zealand .. .	41,577	41,614	57,329	50,774	53,226	43,069	39,236
Solomon Islands (d) .. .	1	2	6	8	5	7	9
Western Samoa .. .	(a)	(a)	(a)	142	80	119	(a)
Irish Republic .. .	2,764	3,489	3,346	3,148	3,748	2,815	2,558
Refined salt .. .	25,249	29,581	29,109	26,377	27,186	26,222	26,857
<b>FOREIGN COUNTRIES</b>							
Austria—							
Common salt .. .	(a)	(a)	—	2,667	636	91	—
Belgium-Luxemburg E.U.—							
Common salt .. .	(a)	(a)	(a)	382,398	295,409	310,443	428,049
Refined salt .. .	(a)	(a)	(a)	68,606	70,012	96,271	68,113
Bulgaria—							
Rock-salt .. .	5,229	8,893	(a)	(a)	(a)	(a)	(a)
Sea-salt .. .	—	—	(a)	(a)	(a)	(a)	(a)
Czechoslovakia—							
Common salt .. .	{ (a)	{ 113,358	141,848	(e) 201,510	(a)	(a)	(a)
Refined salt .. .	{ (a)	{ 137,225	94,350	(e) 160,267	(a)	(a)	(a)
Denmark—							
Rock-salt .. .	208	166	58	146	796	1,511	1,050
Refined salt .. .	49,774	98,341	119,121	84,781	82,481	96,396	102,387
Finland (total imports)—							
Common salt .. .	43,885	108,594	112,431	128,815	65,823	91,617	104,594
France .. .	1,144	1,464	9,181	16,058	11,112	16,510	14,440
Germany (Federal)—							
Rock-salt, sea-salt, etc. .. .	(a)	(a)	(a)	141	255	16	—
Hungary .. .	(a)	51,971	89,438	(a)	(a)	(a)	(a)
Iceland—							
Common salt .. .	5,803	19,879	42,623	20,734	20,977	55,611	27,068
Refined salt .. .	68	30	75	109	54	94	129
Netherlands—							
Rock-salt .. .	(a)	21,694	37,099	58,802	30,537	57,101	59,037
Sea-salt, etc. .. .	(a)	28,296	42,704	45,799	9,150	3,452	4,447
Refined salt .. .	(a)	1	(a)	(a)	(a)	4	41

(a) Information not available.

(b) February to September only.

(c) April 15 to December 31 only.

(d) Years ended March 31 following that stated.

(e) January to October only.

## IMPORTS OF SALT (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
FOREIGN COUNTRIES (Cont.)							
Norway—							
Common salt .. .	123,162	199,335	231,580	234,160	209,449	217,484	219,295
Refined salt .. .	10,130	15,504	14,968	20,240	19,703	29,012	34,992
Portugal .. . .	1	9	176	26	8	44	(a)
Sweden—							
Common salt .. .	76,795	243,671	290,643	287,745	324,243	348,228	338,812
Switzerland .. .	—	472	246	382	259	269	295
Yugoslavia .. .	(a)	(a)	(a)	(a)	(a)	104,356	41,320
Algeria .. . .	5,482	3,089	2,486	1,391	518	127	133
Belgian Congo .. .	21,152	31,846	25,050	22,995	31,141	31,349	(a)
Cameroon (French) ..	6,526	4,851	10,059	10,173	6,047	9,937	5,625
Egypt—							
Common salt .. .	213	197	135	271	216	317	(a)
Ethiopia (b) .. .	45,306	42,752	45,000	42,000	49,595	48,663	50,200
French Equatorial Africa ..	9,673	5,027	5,318	7,003	10,695	5,909	5,734
French Togoland ..	3,385	3,493	7,154	957	2,905	4,023	(a)
French West Africa ..	(a)	1,299	929	3,095	5,985	9,446	8,447
Madagascar ..	(a)	519	4,201	9,032	2,452	621	182
Morocco (French) ..	7,583	7,409	3,702	(a)	(a)	(a)	(a)
Morocco (Spanish) ..	5,488	8,067	5,092	(a)	(a)	(a)	(a)
Mozambique .. .	2,963	5,121	3,332	3,801	3,247	5,438	2,636
Portuguese Guinea ..	1,528	1,131	808	908	761	(a)	(a)
Réunion .. .	778	969	(a)	1,037	1,347	(a)	(a)
S. Thomé and Principe ..	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Costa Rica .. .	104	191	(a)	189	125	(a)	(a)
Cuba (total imports) ..	5,213	(a)	(a)	6,526	8,270	(a)	(a)
French West Indies—							
Guadeloupe .. .	1,796	1,518	(a)	(a)	(a)	1,809	1,822
Martinique .. .	1,909	1,216	2,341	1,916	1,212	2,369	(a)
Guatemala .. .	(a)	(a)	1,478	954	3,865	1,771	(a)
Honduras (d) .. .	(a)	(a)	543	755	1,450	286	951
Mexico .. . .	4,418	6,063	5,133	3,629	(a)	(a)	(a)
Netherlands West Indies ..	226	229	248	270	353	(a)	(a)
Nicaragua (total imports) ..	152	370	251	(a)	(a)	(a)	(a)
St. Pierre and Miquelon ..	8,053	3,296	4,120	7,143	4,815	4,006	(a)
United States .. .	4,065	3,797	1,704	5,019	5,633	7,026	3,865
Argentina—							
Rock-salt .. .	—	217					
Sea-salt .. .	—	—					
Refined salt .. .	100	129					
Brazil (total imports)—							
Common salt .. .	29,845	23,463	15,303	177	—	(a)	(a)
Refined salt .. .	5,474	1,040	890	66	—	(a)	(a)
Chile .. . .	—	147	(a)	(a)	(a)	(a)	(a)
Colombia .. . .	(a)	291	(a)	(a)	(a)	(a)	(a)
Dutch Guiana .. .	761	925	932	769	(a)	(a)	(a)
French Guiana .. .	294	364	(a)	(a)	(a)	360	(a)
Peru .. . .	69	209	(a)	(a)	(a)	(a)	(a)
Uruguay—							
Refined salt .. .	—	150	230	50	8,811	10,586	(a)
Rock-salt .. .	—	—					
Sea-salt .. .	—						
French Indo-China .. .	(a)	3,622	9,507	9,505	1,217	755	712
Iran (c)—							
Common salt .. .	(a)	1,535	2,261	24	2	—	(a)
Refined salt .. .	(a)	33	13	14	38	7	(a)
Iraq .. . .	5	25	(a)	(a)	(a)	(a)	(a)
Japan .. . .	444,589	264,555	773,586	1,182,229	1,798,736	621,231	1,783,059
Korea .. . .	(a)	11,747	95,430	114,261	(a)	(a)	(a)
Syria and Lebanon .. .	3,609	4,098	4,918	(a)	(a)	(a)	(a)
New Caledonia .. .	(a)	907	201	424	523	47	592

(a) Information not available.

(b) Years ended September 10 of that stated.

(c) Total imports for years ended March 20 of year following that stated.

(d) Years ended June 30 of that stated.

**SILVER**  
**PRODUCTION OF SILVER ORE**  
*(In terms of metal)*  
(Fine troy ounces)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Great Britain .. ..	27,517	23,285	23,522	15,942	13,996	18,153	26,777
Bechuanaland Protectorate .. ..	1,237	1,704	1,081	233	27	39	70
Gold Coast (b) .. ..	36,666	54,526	41,250	45,553	40,051	43,317	52,542
Kenya .. .. ..	16,659	5,493	3,859	3,184	2,279	2,586	2,150
Nigeria .. .. ..	1,106	666	2,130	4,269	484	304	213
Northern Rhodesia .. ..	2,269	(c) 634,392	(c) 73,277	(c) 145,865	(c) 134,920	(c) 173,304	(c) 100,702
Southern Rhodesia .. ..	95,975	95,168	91,901	81,404	84,495	85,549	79,731
South West Africa .. ..	(a)	(a)	(f) 390,000	(d) 400,000	659,000	887,000	867,000
Swaziland .. .. ..	—	—	211	124	120	60	18
Tanganyika .. .. ..	21,689	21,682	21,131	25,340	26,886	(e) 51,674	(e) 113,544
Uganda (b) .. .. ..	275	205	87	56	42	35	14
Union of South Africa .. ..	1,243,426	1,207,373	1,147,694	1,170,951	1,154,454	1,133,645	1,162,586
Canada .. .. ..	12,942,906	12,544,100	12,504,018	16,109,982	} 17,641,493	23,221,431	24,244,949
Newfoundland .. .. ..	1,076,129	1,107,827	956,052	882,263			
Cyprus .. .. ..	—	—	87	—	—	—	—
India .. .. ..	14,154	9,821	12,422	12,797	11,275	15,676	14,612
Australia .. .. ..	8,076,740	9,045,280	9,527,140	10,057,519	9,849,213	10,677,456	10,792,032
Fiji .. .. ..	29,398	26,351	33,238	29,187	29,755	37,740	24,869
New Guinea (h) .. .. ..	(a)	(a)	(a)	(a)	41,911	36,189	38,556
New Zealand .. .. ..	244,544	224,341	221,984	232,563	232,599	199,701	133,291
Total .. .. ..	23,830,000	25,002,000	25,051,000	29,217,000	29,920,000	36,636,000	37,654,000
<b>FOREIGN COUNTRIES</b>							
Austria .. .. ..	—	(g) 300,000	(g) 600,000	(g) 1,400,000	(a) 1,600,000	1,318	868
Czechoslovakia .. .. ..	(g) 33,115	140,209	188,821	167,602	168,026	(a) 115,936	(a) 157,281
Finland .. .. ..	350,025	535,214	474,320	494,414	570,901	719,855	(a)
Germany (Federal) .. .. ..	(a)	(a)	(a)	867,459	1,601,782	1,637,116	1,819,957
Greece .. .. ..	(a)	(a)	(a)	(a)	(a)	(a)	74,590
Italy .. .. ..	29,700	311,900	512,300	596,000	635,395	836,000	(a)
Norway .. .. ..	132,374	201,926	226,679	216,667	169,981	168,181	164,000
Portugal .. .. ..	(a)	(a)	7,395	35,366	31,958	68,288	65,427
Roumania .. .. ..	190,000	(a)	481,200	(a)	(a)	(a)	(a)
Spain .. .. ..	(a)	668,993	638,192	371,547	514,283	585,938	609,320
Sweden .. .. ..	1,135,178	1,294,935	1,088,656	1,137,943	1,140,708	1,275,709	(a)
Yugoslavia (refined) .. .. ..	(a)	(a)	(a)	(a)	(a)	2,386,000	3,032,000
Algeria .. .. ..	14,661	39,996	48,226	29,740	(a)	(a)	(a)
Belgian Congo .. .. ..	4,147,000	5,048,000	4,051,000	3,805,619	4,549,300	4,459,300	3,795,070
Morocco (French) .. .. ..	107,609	117,157	375,782	487,598	491,906	1,007,900	1,569,000
Mozambique .. .. ..	997	804	707	616	244	71	96
Tunis .. .. ..	34,369	60,122	53,852	16,011	68,320	71,825	61,119
Costa Rica .. .. ..	1,400	600	1,500	3,000	700	200	(a)

(a) Information not available.

(b) Exports.

(c) Recovered from copper-refinery slimes. The 1946 figure includes an accumulation of the war years.

(d) Estimated.

(e) Including silver in lead concentrates exported amounting to 21,635 and 80,030 fine troy ounces in 1950 and 1951 respectively.

(f) Estimated content of ores sorted ex dumps.

(g) U.S. Bureau of Mines estimate.

(h) Years ended June 30 of that stated.

PRODUCTION OF SILVER ORE (Cont.)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Cuba .. .. ..	(b) 107,195	127,222	146,932	185,216	(b) 157,411	(b) 221,779	(a)
Honduras .. .. ..	3,003,495	2,682,910	2,403,500	3,17,027	3,378,000	3,514,976	3,182,502
Mexico .. .. ..	61,097,728	43,263,132	58,843,864	57,519,704	49,454,883	49,141,445	43,797,735
Nicaragua .. .. ..	236,000	257,000	215,293	214,628	206,604	187,953	206,882
Panama .. .. ..	(a)	(a)	(a)	(a)	(a)	(a)	5,026
Salvador .. .. ..	221,144	291,689	285,893	216,342	250,259	462,840	(a)
United States .. .. ..	29,024,197	22,914,604	35,823,563	38,096,031	34,674,952	42,459,014	39,463,661
Argentina (f) .. .. ..	2,760,000	3,090,000	2,435,400	1,201,900	1,249,421	1,150,000	(a)
Bolivia (c) .. .. ..	6,683,561	6,106,165	6,265,505	7,562,208	6,637,296	6,566,918	7,172,220
Brazil .. .. ..	28,383	21,965	20,291	23,084	21,041	21,155	20,319
Chile .. .. ..	825,438	557,333	763,130	861,962	799,674	742,489	983,491
Colombia .. .. ..	168,699	152,651	110,830	108,716	106,674	116,104	130,028
Ecuador .. .. ..	255,965	254,271	134,100	205,800	276,900	273,200	(a)
Peru .. .. ..	12,997,845	12,334,249	10,782,995	9,288,703	10,609,649	13,367,700	14,856,194
Burma .. .. ..	(a)	(a)	(a)	(d) 700,000	75,200	(a)	(a)
Formosa .. .. ..	(a)	(a)	(a)	7,269	2,778	2,098	1,640
Japan .. .. ..	2,069,479	1,244,620	1,792,082	2,185,608	2,736,382	3,964,572	4,505,862
Korea .. .. ..	(a)	(a)	(e) 66,956	(e) 38,504	(e) 18,937	(a)	(a)
Philippine Republic .. .. ..	17,208	913	44,816	150,760	218,433	216,034	274,602
Saudi Arabia .. .. ..	24,144	31,307	49,805	67,819	81,295	124,287	109,912
Turkey .. .. ..	(a)	(a)	(a)	(a)	580,000	(a)	(a)
<b>Total*</b> .. .. ..	<b>130,000,000</b>	<b>107,000,000</b>	<b>140,000,000</b>	<b>143,000,000</b>	<b>133,000,000</b>	<b>145,000,000</b>	<b>140,000,000</b>
<b>WORLD'S TOTAL*</b> ..	<b>154,000,000</b>	<b>132,000,000</b>	<b>165,000,000</b>	<b>172,000,000</b>	<b>163,000,000</b>	<b>182,000,000</b>	<b>178,000,000</b>

\* Figures for certain large producers such as the U.S.S.R. are not available; an allowance has been made for these countries where information is not yet available.

(a) Information not available.

(b) Imports into the United States.

(c) Exports.

(d) Year ended June 30 following that stated.

(e) South Korea only.

(f) U.S. Bureau of Mines.

**EXPORTS OF SILVER\***

(Including re-exports)

(In terms of metal)

(Fine troy ounces)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951	
<b>BRITISH COUNTRIES</b>								
United Kingdom— Refined bullion .. ..	5,733	19,319,584	30,239,428	11,176,381	18,814,049	21,582,042	18,111,753	
Malta— Bullion and scrap .. ..	(a)	3,400	—	1,900	—	1,300	1,400	
Anglo-Egyptian Sudan— Bullion .. .. ..	—	—	—	—	—	1,200	(a)	
Gold Coast— Bullion .. .. ..	36,666	54,526	41,250	45,553	40,051	43,317	52,542	
Northern Rhodesia— Bullion .. .. ..	10	40	—	—	—	—	—	
Southern Rhodesia— Bullion .. .. ..	96,152	95,645	90,370	81,001	81,308	84,227	78,935	
Tanganyika— Concentrates .. .. ..	—	—	—	—	—	21,635	80,030	
	Bullion .. .. ..	21,594	21,336	20,854	25,010	27,631	31,014	36,271
Uganda— Bullion .. .. ..	275	205	87	56	42	35	14	
Union of South Africa— Bullion .. .. ..	200	408,651	222	603,626	1,102,479	506,959	30	
Zanzibar— Bullion .. .. ..	—	—	2,100	—	—	—	—	
British West Indies— Trinidad and Tobago— Bullion .. .. ..	—	129	—	1,700	(a)	40,000		
Canada— Ore, concentrates, etc. .. ..	2,232,405	1,863,817	2,722,261	3,294,691	4,054,614	3,494,107	2,413,288	
	Bullion .. .. ..	2,723,698	3,116,146	7,913,730	5,814,573	6,211,912	8,355,183	16,183,364
Burma— Bullion .. .. ..	(a)	(d) 78,257	(a)	(a)	(a)	(a)	(a)	
Hong Kong— Bullion .. .. ..	(a)	6,442,000	10,002,000	4,366,000	(a)	5,021,000	2,139,000	
India— Bullion .. .. ..	(c) 3,400	(c) 20,800	(c) —	(c) 200	—	—	—	
Malaya— Bullion .. .. ..	(a)	1,600	36,700	98,700	(a)	354,300	215,600	
Australia— Ores and concentrates .. ..	(b) 1,402,076	(b) 358,779	(b) 726,627	(b) 1,235,056	640,000	1,300,000	1,400,000	
	Silver-lead bullion .. ..	(a)	(a)	(a)	(b) 1,675,920	2,905,518	2,623,68	2,446,983
	Bullion (refined).. ..	19,000	228,149	2,896,826	5,385,887	4,555,738	7,488,141	7,180,541
Fiji— Bullion .. .. ..	25,700	16,700	34,933	40,222	32,481	29,065	31,408	
New Guinea (b)— Bullion .. .. ..	(a)	(a)	(a)	(a)	38,691	36,326	38,639	
New Zealand— Scrap, sweepings, etc.	1,068	2,229	7,951	1,737	3,918	12,630	2,106	
	Bullion, etc .. .. ..	66,000	55,000	(e) 101,485	(e) 145,436	(e) 85,721	93,000	2,000
<b>FOREIGN COUNTRIES</b>								
Czechoslovakia— Bullion .. .. ..	(a)	(a)	290,000	(a)	(a)	(a)	(a)	

\* Excluding silver coin, but including silver shipped for minting.

(a) Information not available.

(b) Years ended June 30 of that stated.

(c) Sea-borne trade only.

(d) February to September only.

(e) Gross Weight.

EXPORTS OF SILVER (*Cont.*)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (<i>Cont.</i>)</b>							
Denmark—							
Bullion .....	—	52,000	22,500	64,000	61,000	56,000	47,000
Beaten, rolled or drawn	37,000	40,000	93,000	79,800	1,453,000	5,000	2,400
France—							
Bullion .....	(a)	(a)	(a)	(a)	(a)	(a)	278,000
Beaten, rolled or drawn	13,500	250,000	100,000	260,000	135,000	197,000	190,000
Italy—							
Bullion, etc. .....	(a)	(c) 980,000	(c) 300	(c) 3,000	(c) 16,000	(c) 3,600	2,000
Netherlands—							
Bullion and scrap .....	(a)	420,000	459,000	360,000	(a)	256,000	6,912,000
Sweden—							
Bullion .....	200,000	300,000	250,000	110,000	135,000	250,000	233,000
Switzerland—							
Bullion .....	1,000	8,000	130,000	530,000	560,000	551,000	112,000
Honduras (b)—							
Bullion .....	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Mexico—							
Bullion, etc. .....	20,730,000	36,300,000	44,000,000	42,000,000	44,900,000	42,700,000	29,000,000
Nicaragua—							
Concentrates .....	226,000	235,000	(a)	(a)	(a)	(a)	(a)
Salvador—							
Bullion .....	223,700	313,200	265,100	216,300	(a)	(a)	(a)
United States—							
Ore and base bullion .....	—	10,070	40,000,000	(a)	(a)	(a)	(a)
Refined bullion .....	98,517,009	39,793,263					
Argentina—							
Bullion .....	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Bolivia—							
Ores, etc. .....	6,684,000	6,106,000	6,233,000	7,562,000	6,635,000	6,567,000	7,172,000
Chile—							
Ore .....	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Peru—							
Ores, concentrates, etc. ....	2,025,000	1,000,000	2,680,000	1,347,000	(a)	4,500,000	(a)
Bullion .....	6,070,000	6,006,000	5,000,000	2,857,000	(a)	7,200,000	(a)
China—							
Bullion .....	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Philippine Republic—							
Bullion .....	(a)	(a)	(a)	(a)	(a)	(a)	(a)

(a) Information not available.

(b) Years ended July 31 of year stated.

(c) Gross weight.

TOTAL IMPORTS OF SILVER\*

*(In terms of metal)*

*(Fine troy ounces)*

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Ores ..	259,000	553,000	2,486,000	1,786,000	(a)	3,075,000	2,805,000
Unrefined bullion ..	50	838,000	1,028,000	870,917	1,906,000	2,601,654	1,590,915
Refined bullion ..	24,035,000	32,675,000	33,711,000	7,617,058	12,965,000	7,287,943	10,191,575
Malta—							
Bullion ..	(a)	6,600	9,300	8,200	(a)	1,900	3,700
Anglo-Egyptian Sudan—							
Bullion ..	—	—	6,300	—	(a)	320	(a)
Gold Coast—							
Bullion ..	—	2	2,440	1,437	31,528	28,870	59,954
Kenya and Uganda—							
Bullion ..	—	—	1,800	800	(a)	700	300
Nigeria—							
Bullion ..	—	10,388	17,901	10,538	16,816	6,601	47,575
Sierra Leone—							
Bullion ..	—	195	186	—	—	381	1,251
Union of South Africa—							
Bullion ..	148,000	129,559	116,066	115,796	240,303	25,302	(a)
Zanzibar—							
Bullion ..	—	—	2,100	—	(a)	—	50
Canada—							
Bullion ..	1,796	1,927,922	71,499	717,817	1,332,713	341,605	1,050,299
British Guiana—							
Bullion ..	—	780	150	—	—	—	90
British West Indies—							
Trinidad and Tobago—							
Bullion ..	—	2,000	2,700	200	(a)	100	—
Ceylon—							
Bullion ..	9,000	23,000	26,000	124,000	(a)	23,000	37,000
Cyprus—							
Bullion ..	6,000	1,300	19,300	5,800	(a)	2,800	4,800
Hong Kong—							
Bullion ..	(a)	11,000	1,000	147,000	(a)	1,055,000	893,000
India (b)—							
Bullion ..	62,974,702	46,945,674	d 39,956,850	(d) 4,234,531	(d) 100,921	(d) 112,207	(d) 135,395
Malaya—							
Bullion ..	(a)	700	30,600	—	(a)	1,800	5,400
Palestine—							
Bullion ..	62,300	19,300	(a)	(a)	(a)	(a)	(a)
Australia—							
Bullion ..	6,000	19,000	44,000	40,327	30,081	74,688	79,186
Fiji—							
Bullion ..	—	2,800	530	122	125	119	233
New Zealand—							
Bullion ..	{ 11,100	3,000	2,800	3,700	{ 400	40	674
Beaten, rolled drawn ..							2,800
<b>FOREIGN COUNTRIES</b>							
Belgium-Luxemburg E.U.—							
Bullion and scrap ..	{ (a)	(a)	1,590,000	(a)	(a)	(a)	4,557,000
Beaten, rolled or drawn ..							

\* Excluding silver coin, but including silver shipped for minting.

(a) Information not available.

(b) Includes trade by land as recorded.

(c) Years ended June 30 of that stated.

(d) Sea-borne trade only.

(e) Gross weight.

IMPORTS OF SILVER (*Cont.*)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Czechoslovakia— Bullion and scrap ..	(a)	—	60,000	—	(a)	(a)	(a)
Denmark— Bullion .. ..	64,000	2,155,000	749,000	809,000	1,189,000	1,260,000	836,000
Beaten, rolled or drawn ..	38,000	1,200,000	494,000	379,000	577,000	688,000	1,032,000
Finland— Bullion, etc. .. ..	11,000	15,000	14,000	15,000	(b) 46,000	112,000	1,360,000
France— Bullion .. .. ..	(a)	(a)	150,000	(a)	(a)	(a)	(b) 969,000
Beaten, rolled or drawn ..	6,000	10,000	37,000	54,000	(b) 64,000	153,000	597,000
Italy— Bullion, etc. (b) .. ..	—	12,900	1,121,000	532,000	1,213,000	653,000	1,218,000
Netherlands— Bullion and scrap ..	(a)	504,000	629,000	915,000	(a)	1,528,000	(b) 1,247,000
Norway— Bullion .. .. ..	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Beaten, rolled or drawn ..	20	568,000	804,000	507,000	600,000	700,000	577,000
Sweden— Bullion .. .. ..	900,000	4,000,000	1,500,000	2,100,000	2,300,000	3,800,000	1,800,000
Switzerland— Bullion .. .. ..	3,000,000	3,000,000	1,500,000	836,000	750,000	1,020,000	3,110,000
Algeria— Bullion, etc. .. ..	8,600	6,200	13,400	83,000	69,000	63,000	76,000
Egypt— Bullion and scrap ..	510,000	280,000	—	366,000	880,000	(a)	(a)
Tunis— Beaten, rolled or drawn ..	—	—	—	100	(a)	(a)	(a)
Guatemala— Bullion .. .. ..	(a)	(a)	(a)	8,200	2,300	10,000	—
United States— Ore and base bullion ..	33,050,441	28,738,365	} 91,000,000	(a)	(a)	(a)	(a)
Refined bullion ..	17,560,165	32,954,607		(a)	(a)	(a)	(a)
Brazil— Bullion .. .. ..	1,344,000	1,360,000	384,000	481,000	(b) 626,000	(a)	(a)
Colombia— Bullion .. .. ..	(a)	1,390,000	(a)	(a)	(a)	(a)	(a)
Turkey— Bullion, etc. .. ..	—	60	1,500	2,700,000	(a)	(a)	7,600

(a) Information not available.

(b) Gross weight.

**STRONTIUM MINERALS**  
**PRODUCTION OF STRONTIUM MINERALS**  
 (Long tons)

Producing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom— Celestite .. ..	—	—	5,012	7,407	4,794	6,653	16,350
Pakistan— Celestite .. ..	—	—	—	(a)	(a)	(a)	136
<b>FOREIGN COUNTRIES</b>							
France— Celestite .. ..	(a)	(a)	(a)	276	(a)	(a)	(a)
Spain— Strontianite .. ..	—	—	—	—	(a)	(a)	(a)
Tunis— Celestite .. ..	59	{ 44 68	44 185	15 103	—	—	24 399
Mexico (c)— Celestite .. ..	2,051	1,614	3,440	869	1,142	1,705	(d) 1,816
United States (b)— Celestite .. ..	2,846	217	—	—	—	—	—

Strontianite is also produced in Germany.

(a) Information not available.

(b) Shipments.

(c) Exports.

(d) Imports into the United States from Mexico.

**EXPORTS OF STRONTIUM MINERALS, ETC.**  
*(Domestic Produce)*  
 (Long tons)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom— Celestite (b) .. ..	—	2,259	3,879	5,395	4,378	5,942	10,689
<b>FOREIGN COUNTRIES</b>							
France— Strontium compounds ..	3	13	9	(a)	(a)	(a)	(a)
Germany (Federal) Strontianite and witherite	(a) (a)	(a) (a)	(a) (a)	15 —	20 —	18 11	(c) 49 15
Italy— Strontianite and celestite	(a)	(a)	(a)	(a)	(a)	(d) 159	962
Spain— Strontianite (b) ..	602	—	5,211	13,048	2,913	—	(a)
Tunis— Strontium minerals ..	(a)	(a)	(a)	103	(a)	(a)	(a)
Mexico— Celestite .. ..	2,051	1,614	3,440	869	1,142	1,705	(b) 1,816
United States— Strontium nitrate ..	199	—	(a)	(a)	(a)	(a)	(a)
Other compounds ..	13	—	(a)	(a)	(a)	(a)	(a)

(a) Information not available.

(d) July to December only.

(b) Imports into the United States from the country stated.

(c) January to September only.

IMPORTS OF STRONTIUM MINERALS, ETC.

(Less Re-exports)

(Long tons)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES</b>							
France—							
Celestite .. ..	—	15	10	(a)	(a)	(a)	(a)
Strontium compounds ..	—	13	11	(a)	(a)	(a)	(a)
<b>Mexico—</b>							
Strontium carbonate ..	43	—	(a)	(a)	(a)	(a)	(a)
<b>United States—</b>							
Strontianite and celestite	3,296	4,024	12,604	19,438	8,379	7,706	12,539
Strontium compounds ..	—	—	13	1	20	16	—
<b>Chile—</b>							
Strontium compounds ..	(9 cwt.)	(12 cwt.)	(a)	(a)	(a)	(a)	(a)
<b>Turkey—</b>							
Strontium compounds ..	1	—	1	10	1	—	1

(a) Information not available.

**SULPHUR**  
PRODUCTION OF SULPHUR\*  
(Long tons)

Producing Country and Description	1945	1946	1947	1948	1949	1950	1951	Estimated Sulphur Content					
								1945	1946	1947	1948	1949	1950
<b>BRITISH COUNTRIES</b>													
United Kingdom— Spent oxide (b) ..	218,100	217,700	223,000	238,300	218,300	244,000	304,804	104,700	104,500	107,000	114,400	104,800	117,100
Canada— Sintered gas ..	(a)	124,921	123,422	124,236	127,087	128,850							
Australia— Sulphur recoverable from zinc concentrates ..	(a)	12,000	12,000	63,000	74,500	81,690	100,009						
Spent oxide ..	(a)	(a)	(a)	(a)	4,000	5,270							
Irish Republic Spent oxide (c) ..	(£1,491)	(£1,513)	(£557)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
<b>FOREIGN COUNTRIES</b>													
France— Sulphur rock ..	(d)31,775	(d)11,756	105,079	139,122	115,784	140,245	265,000	2,672	2,083	8,515	13,912	9,587	5,629
Greece— Sulphur rock ..	..	..	..	..	..	..	..	(a)	(a)	—	(a)	(a)	(a)
Italy— Sulphur rock ..	..	..	..	..	..	..	..	..	..	..	(a)	(a)	(a)
Crude sulphur (e) ..	625,742	1,036,587	1,073,142	1,342,311	1,520,588	1,646,110	1,646,110	(a)	(a)	(a)	(a)	(a)	(a)
Fused ..	..	..	..	..	..	..	..	..	..	..	(a)	(a)	(a)
Ground ..	..	..	..	..	..	..	..	..	..	..	(a)	(a)	(a)
Norway— Sulphur recovered from pyrites ..	..	..	..	..	..	..	..	..	..	..	(a)	(a)	(a)
Poland— Sulphur ..	..	..	..	..	..	..	..	..	..	..	(a)	(a)	(a)
Portugal— Sulphur recovered from pyrites ..	12,756	12,403	7,522	9,671	10,706	14,202	13,903	12,692	12,242	7,424	9,545	10,566	14,032
													13,722

\* See also Pyrites (page 273).

(a) Information not available.

(b) Estimated.

(c) Consumed by the sulphuric acid industry.

(d) Sales of concentrates.

(e) Derived from sulphur rock above.

## PRODUCTION OF SULPHUR (Cont.)

Producing Country and Description	1945	1946	1947	1948	1949	1950	1951	1945	1946	1947	1948	1949	1950	1951
	Estimated Sulphur Content													
<b>FOREIGN COUNTRIES (Cont.)</b>														
Spain—	35,821	29,396	26,302	18,494	37,679	50,277	39,683	(a)	(a)	(a)	(a)	10,000	12,600	10,800
Sulphur rock	21,950	37,521	23,204	33,648	32,985	37,085	36,998	(a)						
Refined sulphur (e)	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sweden—	24,291	21,395	13,982	12,138	11,769	14,354	(a)							
Sulphur ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Egypt—	..	..	285	—	—	—	—	(a)	—	—	—	—	—	—
Sulphur ..	..	..	..	(a)	(a)	..	..	(a)						
Mexico—	..	..	..	(a)	..	..	..	..	..	..	..	..	..	..
Mined ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Refined sulphur (f)	..	..	..	..	..	..	..	..	..	..	..	..	..	..
United States—	3,753,188	3,859,642	4,441,214	4,869,210	4,745,014	5,192,184	5,278,249	3,753,188	3,859,642	4,441,214	4,869,210	4,745,014	5,192,184	5,278,249
Crude sulphur	..	(a)												
Smelter gas (b)	..	(a)												
By-product sulphur (c)	..	(a)												
Hydrogen sulphide (c)	..	(a)												
Argentina—	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Refined sulphur	..	11,488	10,070	10,871	8,388	10,048	7,622	7,560	(a)	(a)	(a)	(a)	(a)	(a)
Bolivia (exports)—	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Refined sulphur	..	607	464	2,251	2,685	4,329	4,239	8,960	(a)	(a)	(a)	(a)	(a)	(a)
Ecuador—	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sulphur ..	..	(a)	(a)	23	43	16	27	1	(a)	(a)	(a)	(a)	(a)	(a)
Chile—	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Refined sulphur	..	20,431	30,672	29,617	(a)	(a)	(a)	(a)	20,411	30,641	29,587	13,124	7,599	22,065
Colombia—	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sulphur ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pero—	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sulphur ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
China—	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sulphur ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Iran—	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sulphur (d) ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Japan—	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Refined sulphur	..	37,333	21,046	28,735	40,120	61,493	90,900	139,400	(a)	(a)	(a)	(a)	(a)	(a)
Turkey—	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Refined sulphur	..	4,088	2,970	2,620	2,556	2,995	6,502	7,273	4,047	2,940	2,530	2,594	2,992	7,266

(a) Sulphur is also produced in U.S.S.R., Formosa and Manchuria.

(b) Estimated sulphur content of gas driven off in the smelting of zinc and copper concentrates, chiefly used in acid making.

(c) Recovered from pyrites.

(d) Information not available.

(e) Produced in treatment of industrial gases.

(f) Estimated.

(g) Recovered from natural gas.

EXPORTS OF SULPHUR

(Domestic Produce)

(Long tons)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom .. ..	678	2,553	4,383	3,893	2,617	6,057	430
Union of South Africa ..	165	281	455	751	46	27	(a)
Hong Kong (e-exports) ..	(a)	419	778	1,300	2,648	5,065	638
Malaya (including re-exports) .. ..	(a)	278	54	32	85	54	16
Palestine .. .. ..	—	—	778	(a)	(a)	(a)	(a)
Australia—							
Zinc concentrates (S content) (b) ..	43,700	29,600	(a)	(a)	40,500	47,500	42,075
<b>FOREIGN COUNTRIES</b>							
Belgium-Luxemburg E.U. ..	(a)	(a)	(a)	1,668	1,847	2,740	4,741
France—							
Rock .. .. ..	4,876	863	16	(a)	(a)	(a)	(a)
Crude .. .. ..	1,738	1,772	1,230	1,733	1,764	916	2,618
Unrefined ground .. ..	(a)	(a)	(a)	2,025	1,664	1,405	3,277
Refined lump .. ..	2,145	7,995	4,767	9,243	12,789	10,000	10,796
Flowers of sulphur .. ..	—	857	8,023	1,073	317	57	313
Precipitated sulphur .. ..	—	549	1,737	700	321	6	8
Germany (Federal)—							
Sulphur, etc. .. .. ..	(a)	(a)	(a)	19	30	7,127	1,323
Italy .. .. ..	(a)	(a)	21,481	81,705	71,938	235,934	105,923
Norway .. .. ..	18,623	60,761	71,223	53,385	61,356	74,959	69,062
Portugal .. .. ..	385	199	8	40	208	59	6,685
Spain—							
Flowers of sulphur, etc. .. ..	2,564	2,020	1,982	183	2,301	1,331	5,704
Sweden .. .. ..	2,492	291	180	128	29	112	157
Algeria—							
Rock .. .. ..	—	4,557	—	—	1	—	9
Refined and flowers of sulphur .. .. ..	116	57	—	—	1	1	—
Mexico .. .. ..	1,234	3,033	1,154	1,691	325	630	6,835
United States—							
Crude .. .. ..	918,691	1,189,072	1,299,060	1,262,913	1,443,540	1,440,996	1,283,073
Refined and flowers of sulphur .. .. ..	23,964	56,748	50,477	32,630	30,051	37,526	24,044
Argentina .. .. ..	—	—	(a)	(a)	(a)	(a)	(a)
Bolivia .. .. ..	607	464	2,251	2,685	4,398	(a)	8,956
Chile .. .. ..	10,706	4,646	251	(a)	—	(a)	(a)
Peru .. .. ..	541	369	787	973	248	98	(a)
Japan .. .. ..	2,094	2,437	1,962	650	(a)	542	(a)
Turkey .. .. ..	(a)	(a)	(a)	(a)	(a)	(a)	1,104

(a) Information not available.

(b) Estimated amount recoverable.

IMPORTS OF SULPHUR

(Less Re-exports)

(Long tons)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom ..	198,154	246,436	304,701	347,735	392,012	438,551	377,220
Malta—							
Flowers of sulphur ..	—	(£5,223)	(£2,511)	(£3,902)	(£1,857)	(£6,259)	215
Kenya (b) .. ..	(a)	(a)	(a)	719	129	526	(g) 204
Mauritius .. ..	—	40	409	(a)	5	32	—
Northern Rhodesia ..	3	28	167	193	2	2	2
South West Africa ..	89	166	29	37	45	9	(a)
Southern Rhodesia ..	(a)	5	13	17	15	17	17
Uganda .. ..	(c)	(c)	(c)	(c)	214	450	208
Union of South Africa ..	33,728	29,438	36,397	44,892	61,438	67,246	57,687
British Guiana .. ..	2	2	1	8	1	7	8
Canada (d) .. ..	222,184	244,198	322,665	316,627	250,497	348,511	353,404
Newfoundland (e) ..	11,072	5,379	11,444	13,041	(e)	(e)	(e)
Ceylon .. ..	612	884	951	639	380	71	382
Cyprus .. ..	501	423	799	936	1,222	118	1,188
Hong Kong (total imports) ..	(a)	829	1,291	2,185	3,003	10,026	33
India (total imports) ..	10,728	37,909	37,520	37,224	39,426	56,488	38,507
Malaya (total imports) ..	(a)	235	257	61	225	529	180
Palestine .. ..	2,083	1,167	(a)	(a)	(h)	(h)	(h)
Australia .. ..	67,074	72,939	110,634	144,084	144,037	191,790	99,382
New Zealand .. ..	51,872	43,632	79,006	54,393	64,846	62,499	73,759
Irish Republic .. ..	131	164	229	148	232	284	238
<b>FOREIGN COUNTRIES</b>							
Austria .. ..	(a)	(a)	7,788	2,559	17,829	30,713	18,911
Belgium-Luxemburg E.U. ..	(a)	(a)	(a)	85,241	87,241	62,444	59,211
Bulgaria .. ..	112	647	(a)	(a)	(a)	(a)	(a)
Czechoslovakia—							
Crude and ground ..	(a)	12,731	7,004	(f) 16,818	(a)	(a)	(a)
Flowers of sulphur ..	(a)	10	188	(f) 91	(a)	(a)	(a)
Denmark .. ..	88	1,014	877	1,625	802	1,182	785
Finland (total imports) ..	2,992	20,635	16,111	20,691	19,264	22,281	35,936
France—							
Rock .. ..	—	31,995	38,472	(a)	(a)	(a)	(a)
Crude .. ..	123,549	155,617	136,823	115,676	162,460	139,715	119,814
Unrefined ground ..	(a)	(a)	(a)	280	1	11	32
Refined lump .. ..	2,441	445	398	—	9	—	—
Flowers of sulphur ..	89	1	85	—	200	21	—
Precipitated .. ..	8	—	4	8	9	9	7
Germany (Federal)—							
Sulphur, etc. .. ..	(a)	(a)	(a)	12,306	24,196	30,457	20,231
Greece .. ..	6,193	3,412	1,732	10,478	2,766	16,555	11,808
Iceland .. ..	1	1	1	2	—	—	—
Netherlands .. ..	(a)	1,665	5,688	4,993	4,078	2,653	3,274
Norway .. ..	47	60	43	47	71	183	(a).
Portugal—							
Crude .. ..	4,871	1	300	700	200	200	195
Flowers of sulphur ..	12	32	153	113	64	52	2
Other sulphur .. ..	—	4	15	21	20	7	6
Spain—							
Crude .. ..	9,801	5,021	20,692	1,968	2,399	11,522	2,801
Flowers of sulphur ..	—	57	44	79	3,536	30	50
Sweden .. ..	9,414	49,654	54,458	54,795	49,919	52,206	60,229

(a) Information not available.

(b) Including Uganda up to 1948 inclusive.

(c) Included with Kenya.

(d) Including Newfoundland from April 1, 1949.

(e) Years ended March 31 of year following that stated. Included with Canada from April 1, 1949.

(f) January to October only.

(g) Excess of re-exports.

(h) See "Israel" under Foreign Countries.

IMPORTS OF SULPHUR (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Switzerland—							
Crude and ground	15,033	18,280	23,780	44,136	8,685	27,579	16,280
Flowers of sulphur	4	259	190	130	177	270	329
Yugoslavia .. ..	(a)	(a)	(a)	(a)	(a)	4,351	2,397
Algeria—							
Rock .. ..	28	98	—	98	2	34	42
Crude .. ..	19,509	24,793	14,584	8,211	18,809	14,969	16,073
Unrefined, ground .. ..				1,532	1,006	925	2,409
Refined .. ..	1,902	8,932	3,208	7,096	7,085	2,291	5,109
Flowers of sulphur .. ..	—	7	5,212	1,027	251	34	182
Precipitated .. ..	6	1,433	1,625	637	48	2	5
Angola .. ..	50	50	(a)	(a)	(a)	(a)	(a)
Belgian Congo .. ..	93	—	164	(a)	(a)	90	(a)
Egypt .. ..	2,746	2,337	2,725	3,995	4,716	9,324	(a)
Madagascar .. ..	226	15	72	75	(a)	(a)	(a)
Morocco (French)—							
Crude .. ..	149	221	220	(a)	(a)	(a)	(a)
Refined .. ..	242	1,871	1,082	(a)	(a)	(a)	(a)
Morocco (Spanish) .. ..	105	50	55	(a)	(a)	(a)	(a)
Mozambique .. ..	639	344	419	302	278	612	1,025
Tunis—							
Crude .. ..	6,574	15,151	3,173	8,225	8,862	(a)	(a)
Refined and flowers of sulphur .. ..	—	560	209	5	214	(a)	(a)
Costa Rica .. ..	44	6	(a)	53	(a)	(a)	(a)
Cuba (total imports) .. ..	1,301	(a)	(a)	3,659	5,679	(a)	(a)
Guatemala .. ..	(a)	(a)	(a)	121	113	124	113
Mexico .. ..	4,071	3,229	3,008	4,718	7,045	11,227	9,934
United States .. ..	33	35	15	38	32	25	2,376
Argentina—							
Crude .. ..	30,114	23,561	47,289	28,348	26,900	22,684	10,999
Refined and flowers of sulphur .. ..	444	232	(a)	(a)	(a)	(a)	(a)
Brazil (total imports) .. ..	19,070	26,868	41,944	31,353	44,572	66,704	(a)
Chile .. ..	1	3	(a)	(a)	(a)	(a)	(a)
Colombia .. ..	(a)	1,277	(a)	(a)	669	2,042	(a)
Peru .. ..	341	472	(a)	(a)	(a)	(a)	(a)
Uruguay .. ..	5,330	14,537	1,212	4,165	4,548	14	(a)
Venezuela .. ..	59	134	108	287	(a)	(a)	(a)
China .. ..	(a)	2,530	3,112	(a)	(a)	(a)	(a)
Iran (b) .. ..	(a)	1,037	39	(a)	(a)	(a)	(a)
Israel .. ..	(c)	(c)	(c)	(c)	3,608	2,138	(a)
Syria and Lebanon .. ..	546	473	626	(a)	(a)	(a)	(a)
Turkey—							
Refined and flowers of sulphur .. ..	994	3,741	6,579	2	2,247	130	—

(a) Information not available.

(b) Total imports for years ended March 20 of year following that stated.

(c) See "Palestine" under British Countries.

**TALC**  
**PRODUCTION OF TALC**  
**(Including Steatite and Pyrophyllite)**  
**(Long tons)**

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Great Britain .. ..	2,136	3,383	3,326	4,000	3,000	1,700	2,500
Kenya (b) .. ..	66	(a)	20	10	83	10	
Union of South Africa .. ..	1,916	3,622	2,655	4,820	5,301	3,915	5,573
Canada (shipments) .. ..	24,186	26,208	23,847	25,095	} 24,038	29,111	22,184
Newfoundland (c) .. ..	700	650	216	—			
India .. .. ..	22,511	23,472	23,240	18,096	21,195	25,485	32,378
Pakistan .. .. ..	(a)	(a)	(a)	(a)	58	(a)	(a)
Australia—							
Talc							
Pyrophyllite .. ..	4,790	5,745	{ 5,733	5,690	8,029	9,047	12,597
			102	411	550	648	552
<b>FOREIGN COUNTRIES</b>							
Austria .. .. ..	3,869	22,184	25,252	48,742	55,165	57,754	71,634
France .. .. ..	40,008	62,349	68,683	90,070	98,475	86,035	105,800
Germany .. .. ..	(a)	(a)	(a)	(a)	(f) 8,707	(f) 13,104	(f) 18,886
Greece .. .. ..	—	500	200	1,033	1,673	2,500	(a)
Italy .. .. ..	39,231	35,782	47,613	69,031	59,259	65,683	74,629
Norway .. .. ..	(d) 15,277	41,648	53,785	56,322	53,447	63,081	(a)
Portugal .. .. ..	—	—	—	.21	3	2	1
Spain .. .. ..	15,330	19,227	20,505	18,332	20,551	11,326	20,515
Sweden .. .. ..	9,212	13,788	10,541	11,518	11,115	11,784	(a)
Egypt .. .. ..	3,807	4,684	4,557	5,434	5,485	3,675	3,698
United States—							
Talc							
Pyrophyllite .. ..	300,656	323,919	364,289	375,587	328,950	446,321	571,836
Argentina .. .. ..	69,389	87,290	96,830	96,326	81,179	104,286	107,171
Brazil .. .. ..	2,639	3,701	(a)	(a)	(a)	(a)	(a)
Chile .. .. ..	2,665	4,117	9,350	10,573	17,501	12,432	(a)
Uruguay .. .. ..	469	(a)	(a)	257	108	140	(a)
Japan—							
Talc							
Pyrophyllite .. ..	(a)	(a)	12,791	13,677	12,385	12,200	10,003
Korea (c) .. .. ..	196,499	109,800	160,552	220,919	245,609	265,901	(a)
	(d) 11,960	(a)	(a)	(a)	(e) 307	(a)	(a)
<b>TOTAL*</b> .. ..	<b>776,000</b>	<b>808,000</b>	<b>961,000</b>	<b>1,108,000</b>	<b>1,066,000</b>	<b>1,231,000</b>	<b>1,430,000</b>

\* Excluding talc produced in Roumania, U.S.S.R., China and Manchuria.

(a) Information not available.

(b) In addition the following amounts of Kisii stone were produced (long tons): 1945—133; 1946—482; 1947—272; 1948—312; 1949—497; 1950—318; 1951—332.

(c) Pyrophyllite.

(d) Incomplete.

(e) Southern Korea only.

(f) Bizonal area.

EXPORTS OF TALC

*(Domestic Produce)*

*(Long tons)*

Exporting Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom .. ..	62	(a)	(a)	(a)	(a)	(a)	(a)
Canada (b) .. ..	6,574	5,716	5,185	4,511	3,770	3,989	3,342
Newfoundland (c) .. ..	80	261	206	—	(c)	(c)	(c)
India .. ..	7,463	5,354	3,623	3,683	2,802	3,188	5,344
Malaya (incl. re-exports) ..	(a)	158	256	471	508	613	651
Australia .. ..	(a)	51	1	5	11	—	22
<b>FOREIGN COUNTRIES</b>							
Austria .. ..	(a)	(a)	6,178	19,657	22,720	27,150	34,984
Belgium-Luxemburg E.U.	(a)	(a)	(a)	68	36	33	120
Czechoslovakia .. ..	(a)	148	165	(d)	153	(a)	(a)
France .. ..	11,467	24,628	26,633	23,324	21,053	30,115	35,081
Germany (Federal) .. ..	(a)	(a)	(a)	(a)	43	169	424
Greece .. ..	(a)	(a)	(a)	54	128	1,771	(a)
Italy .. ..	(a)	(a)	22,974	31,925	23,489	27,055	32,021
Norway .. ..	16,435	24,845	35,010	37,624	35,317	44,274	50,562
Egypt .. ..	680	—	—	1,656	1,819	(a)	(a)
United States .. ..	10,102	14,619	15,676	14,578	14,143	18,432	20,449
Uruguay .. ..	(a)						

(a) Information not available.

(b) Including Newfoundland from April 1, 1949.

(c) Years ended March 31 following that stated. Included with Canada from April 1, 1949.

(d) January to October only.

**IMPORTS OF TALC**

(Less Re-exports)

(Long tons)

Importing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Unground .. ..	2,015	657	1,069	814	1,271	513	1,135
Ground .. ..	6,361	12,120	22,101	19,585	23,367	27,028	34,944
Canada .. .. ..	5,704	6,015	7,565	6,947	6,490	8,003	8,289
Cyprus .. .. ..	—	(£401)	10	11	37	30	21
India .. .. ..	—	—	1	—	—	—	—
Malaya (total imports) .. ..	(a)	373	177	319	573	430	558
Australia .. .. ..	287	33	240	290	370	287	359
<b>FOREIGN COUNTRIES</b>							
Belgium-Luxemburg E.U.	(a)	(a)	(a)	6,409	4,936	6,165	8,234
Czechoslovakia .. ..	(a)	1,360	595	(b)	320	(a)	(a)
Denmark .. .. ..	3,545	5,064	5,657	5,545	5,858	6,842	7,979
Finland (total imports) .. ..	630	1,283	2,961	2,430	3,218	3,810	5,048
France .. .. ..	6	110	827	3,092	357	725	1,938
Germany (Federal) .. ..	(a)	(a)	(a)	12,589	11,755	17,434	18,583
Netherlands .. .. ..	(a)	(a)	(a)	14,417	9,629	12,049	11,582
Portugal .. .. ..	44	733	349	190	431	622	553
Sweden .. .. ..	(a)	(a)	(a)	(a)	1,981	1,044	(a)
Yugoslavia .. .. ..	(a)	(a)	(a)	(a)	(a)	123	93
Algeria .. .. ..	—	—	945	1,451	823	950	1,546
Belgian Congo .. ..	3	46	14	(a)	(a)	66	(a)
Egypt (a) .. .. ..	26	19	119	90	191	(a)	(a)
Morocco (French) .. ..	213	45	10	(a)	(a)	(a)	(a)
Morocco (Spanish) .. ..	11	6	40	(a)	(a)	(a)	(a)
Tunis .. .. ..	113	315	434	127	(a)	(a)	(a)
Mexico .. .. ..	708	1,429	1,639	903	(a)	(a)	(a)
United States .. .. ..	5,982	16,472	15,808	16,408	16,800	20,872	18,430
Argentina .. .. ..	45	175	(a)	(a)	(a)	(a)	(a)
Brazil .. .. ..	189	79	527	202	31	(a)	(a)
Chile .. .. ..	38	52	(a)	(a)	(a)	(a)	(a)
Colombia .. .. ..	(a)	189	(a)	(a)	169	169	(a)
Peru .. .. ..	80	24	(a)	(a)	(a)	(a)	(a)
Venezuela .. .. ..	100	200	249	251	(a)	(a)	(a)
Japan (total imports) .. ..	(a)	583	2,473	958	886	(a)	4,518
Syria and Lebanon .. ..	10	71	(a)	(a)	(a)	(a)	(a)

(a) Information not available.

(b) January to October only.

(c) Total imports.

**TANTALITE AND COLUMBITE**  
**PRODUCTION OF TANTALITE AND COLUMBITE**  
 (Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Nigeria—							
Tantalite .. ..	13	1	4	4	2	1	3
Columbite .. ..	1,571	1,550	1,286	1,096	888	864	1,078
Southern Rhodesia—							
Tantalite .. ..	7	8	12	8	5	1	—
South West Africa—							
Tantalite and columbite	—	—	(500 lbs.)	(17 lbs.)	3	6	2
Uganda—							
Tantalite .. ..	8	{ — 1 } (b) 2 (b) 1 { — 3 (b) — 3 (b) — 6					
Columbite .. ..		—	—	—			
Bismutotantalite .. ..	(c) (670 lbs.)						
Union of South Africa—							
Tantalite .. ..	(776 lbs.)	—	—	—	—	2	3
Malaya—							
Columbite .. ..	—	—	—	—	—	8	25
Australia—							
Tantalite concentrates ..	(1,050 lbs.)	(806 lbs.)	(112 lbs.)	5	2	7	2
<b>FOREIGN COUNTRIES</b>							
Belgian Congo—							
Tantalite and columbite concentrates .. ..	195	165	155	143	114	133	94
Tin-tantalite-columbite	—	—	286	513	867	1,086	1,159
French Equatorial Africa—							
Tantalite and columbite	2	1	1	2	6	2	—
Madagascar—							
Columbite .. ..	—	—	—	—	—	—	4
Mozambique—							
Columbite .. ..	2	(400 lbs.)	—	—	(570 lbs.)	5	5
United States—							
Tantalite .. ..	2	2	1	(500 lbs.)			
Columbite .. ..	1	—	—	(100 lbs.)	(1,020 lbs.)	(1,000 lbs.)	(1,000 lbs.)
Argentina—							
Tantalite and columbite	(1,000 lbs.)	(a)	(a)	(a)	(a)	(a)	(a)
Bolivia (exports)—							
Columbite .. ..	—	3	—	—	—	—	(a)
Brazil (exports)—							
Tantalite .. ..	30	44	32	4	41	(a)	(a)
Columbite .. ..	(a)	7	—	5	12	(a)	(a)

(a) Information not available.

(b) In addition Tin-columbite produced amounted to 329 lbs., 210 lbs., 1,210 lbs. and 336 lbs. in 1947, 1948, 1950 and 1951 respectively.

(c) Exports.

**EXPORTS OF TANTALITE AND COLUMBITE**

*(Domestic Produce)*

*(Long tons)*

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Tantalum .. ..	—	(5 lbs.)	(1 lb.)	4	—	(a)	(a)
Nigeria—							
Tantalite .. ..	14	7	3	2	—	3	2
Columbite .. ..	1,975	1,438	1,290	1,239	945	916	1,092
South West Africa—							
Tantalite .. ..	—	—	—	—	1	4	3
Southern Rhodesia—							
Tantalite .. ..	5	7	7	11	4	4	—
Uganda—							
Tantalite .. ..	2	4	4	2	1	2	5
Columbite .. ..	4		—	—	—	—	19
Bismutotantalite .. ..	(670 lbs.)	—	—	—	—	—	—
Union of South Africa—							
Tantalite .. ..	—	—	—	—	—	2	3
Australia—							
Tantalite and columbite	(c) 12	1	4	4	1	6	2
<b>FOREIGN COUNTRIES</b>							
Belgian Congo—							
Tantalite and columbite	208	(b)	117	170	125	193	488
French Equatorial Africa—							
Tantalite and columbite	—	—	—	—	2	6	2
United States—							
Tantalite .. ..	(11 lbs.)	(21 lbs.)	—	(60 lbs.)	—	—	143
Columbite .. ..	2	4	5	(660 lbs.)	8	49	—
Bolivia—							
Colombite .. ..	—	3	—	—	—	(a)	(a)
Brazil—							
Tantalite .. ..	30	44	32	4	41	(a)	(a)
Columbite .. ..	—	7	—	5	12	(a)	(a)

(a) Information not available.

(b) Imports from Belgian Congo into the United States.

(c) Year ended June 30 of year stated.

**IMPORTS OF TANTALITE AND COLUMBITE**

*(Less Re-exports)*

*(Long tons)*

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Tantalite and columbite	(a)	(a)	292	329	387	586	538
Tantalum powder, sheet, etc. .. .. ..	(226 lbs.)	(265 lbs.)	(170 lbs.)	(317 lbs.)	(131 lbs.)	(187 lbs.)	(377 lbs.)
<b>FOREIGN COUNTRIES</b>							
United States—							
Tantalite .. ..	281	162	187	52	61	147	106
Columbite .. ..	1,887	1,083	1,260	878	695	771	681

(a) Information not available.

**TIN**  
**PRODUCTION OF TIN ORE**  
*(In terms of metal)*  
*(Long tons)*

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Great Britain .. ..	993	849	820	862	898	889	809
Nigeria .. ..	11,224	10,333	9,133	9,237	8,825	8,258	8,539
Northern Rhodesia .. ..	18	6	1	—	7	4	2
Southern Rhodesia .. ..	125	100	122	114	74	66	59
South West Africa .. ..	184	177	146	111	119	90	75
Swaziland .. ..	53	37	24	20	32	37	32
Tanganyika .. ..	137	127	93	95	109	94	66
Uganda .. ..	203	202	156	176	174	139	120
Union of South Africa .. ..	501	487	483	457	471	643	747
Canada (smelter) .. ..	379	390	319	309	276	355	356
Burma .. ..	(d)	775	342	1,792	(e)	(e)	(e)
Malaya .. ..	3,152	8,432	27,026	44,815	54,910	57,537	57,167
Australia .. ..	2,282	2,141	2,456	1,885	1,882	1,855	1,577
<b>TOTAL</b> .. ..	<b>20,000</b>	<b>23,600</b>	<b>42,570</b>	<b>58,080</b>	<b>67,777</b>	<b>69,967</b>	<b>69,549</b>
<b>FOREIGN COUNTRIES</b>							
France .. ..	10	10	43	76	78	117	(b) 170
Germany (b) .. ..	—	—	—	—	120	120	120
Italy .. ..	35	100	50	—	—	—	—
Portugal .. ..	581	409	555	706	1,039	947	1,211
Spain .. ..	1,141	921	303	261	666	575	716
Belgian Congo .. ..	17,524	14,634	12,752	13,215	13,963	13,796	13,917
Cameroon (French) .. ..	116	113	115	102	72	66	72
Egypt .. ..	13	25	—	—	—	—	—
French West Africa .. ..	—	—	—	—	26	50	18
Morocco (French) .. ..	8	9	—	—	—	—	13
Mozambique .. ..	3	2	1	1	1	1	8
Mexico .. ..	174	263	171	182	358	440	366
United States .. ..	—	—	1	5	68	94	90
Argentina .. ..	974	923	522	273	268	267	242
Bolivia (exports) .. ..	42,487	37,618	32,663	37,336	34,115	31,213	33,133
Brazil .. ..	122	269	272	172	206	180	(b) 240
Peru .. ..	1	2	51	64	51	38	40
Burma .. ..	(c)	(c)	(c)	1,147	1,781	1,520	1,624
China (smelter) .. ..	3,268	1,930	3,907	4,800	4,200	4,030	4,800
French Indo-China .. ..	86	—	—	30	40	60	92
Indonesia .. ..	948	6,426	15,915	30,562	29,033	32,102	30,986
Japan .. ..	56	82	102	118	190	326	427
Siam .. ..	1,775	1,056	1,401	4,240	7,815	10,366	9,503
<b>Total</b> .. ..	<b>69,300</b>	<b>64,780</b>	<b>68,800</b>	<b>93,300</b>	<b>94,100</b>	<b>96,300</b>	<b>97,800</b>
<b>WORLD'S TOTAL (excl. U.S.S.R.)</b> .. ..	<b>89,300</b>	<b>88,400</b>	<b>111,400</b>	<b>151,400</b>	<b>161,900</b>	<b>166,300</b>	<b>167,300</b>

(a) Information not available.

(b) Estimated.

(c) Included under British Countries.

(d) Average annual production during Japanese occupation.

(e) Included under Foreign Countries.

SMELTER PRODUCTION OF TIN

(Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom (b)	27,549	29,121	28,083	31,002	28,384	28,500	27,650
Southern Rhodesia	117	79	121	127	75	80	63
Union of South Africa	1,032	858	601	554	595	718	829
Canada	379	390	319	309	276	355	356
Malaya	3,500	11,533	29,318	49,707	62,737	68,747	65,914
Australia	2,359	2,225	2,371	1,885	1,955	2,014	1,459
<b>TOTAL</b>	<b>34,936</b>	<b>44,206</b>	<b>60,813</b>	<b>83,584</b>	<b>93,962</b>	<b>100,400</b>	<b>96,271</b>
<b>FOREIGN COUNTRIES</b>							
Belgium	—	1,405	12,059	10,469	8,996	9,512	8,360
Italy	6	75	46	—	—	—	—
Netherlands	—	945	8,981	16,402	19,247	21,027	20,977
Portugal	101	187	373	282	218	209	313
Spain	712	1,267	622	565	640	896	884
Belgian Congo	8,530	3,533	3,076	3,875	3,247	3,238	3,011
Mexico	160	263	161	170	(c) 325	(c) 425	(c) 350
United States	40,475	43,468	33,292	36,703	35,834	33,118	31,526
Argentina	631	777	433	254	235	253	206
Bolivia (exports)	1	—	22	105	—	392	39
Brazil	169	178	220	185	157	118	(c) 180
China	3,268	1,930	3,907	4,800	4,200	4,000	4,800
French Indo-China	14	—	—	31	—	—	—
Indonesia	844	—	—	—	—	—	—
Japan	120	106	52	149	290	389	574
Siam	1,652	389	141	—	—	2	—
<b>TOTAL</b>	<b>56,700</b>	<b>54,500</b>	<b>63,400</b>	<b>74,000</b>	<b>73,400</b>	<b>73,600</b>	<b>71,200</b>
<b>WORLD'S TOTAL</b>	<b>91,600</b>	<b>98,700</b>	<b>124,200</b>	<b>157,600</b>	<b>167,400</b>	<b>174,000</b>	<b>167,500</b>

In addition secondary tin recovered in the United States (as metal, in alloys, and in chemical compounds) was as follows :—

	Long tons				Long tons		
1945	..	..	31,369	1949	..	..	22,233
1946	..	..	24,706	1950	..	..	31,680
1947	..	..	26,834	1951	..	..	30,745
1948	..	..	26,896				

(a) Information not available.

(b) Includes production from imported scrap and residues refined on toll.

(c) Estimated.

EXPORTS OF TIN

*(Domestic Produce)*

(Long tons)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Blocks, ingots, bars and slabs .. .. ..	9,803	20,600	3,909	2,216	4,204	15,460	4,912
Soft solder .. .. ..	1,122	1,840	831	1,256	1,362	2,053	2,618
Tin-foil .. .. ..	116	365	395	278	210	255	120
Nigeria—							
Ore .. .. ..	15,166	13,929	14,090	12,169	12,676	11,417	11,753
Southern Rhodesia—							
Ore and concentrates .. .. ..	22	38	28	43	—	82	—
Blocks, ingots and bars .. .. ..	65	23	12	12	3	5	5
South West Africa—							
Ore (c) .. .. ..	229	262	224	146	91	67	47
Tanganyika—							
Ore and concentrates .. .. ..	187	181	129	133	140	142	93
Uganda—							
Ore .. .. ..	287	296	189	283	185	260	155
Union of South Africa—							
Bars, sheet, etc. .. .. ..	31	148	154	—	—	—	(a)
Burma—							
Ore and concentrates (c) .. .. ..	(a)	{ (b) 96	(a)	(a)	(a)	(a)	(a)
Blocks, ingots, etc. .. .. ..		{ (b) 1	(a)	(a)	(a)	(a)	(a)
Hong Kong (re-exports)—							
Slabs and ingots .. .. ..	(a)	2,006	2,588	2,080	4,193	1,136	101
India—							
Blocks, ingots, bars, slabs and scrap .. .. ..	104	—	1	242	—	—	—
Malaya—							
Ore .. .. ..	(a)	{ 344	—	40	—	9	—
Ingots, blocks, bars, slabs .. .. ..		{ 7,619	32,072	47,215	54,783	81,805	64,956
Australia—							
Ore and concentrates (d) .. .. ..	1	(a) 103	(a) 14	25	12	(e) 5	(e) 41
Ingots .. .. ..	468			—	1	—	—
<b>FOREIGN COUNTRIES</b>							
Belgium-Luxemburg E.U.—							
Crude .. .. ..	{ 40	2,780	12,562	{ 10,356	9,809	10,193	8,484
Scrap .. .. ..				{ 24	63	57	68
Sheets, wire, etc. .. .. ..				{ 10	—	7	4
Denmark—							
Crude .. .. ..	1	8	109	218	117	399	11
Scrap .. .. ..	—	—	3	2	—	—	(a)
France—							
Ore .. .. ..	—	—	2	(a)	(a)	(a)	(a)
Pigs, bars, etc. .. .. ..	22	129	73	108	77	174	172
do. (alloys) .. .. ..	3	21	126	218	265	503	320
Scrap .. .. ..	—	—	—	—	9	25	12
Sheets and wire .. .. ..	1	10	66	123	115	62	82

(a) Information not available.

(b) February to September only.

(c) Excluding tin-tungsten ore.

(d) Sn content during the years ended June 30 of the year stated.

(e) Sn content during calendar years.

EXPORTS OF TIN (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Germany (Federal)—							
Crude, scrap and alloys							
Sheets and wire .. ..	(a)	(a)	(a)	{ —	371	931	302
Tin-foil .. ..				—	26	26	23
Italy—							
Ingots, bars, scrap, sheets, alloys, etc. .. ..	—	—	—	13	100	2	5
Netherlands—							
Ore .. ..	(a)	—	—	4			
Blocks .. ..	(a)	267	4,771	12,252	19,248	17,847	19,383
Sheets, wire, etc. ..	(a)	2	25	6	(a)	2	1
Norway—							
Ingots and bars .. ..	25	93	119	111	116	152	(a)
Portugal—							
Ore .. ..	—	181	317	636	1,214	1,156	(a)
Bars .. ..	649	244	248	199	51	3	14
Spain—							
Ingots and bars .. ..	2	9	8	440	5	176	35
Sweden—							
Crude and scrap .. ..	—	10	—	—	54	5	12
Switzerland—							
Pigs, bars, slabs, sheets, etc. .. ..	—	6	9	8	7	36	9
Tin-foil .. ..	—	—	18	24	2	3	6
Scrap .. ..	—	—	19	1	19	133	288
Algeria—							
Ingots, scrap and alloys .. ..	5	974	6	—	37	34	44
Belgian Congo—							
Ore .. ..	11,483	17,629	19,623	14,394	13,474	15,755	13,501
Ingots .. ..	6,861	4,383	4,311	3,860	4,517	3,921	2,670
Cameroon (French)—							
Ore .. ..	187	85	212	113	143	110	102
Morocco (French)—							
Ore .. ..	—	—	20	(a)	—	—	—
Mozambique—							
Ore .. ..	4	1	—	—	—	—	—
Mexico—							
Ores and concentrates .. ..	38	—	28	34	94	13	1,663
Sn content .. ..	11	—	10	12	33	5	582
Crude and scrap .. ..	6	1	3	239	(a)	(a)	(a)
United States—							
Ingots, pigs, etc. .. ..	708	859	414	78	76	287	264
Scrap .. ..	3,453	6,864	6,678	9,138	9,225	2,801	5,519
Tubes, sheets, foil .. ..	103	94	93	45	36	27	24
Argentina—							
Ore .. ..	637	79					
Slag and ashes .. ..	489	2,016					
Ingots and bars .. ..	—	—					
Bolivia—							
Ores, concentrates, etc. (Sn content) .. ..	42,487	37,618	32,663	37,336	34,115	31,424	33,000
Metal .. ..	1	—	26	81	405	269	(a)
Peru—							
Slag (Sn content) .. ..	—	2	50	64	51	45	(a)
Burma—							
Ore and concentrates (Sn content) .. ..	(b)	(b)	(b)	1,833	1,511	1,416	(a)
China—							
Ingots and slabs .. ..	1,560	1,535	4,050	3,850	(c)	3,000	(c)
French Indo-China—							
Ore (Sn content) .. ..	—	—	11	33	286	259	92
Ingots and scrap .. ..	(a)	(a)	134	94	274	259	182
Indonesia—							
Ore .. ..	(a)	(a)	16,285	45,559	43,097	43,231	44,220
Siam—							
Ore (Sn content) .. ..	69	—	5,277	5,651	7,977	10,955	8,809

(a) Information not available.

(b) See under British Countries.

(c) Estimated.

**IMPORTS OF TIN**

(Less Re-exports)

(Long tons)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
BRITISH COUNTRIES							
United Kingdom—							
Ore and concentrates ..	44,861	47,152	39,348	48,440	46,655	46,130	50,610
Blocks, ingots, bars and slabs .. ..	57	634	230	158	538	4,069	9,927
Soft solder .. ..	—	21	3	7	5		
Anglo-Egyptian Sudan—	73	15	16	24	12	8	(a)
Unwrought incl. scrap ..							
Kenya (g)—							
Unwrought incl. scrap ..	(a)	(a)	(a)	(e)	190	26	35
Bars, plates and sheets ..	36	55	6	17	10	—	—
Solder .. ..	(a)	(a)	(a)	78	94	65	64
Southern Rhodesia—							
Blocks, ingots and bars	—	—	—	10	3	26	33
South West Africa—							
Bars, sheets, etc. ..	—	—	—	1	1	—	(a)
Tanganyika—							
Unwrought incl. scrap ..	(a)	(a)	(a)	9	1	(e)	1
Bars, plates and sheets ..	—	1	—	1	22	5	—
Solder .. ..	(a)	(a)	(a)	30	30	38	57
Uganda—							
Solder .. ..	(h)	(h)	(h)	(h)	16	11	11
Union of South Africa—							
Blocks, ingots, bars and rods .. ..	6	93	48	568	635	773	1,236
Tin-foil .. ..	23	26	8	15	8	14	(a)
Canada (c)—							
Blocks, pigs and bars ..	3,212	3,751	3,961	3,598	3,676	4,817	6,135
Tin-foil .. ..	61	3	4	1	3	15	4
Newfoundland (d)—							
Bars, sheets, ingots, etc.	219	254	402	154	(d)	(d)	(d)
Aden—							
Blocks, ingots, etc. ..	38	—	—	12	(e)	5	386
Burma—							
Blocks, ingots, etc. ..	(a)	(f)	10	(a)	(a)	(a)	(a)
Ceylon—							
Ingots, slabs, etc. ..	56	—	50	44	6	15	33
Tin solder .. ..	81	10	17	32	23	26	23
Cyprus—							
Ingots and bars .. ..	11	10	9	19	1	13	6
Hong Kong (total imports)—							
Slabs and ingots .. ..	(a)	2,069	2,567	2,969	3,182	595	205
India—							
Blocks, ingots, bars and slabs .. ..	(e)	676	341	575	582	3,876	4,737
do. (Government stores)		5	50	757	200		2,905
Malaya (b)—							
Ore .. ..	(a)	{	{	4,559	4,848	9,053	13,559
Ingots, blocks, bars, slabs .. ..		654	180	167	167	30	28
Palestine—							
Ingots and bars .. ..	70	103	(a)	(a)	(j)	(j)	(j)
Tin-foil .. ..	1	11	(a)	(a)	(j)	(j)	(j)
Australia—							
Ingots .. ..	—	(i)	2,103	(i)	276	270	249
Rods, sheets, tubes, etc.	(a)		66	—	1	9	1
Foil (i) .. ..	105		556	(i)	237	164	171
New Zealand—							
Ingots, etc. .. ..	621	74	266	425	310	136	450

(a) Information not available.

(b) Total imports.

(c) Including Newfoundland from April 1, 1949.

(d) Years ended March 31 of year following that stated.

Included with Canada from April 1, 1949.

(e) Excess of re-exports.

(f) February to September only.

(g) Including Uganda up to 1948 inclusive.

(h) Included with Kenya.

(i) Years ended June 30 of that stated.

(j) See "Israel" under Foreign Countries.

IMPORTS OF TIN (*Cont.*)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES (Cont.)</b>							
Irish Republic—							
Ingots, bars, slabs, etc.	15	31	40	47	63	84	79
Soft solder .. ..	95	60	144	166	114	131	155
Tin-foil .. ..	2	9	54	33	3	26	19
<b>FOREIGN COUNTRIES</b>							
Austria—							
Crude and alloys ..	(a)	(a)	(a)	(a)	630	581	894
Belgium-Luxemburg E.U.—							
Ore .. .. ..	(a)	(a)	15,669	14,987	11,885	12,844	12,097
Crude .. .. ..				1,783	1,243	1,431	1,959
Scrap .. .. ..	2,287	3,612	2,553	{ 10	1	—	—
Sheets, wire, etc. ..				—	3	—	4
Bulgaria—							
Crude, bars, sheets, scrap, etc. .. ..	104	9	(a)	(a)	(a)	(a)	(a)
Czechoslovakia—							
Crude, scrap and alloys ..	(a)	138	1,336	(b) 1,203	(a)	(a)	(a)
Denmark—							
Crude .. .. ..	228	659	662	706	344	1,036	1,010
Scrap .. .. ..	—	—	—	—	—	18	107
Sheets, wire, etc. ..	—	12	7	5	3	28	44
Tin-foil .. .. ..	—	23	22	6	8	26	18
Finland (total imports)—							
Ingots, bars and scrap ..	17	353	376	437	418	430	719
Tin solder .. ..	—	24	32	46	46	123	135
France—							
Ore .. .. ..	—	—	327	(a) 7,618	(a) 4,410	(a) 5,664	(a) 9,635
Pigs, bars, etc. .. ..	3,193	6,910	9,300				
do. (alloyed with antimony) .. ..	1	51	35	563	47	50	272
Scrap .. .. ..	—	116	209	215	85	28	54
Sheets and wire .. ..	6	1	3	8	21	5	3
Germany (Federal)—							
Ore .. .. ..	(a)	(a)	(a)	—	1,085	4,899	1,862
Crude and scrap .. ..	(a)	(a)	(a)	1,844	3,999	8,614	8,164
Sheets and wire .. ..	(a)	(a)	(a)	1	—	—	—
Greece .. .. ..	—	104	338	52	246	291	166
Italy—							
Ingots, bars, scrap and alloys .. .. ..	—	581	2,729	1,161	1,646	4,174	4,391
Sheets, tubes, wire and alloys .. .. ..	—	—	22	17	9	6	—
Netherlands—							
Ore .. .. ..	(a)	1,325	15,852	24,339	23,990	29,702	26,966
Blocks .. .. ..	(a)	777	859	359	462	118	2,313
Sheets, wire, etc. .. ..	(a)	2	—	—	—	—	—
Norway—							
Crude .. .. ..	82	549	253	443	197	441	506
Bars, sheets, filings, etc.	214	105	219	200	138	51	46
Portugal—							
Sheets, wire, etc. .. ..	6	1	1	—	—	—	1
Spain—							
Ingots and bars .. ..	90	278	1	99	178	213	(a)
Sweden—							
Crude .. .. ..	364	666	1,512	1,402	283	1,285	1,171
Switzerland—							
Pigs, bars and slabs .. ..	59	920	851	787	370	1,208	1,220
Sheets, wire, foil, etc. .. ..	—	6	3	7	2	5	4
U.S.S.R.—							
Blocks, ingots, etc. (c) ..	—	1,474	—	—	(a)	(a)	(a)
Yugoslavia—							
Ingots .. .. ..	(a)	(a)	(a)	(a)	(a)	378	550

(a) Information not available.

(b) January to October only.

(c) Exports from the United Kingdom to the U.S.S.R.

IMPORTS OF TIN (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Algeria—							
Crude, sheets and alloys, etc. .. ..	101	188	305	251	139	119	158
Egypt—							
Crude and scrap ..	358	678	239	555	263	501	664
Madagascar—							
Bars, sheets, etc. ..	20	43	31	29	(a)	(a)	(a)
Morocco (French)—							
Ingots, etc. .. ..	19	100	160	(a)	(a)	(a)	(a)
Mozambique—							
Bars, sheets, etc. ..	7	3	6	6	1	1	1
Tunis—							
Pigs, bars and sheets ..	59	106	104	61	56	74	(a)
Cuba (total imports)—							
Ingots .. .. ..	70	(a)	(a)	49	28	(a)	(a)
Bars, sheets, etc. ..	129	(a)	(a)	14	17	(a)	(a)
Mexico—							
Ingots .. .. ..	7	91	289	167	(a)	(a)	302
United States—							
Ore ( <i>Sn content</i> ) .. ..	33,479	38,070	30,510	37,388	38,311	26,027	29,628
Blocks, pigs, bars, etc. ..	8,320	15,559	24,899	48,797	60,224	82,916	27,784
Scrap .. .. ..	—	—	49	86	48	148	147
Argentina—							
Ingots and sheets ..	2	395	876	1,659	630	968	(a)
Brazil (total imports)—							
Ingots and bars .. ..	362	779	848	1,203	946	1,552	3,313
Colombia—							
Ingots, bars, sheets, etc.	(a)	25	(a)	(a)	32	92	(a)
Chile—							
Ore .. .. ..	98	50	99	150	(a)	(a)	(a)
Ingots .. .. ..	88	163	162	142	{	100	590
Bars and sheets .. ..	—	—	(a)	(a)			290
Peru—							
Bars, sheets, etc. ..	44	33	(a)	(a)	(a)	60	(a)
Uruguay—							
Ingots, etc. .. ..	(a)	(a)	(a)	82	34	163	(a)
Venezuela—							
Crude .. .. ..	64	35	45	63	(a)	(a)	(a)
China—							
Ingots and slabs .. ..	{ (a)	860	26	(a)	(a)	(a)	(a)
Tin and lead foils .. ..	{ (a)	860	26	(a)	(a)	(a)	(a)
Iran (total imports) (b)—							
Ingots, sheets and wire	(a)	473	579	(a)	(a)	(a)	(a)
Iraq—							
Crude, etc. .. ..	3	(a)	(a)	(a)	(a)	(a)	(a)
Sheets, wire, etc. ..	145	(a)	(a)	(a)	(a)	(a)	(a)
Israel—							
Ingots, blocks and slabs ..	(c)	(c)	(c)	(c)	49	44	(a)
Japan—							
Ingots and slabs .. ..	4,255	(a)	(a)	(a)	2,462	856	2,073
Syria and Lebanon—							
Ingots and sheets ..	42	106	102	36	40	(a)	(a)
Turkey—							
Ingots, bars and sheets ..	885	199	350	743	566	1,093	787

(a) Information not available.

(b) Years ended March 20 of year following that stated.

(c) See "Palestine" under British Countries.

**TITANIUM MINERALS**  
**PRODUCTION OF TITANIUM MINERALS**  
 (Long tons)

Producing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Canada (shipments)—							
Titanium ore .. ..	12,631	1,255	6,343	3,965	482	89,732	333,736
India—							
Ilmenite .. ..	172,086	185,023	260,955	229,416	308,180	212,663	219,568
Rutile .. ..	610	258	157	127	—	36	45
Malaya (exports)—							
Ilmenite ("Amang") ..	(a)	—	13,081	13,566	19,718	24,915	43,493
Australia—							
Ilmenite concentrates ..	5,403	5,789	9,773	11,498	10,875	13,554	12,996
Estimated ilmenite content of all ilmenite-bearing concentrates (b)	8,360	6,610	10,310	11,273	9,728	12,221	11,900
Rutile concentrates ..	3,960	4,906	8,464	13,387	13,094	18,312	35,188
Estimated rutile content of all rutile-bearing concentrates (c) ..	9,744	8,152	13,194	15,007	13,738	17,701	34,973
<b>FOREIGN COUNTRIES</b>							
Norway—							
Ilmenite .. ..	27,865	51,744	68,610	88,595	97,449	103,489	103,696
Rutile (d) .. ..	75	62	50	—	16	31	18
Portugal—							
Ilmenite .. ..	573	380	239	151	904	65	166
Tin-titanium ore ..	43	11	4	44	57	42	29
Spain—							
Ilmenite .. ..	213	126	147	178	370	627	430
Cameroon (French)—							
Rutile .. ..	1,417	1,240	744	567	396	25	104
Egypt—							
Ilmenite .. ..	45	144	—	2,593	635	256	321
French Equatorial Africa—							
Rutile .. ..	—	—	—	—	—	6	—
French West Africa—							
Ilmenite .. ..	3,149	4,125	11,104	3,632	8,206	776	3,740
Rutile .. ..	—	—	—	—	—	—	3
United States—							
Ilmenite .. ..	275,461	252,185	300,476	342,629	359,227	418,143	456,866
Rutile .. ..	6,410	6,654	7,645	6,589	10,704	(a)	(a)
Brazil (exports)—							
Ilmenite .. ..	4,921	—	—	7,775	(a)	(a)	(a)
Rutile .. ..	157	28	5	—	(a)	(a)	(a)

(a) Information not available.

(b) Includes the content of Ilmenite concentrates shown above.

(c) Includes the content of Rutile concentrates shown above.

(d) Ore and concentrates.

EXPORTS OF TITANIUM MINERALS, ETC.

(Domestic Produce)

(Long tons)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom— Ferro-titanium .. ..	(a)	193	310	309	490	568	535
Canada— Titanium ore .. ..	12,631	1,207	1,116	(a)	(a)	(a)	(a)
Malaya— Ilmenite ("Amang") ..	(a)	—	13,081	13,566	19,718	24,915	43,493
India— Ilmenite .. .. ..	159,229	202,404	284,703	247,221	266,063	240,783	243,811
Rutile sand .. .. ..	164	50	131	(a)	(a)	36	45
Australia— Rutile .. .. ..	(a)	4,857	8,880	13,270	11,623	15,292	35,040
Rutile-Ilmenite .. .. ..	(a)	10	75	916	194	—	980
Zircon-Rutile .. .. ..	(a)	5,768	10,370	4,160	2,964	1,564	—
Zircon-Rutile-Ilmenite	(a)	2,458	2,063	180	—	4	—
<b>FOREIGN COUNTRIES</b>							
Belgium-Luxemburg E.U.— Titanium white .. ..	(a)	(a)	(a)	504	9	144	31
Czechoslovakia— Titanium white .. ..	(a)	636	596	(b)	414	(a)	(a)
France— Titanium oxide, etc. ..	24	167	223	169	310	740	1,109
Italy— Titanium oxide .. ..	(a)	(a)	127	242	287	667	1,037
Norway— Ilmenite (c) .. .. ..	24,726	51,508	65,944	91,428	79,640	119,885	(a)
Rutile .. .. ..	75	50	25	24	26	224	(a)
Titanium white .. ..	957	930	1,429	1,813	2,527	3,247	(a)
Portugal— Ilmenite .. .. ..	5	222	144	—	297	—	(a)
Cameroon (French)— Rutile .. .. ..	1,023	1,663	451	612	754	568	705
French West Africa (Senegal)— Ilmenite .. .. ..	658	5,147	12,764	2,690	6,300	1,413	3,921
United States— Ores and concentrates ..	544	1,237	1,130	1,298	1,344	535	577
Ferro-titanium .. ..	664	491	455	429	160	152	157
Titanium oxide and pig- ments .. .. ..	11,450	14,566	18,903	23,950	26,447	29,161	35,037
Titanium compounds ..	67	(a)	(a)	(a)	(a)	(a)	(a)
Brazil— Ilmenite .. .. ..	4,921	—	—	7,775	—	(a)	(a)
Rutile .. .. ..	157	28	5	—	—	(a)	(a)

(a) Information not available.

(b) January to October only.

(c) Ilmenite is not recorded separately. The figures refer to exports of "Other ores" which were probably mainly ilmenite.

IMPORTS OF TITANIUM MINERALS, ETC.\*

(Less Re-exports)

(Long tons)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Ilmenite .. .. ..	26,532	37,830	71,250	57,242	{ 69,400 6,514	94,652 6,686	78,113 9,102
Rutile .. .. ..							
Canada—							
Titanium oxide, etc. ..	9,536	10,683	12,193	17,541	18,565	(a)	26,471
Australia—							
Titanium white and oxide	(e) 819	(e) 1,450	(e) 590	(e) 734	1,634	2,780	1,689
<b>FOREIGN COUNTRIES</b>							
Austria—							
Titanium white .. ..	(a)	(a)	10	114	296	527	585
Belgium-Luxemburg E.U.—							
Titanium white .. ..	(a)	(a)	(a)	731	850	968	1,303
Czechoslovakia—							
Titanium white .. ..	(a)	—	20	—	(a)	(a)	(a)
France—							
Titanium oxide, etc. ..	142	316	496	140	1,123	2,100	1,651
Iceland—							
Titanium white .. ..	1	12	(a)	(a)	182	103	—
Italy—							
Ferro-titanium .. ..	—	—	1	10	63	14	52
Titanium oxide .. ..	(a)	(a)	—	—	13	300	259
Netherlands—							
Titanium oxide .. ..	(a)	91	424	2,002	1,895	(a)	(a)
Titanium white .. ..	(a)	206	603	64	93	(a)	(a)
Portugal—							
Ore .. .. ..	—	15	3	—	40	9	—
Sweden—							
Ore .. .. ..	(a)	(a)	(a)	(a)	(a)	1,482	(a)
Titanium white .. ..	(a)	(a)	(a)	(a)	1,696	2,864	(a)
Mexico—							
Titanium oxide .. ..	183	294	3:8	591	(a)	(a)	(a)
United States—							
Ilmenite (b) .. ..	186,461	215,136	(d) 273,547	216,177	289,425	193,267	168,821
Rutile (b) .. ..	2,950	3,936	(d) 6,765	7,831	2,755	3,060	9,842
Ferro-titanium .. ..	—	3	40	25	34	116	222
Titanium compounds ..	—	11	11	11	2	608	233
Brazil—							
Titanium oxide .. ..	182	103	277	412	1,151	(a)	(a)
Chile—							
Titanium oxide .. ..	147	128	(a)	(a)	(a)	(a)	(a)
Japan—							
Ilmenite .. .. ..	(a)	—	1,443	—	(a)	(a)	25,015

\* Imports of ilmenite are generally not separately recorded in Customs Returns.

(a) Information not available.

(b) As recorded in the official trade returns. In addition the U.S. Bureau of Mines records the following amounts of Ilmenite and Rutile contained in "zirconium ores" imported from Australia (long tons):—

		Ilmenite	Rutile
1945	.. .. ..	(c) 1,104	6,516
1946	.. .. ..	1,239	1,300

(c) Includes 276 long tons not recovered from mixed concentrates.

(d) In addition the U.S. Bureau of Mines records 4,519 long tons of Rutile contained in "Ilmenite" imported from Australia.

(e) Year ended June 30 of that stated.

# TUNGSTEN

## PRODUCTION OF TUNGSTEN ORE AND CONCENTRATES (Long tons)

Producing Country							Estimated WO <sub>3</sub> Content								
	1945	1946	1947	1948	1949	1950	1951	1945	1946	1947	1948	1949	1950	1951	
<b>BRITISH COUNTRIES</b>															
Great Britain—															
Concentrates ..	110	89	66	39	65	61	51	71	64	53	27	48	45	36	
Nigeria—															
Concentrates ..	5	5	3	3	5	5	20	3	3	2	2	3	3	13	
South West Africa—															
Wolfram ..	—	—	3	4	1	13	18	—	—	2	3	1	9	12	
Scheelite ..	—	—	5	6	4	4	11	4	—	4	4	3	3	8	
Tim-wolfram concentrates	—	—	—	—	90	94	59	—	—	—	—	13	13	9	
Southern Rhodesia—															
Concentrates ..	261	48	24	70	24	58	210	188	34	17	50	17	42	151	
Tanganyika—															
Wolfram ..	—	—	—	—	1	51	31	(c)	39	—	—	—	1	32	19
Uganda—															
Wolfram ..	53	79	131	164	174	144	161	36	53	88	115	121	101	109	
Union of South Africa—															
Concentrates ..	411	126	79	140	374	86	172	269	84	53	89	247	56	111	
Canada (b)—															
Concentrates ..	(10 cwt.)	—	298	629	149	(g)	842	(a)	(7 cwt.)	—	221	467	113	127	9
Burma—															
Tungsten concentrates ..	(e)	743	73	349	(f)	(f)	(f)	(f)	(f)	475	50	237	(f)	(f)	
Tim-wolfram concentrates ..	(e)	1,109	(a)	(a)	—	—	—	—	—	320	(a)	—	(f)	(f)	13
Hong Kong ..										20	—	—	—	—	
India—															
Concentrates ..	20	3	—	—	—	—	—	14	12	2	—	—	—	—	9
Malaya—															
Wolfram ..	15	9	33	46	28	13	28	10	7	6	23	32	20	9	20
Scheelite ..	10	—	11	29	30	10	18	—	—	8	8	20	21	7	13
Australia—															
Wolfram (d) ..	521	321	388	428	385	282	697	335	206	248	292	264	198	467	
Scheelite ..	609	693	664	651	809	801	1,031	397	452	433	445	550	530	632	
New Zealand—															
Scheelite ..	..	34	27	22	25	25	22	32	22	18	14	16	16	14	21

(c) Information not available. (b) Shipments (chiefly scheelite).  
(e) Average annual production during the Japanese occupation.

(d) Exports. (f) Includes some mixed wolfram-scheelite concentrates.  
(g) Included under Foreign Countries. (g) Revised.

## PRODUCTION OF TUNGSTEN ORE AND CONCENTRATES (Cont.)

Producing Country	1945	1946	1947	1948	1949	1950	1951	Estimated WO <sub>3</sub> Content					
								1945	1946	1947	1948	1949	1950
<b>FOREIGN COUNTRIES</b>													
Finland—	—	—	—	3	37	15	6	—	—	—	2	29	11
Concentrates ..	..	..	..	224	354	488	634	402	697	109	169	335	468
France—	..	..	..	171	15	19	8	3	2	6	3	4	2
Concentrates ..	..	..	..	—	—	—	—	—	—	3	—	4	2
Italy—	..	..	..	13	5	—	—	—	—	—	—	—	—
Ore ..	..	..	..	—	—	—	—	—	—	—	—	—	—
Norway—	..	..	..	—	—	—	—	—	—	—	—	—	—
Wolfram ..	..	..	..	—	—	—	—	—	—	—	—	—	—
Portugal (c)—	..	..	..	—	—	—	—	—	—	—	—	—	—
Scheelite ..	..	..	..	—	—	—	—	—	—	—	—	—	—
Wolfram ..	..	..	..	—	—	—	—	—	—	—	—	—	—
Tin-tungsten ores ..	..	..	..	—	—	—	—	—	—	—	—	—	—
Spain—	..	..	..	—	—	—	—	—	—	—	—	—	—
Concentrates ..	..	..	..	284	390	418	794	806	792	1,677	1,85	234	516
Tin-tungsten ores ..	..	..	..	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	524
Sweden—	..	..	..	—	—	—	—	—	—	—	—	—	515
Concentrates ..	..	..	..	563	691	506	527	678	528	553	244	289	187
Algeria ..	..	..	..	—	—	—	—	—	—	—	—	—	—
Belgian Congo—	..	..	..	—	—	—	—	—	—	—	—	—	—
Concentrates ..	..	..	..	427	384	174	215	327	194	390	278	250	113
Tin-tungsten ore ..	..	..	..	—	—	553	391	68	439	540	—	—	140
Egypt—	..	..	..	—	—	—	—	—	—	—	—	—	—
Concentrates ..	..	..	..	—	—	—	—	—	—	—	—	—	—
Morocco (French) —	..	..	..	—	—	—	—	—	—	—	—	—	—
Concentrates ..	..	..	..	—	—	—	—	—	—	—	—	—	—
Mexico ..	..	..	..	—	—	—	—	—	—	—	—	—	—
United States—	..	..	..	—	—	—	—	—	—	—	—	—	—
Concentrates ..	..	..	..	5,055	4,382	2,839	3,784	2,717	3,720	5,548	3,033	2,629	1,703
Argentina—	..	..	..	—	—	—	—	—	—	—	—	—	—
Concentrates (b) ..	..	..	..	954	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Bolivia (exports) —	..	..	..	3,498	2,351	2,909	2,240	2,261	2,422	2,675	2,275	1,252	1,556
Concentrates ..	..	..	..	2,006	1,452	1,208	1,039	558	690	(a)	(a)	(a)	1,467
Chile—	..	..	..	—	—	—	(a)	(a)	(a)	—	—	(a)	1,502
Concentrates ..	..	..	..	—	—	—	(a)	(a)	(a)	—	—	(a)	1,467

(a) Information not available.

(b) Approximately 40% Scheelite and 60% Wolfram.

(c) In addition 460 tons of mixed Pyrites-Wolfram ore containing 10-17% WO<sub>3</sub> were produced in 1947.

## PRODUCTION OF TUNGSTEN ORE AND CONCENTRATES (Cont.)

Producing Country	1945	1946	1947	1948	1949	1950	1951	Estimated WO <sub>3</sub> Content					1945	1946	1947	1948	1949	1950	1951
								1945	1946	1947	1948	1949		1945	1946	1947	1948	1949	1950
<b>FOREIGN COUNTRIES (Cont.)</b>																			
Peru—Concentrates	.. ..	472	421	566	364	470	508	(a)	309	301	342	208	268	305	(a)	314	(a)	314	(a)
Burma—Tungsten concentrates ..	(d) (d)	(d) (d)	(d) (d)	(a) (a)	356	278	269	483	(d) (d)	(d) (d)	(d) (d)	231	181	175	(a) (a)				
China—Tin-wolfram concentrates ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
China—Concentrates .. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
French Indo-China—Concentrates .. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
Japan—Concentrates .. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
Korea—Concentrates .. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
Siam—Concentrates .. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
Tim-tungsten concentrates .. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..

Tungsten ores are also produced in U.S.S.R.

(a) Information not available.

(b) South Korea only.

(c) Includes some Tungsten concentrates.

(d) Included under British Countries.

(e) Estimated.

EXPORTS OF TUNGSTEN, ETC.

*(Domestic Produce)*

*(Long tons)*

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Tungsten ore .. ..	—	18	10	66	158	1	—
Ferro-tungsten .. ..	159	277	960	1,082	911	1,171	394
Tungsten powder, wire, etc. .. ..	(2 cwt.)	30	54	110	92	149	83
Nigeria—							
Tungsten ore .. ..	10	2	5	3	3	5	19
Southern Rhodesia—							
Tungsten ores .. ..	393	132	13	75	21	30	169
South West Africa—							
Tungsten ore .. ..	84	4	17	18	9	21	11
Tin-tungsten ore .. ..	—	—	—	—	98	99	49
Tanganyika—							
Tungsten ore .. ..	—	—	—	1	29	52	34
Uganda—							
Tungsten ore .. ..	79	84	131	104	139	189	159
Union of South Africa—							
Tungsten ore .. ..	909	169	104	127	312	253	199
Burma—							
Tungsten ore and concen- trates (b) .. ..	(a)	(d)	15	(a)	(a)	(a)	(a)
Hong Kong (re-exports)—							
Tungsten ore .. ..	(a)	656	992	3,307	3,714	2,530	192
India—							
Tungsten and tin-tung- sten ores .. ..	65	12	5	—	—	—	5
Malaya (c)—							
Wolfram .. ..	{ (a)	{ (a)	83	375	158	87	111
Scheelite .. ..			8	36	29	11	213
Australia—							
Wolfram .. ..	587	545	345	345	273	147	289
Scheelite .. ..	(e) 44	592	949	879	906	253	12
Tungsten ore and con- centrates (f) .. ..	—	—	(e) 19	(e) 99	120	578	1,234
New Zealand—							
Scheelite .. ..	75	21	16	28	28	29	39
<b>FOREIGN COUNTRIES</b>							
Portugal—							
Tungsten ore .. ..	—	1,974	3,005	2,650	2,500	2,597	4,082
Spain—							
Tungsten ore .. ..	1,636	52	1,431	558	478	706	1,402
Sweden—							
Ore .. ..	—	—	10	—	—	36	141
Ferro-tungsten .. ..	5	288	1,024	704	759	758	347
Belgian Congo—							
Tungsten ores .. ..	(a)	(a)	564	252	176	598	464
Mexico—							
Tungsten ore and concen- trates .. ..	157	56	173	390	111	111	290
WO <sub>3</sub> content .. ..	63	45	46	80	39	40	(a)

(a) Information not available.

(b) Including tin-tungsten concentrates.

(c) Including re-exports.

(d) February to September only.

(e) Year ended June 30 of that stated.

(f) Classified as "not elsewhere indicated" but believed to be chiefly Scheelite.

EXPORTS OF TUNGSTEN, ETC. (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
United States—							
Ore and concentrates ..	2	35	139	370	91	6	—
Ferro-tungsten .. ..	385	81	37	560	277	149	127
Tungsten metal, wire and alloys .. .. ..	116	62	109	81	48	68	111
Argentina—							
Tungsten ore .. .. ..	934	474	(a)	81	(a)	(a)	(a)
Bolivia—							
Tungsten ore ( $WO_3$ content) .. ..	2,275	1,252	1,556	1,467	1,502	1,467	1,605
Brazil—							
Tungsten ore .. .. ..	2,006	1,452	1,208	1,039	558	690	(a)
Peru—							
Tungsten ore and concentrates ( $WO_3$ content) ..	196	412	222	139	131	393	(a)
China—							
Tungsten ore .. .. ..	—	4,855	6,012	12,848	(a)	(a)	(a)
French Indo-China—							
Tungsten ore .. .. ..	(a)	165	(a)	—	—	—	—
Korea—							
Tungsten ore (b) .. ..	1,500	(a)	(a)	1,800	(a)	(a)	(a)
Siam—							
Tungsten ore .. .. ..	(a)	(a)	(a)	(a)	(a)	(a)	(a)

(a) Information not available.

(b) Estimated imports into Japan from the country indicated.

**IMPORTS OF TUNGSTEN, ETC.**

(Less Re-exports)

(Long tons)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Tungsten ores .. .	3,067	2,085	7,070	7,676	5,616	5,778	4,743
Tungsten powder, wire, etc. .. .	—	1	1	1	1	3	3
Canada—							
Tungsten ore .. .	2	1	44	74	25	25	25
Ferro-tungsten .. .	—	26	306	172	135	96	450
Hong Kong ( )—							
Tungsten ore .. .	(a)	799	1,707	2,402	4,810	47	—
Malaya (a)—							
Wolfram .. .	(a)	—	—	56	15	11	84
<b>FOREIGN COUNTRIES</b>							
Austria—							
Tungsten ore .. .	(a)	(a)	(a)	(a)	(a)	(a)	180
Ferro-tungsten .. .	(a)	(a)	(a)	(a)	(a)	698	398
Germany (federal)—							
Tungsten ore .. .	(a)	(a)	(a)	4,475	678	1,790	2,872
Italy—							
Ferro-tungsten .. .	—	93	74	197	252	83	77
Sweden—							
Tungsten ore .. .	255	1,058	2,555	2,169	2,135	1,581	984
Ferro-tungsten .. .	—	20	—	5	24	72	(a)
United States—							
Tungsten ore .. .	4,709	8,019	5,924	7,496	5,876	12,831	5,316
WO <sub>3</sub> content .. .	2,877	4,790	4,079	4,770	3,764	8,879	3,595
Tungsten metal (WO <sub>3</sub> content) .. .	2	5	6	—	8	119	48
Ferro-tungsten .. .	—	—	—	—	28	785	901
Japan—							
Tungsten ore .. .	1,900	(a)	5	(a)	(a)	(a)	144

(a) Information not available.

(b) Total imports.

**URANIUM MINERALS**  
**PRODUCTION OF URANIUM MINERALS**  
(Cwt.)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES</b>							
Belgian Congo (exports)— Uranium minerals ..	196,189	(a)	(a)	(a)	(a)	(a)	(a)

Statistics of the production of Uranium are no longer published. In addition to Belgian Congo uranium minerals are produced in a number of other countries.

(a) Information not available.

**EXPORTS OF URANIUM MINERALS, ETC.**  
*(Domestic Produce)*

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom— Radium compounds Grains	(£814)	(£705)	5	8	1	294	118
Canada— Radium and salts £	270,289	84,122	381,102	216,439	43,920	—	—
<b>FOREIGN COUNTRIES</b>							
France— Radium and radium products .. . Lb.	64	44	—	—	—	—	—
Portugal— Uranium ore .. Cwt.	(a)	—	—	1	—	—	(a)
Belgian Congo— Uranium minerals Cwt.	196,189	(a)	(a)	(a)	(a)	(a)	(a)
United States— Radium metals (Ra content) Mgrams.	361	1,616	68	546	428	250	8,892
Mozambique— Uranium minerals Cwt.	—	—	—	—	787	—	1,838

(a) Information not available.

**IMPORTS OF URANIUM MINERALS, ETC.**

(Less Re-exports)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Uranium minerals Cwt.	—	—	—	—	—	4	(a)
Radium compounds Grains	138	65	520	747	621	191	401
Canada (b)—							
Radium .. . £	89	4,062	54,990	90,694	18,300	115,182	125,378
Newfoundland (c)—							
Radium salts and com- pounds Mgrams.	406	—	(a)	(a)	(c)	(c)	(c)
<b>FOREIGN COUNTRIES</b>							
France—							
Uranium oxide .. Cwt.	10	10	4	(a)	(a)	(a)	(a)
Radium and radium pro- ducts .. . Lb.	—	496	86	4	2	—	—
Egypt—							
Radium .. . £	—	284	73	6	2	—	(a)
United States—							
Uranium oxide and salts .. . Cwt.	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Radium salts Mgrams.	67,342	16,596	76,681	77,018	98,032	80,969	(£437,701)
Brazil—							
Radium and radium pro- ducts Mgrams.	30	1,663	834	1,265	221	(a)	(a)
Chile—							
Uranium and compounds Lb.	22	7	(a)	(a)	(a)	(a)	(a)
Radium compounds Grams.	—	50	(a)	(a)	(a)	(a)	(a)
Peru—							
Radium salts .. Lb.	—	265	(a)	(a)	(a)	(a)	(a)
Turkey—							
Uranium salts .. Lb.	15	15	8	4	—	—	—

(a) Information not available.

(b) Including Newfoundland from April 1, 1949.

(c) Years ended March 31 of year following that stated. Included with Canada from April 1, 1949.

**VANADIUM**  
**PRODUCTION OF VANADIUM ORES**  
*(In terms of metal)*  
*(Long tons)*

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Northern Rhodesia ..	216	67	56	171	151	—	86
South West Africa ..	435	457	222	180	160	290	521
<b>FOREIGN COUNTRIES</b>							
Argentina .. ..	3	6	7	(a)	(a)	(a)	(a)
United States (Shipments)	1,323	568	946	503	414	425	(a)
Peru .. ..	661	317	428	(b)	—	—	(a)

Vanadium ore is also produced in Mexico.

(a) Information not available.

(b) Revised.

**EXPORTS OF VANADIUM**  
*(Domestic Produce)*  
*(Long tons)*

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom— Ferro-vanadium ..	(a)	(a)	57	131	87	209	58
Northern Rhodesia— Oxide, fused ..	597	22	146	159	131	213	120
South West Africa— Concentrates ..	1,331	900	2,753	(b) 460	(b) 639	(b) 414	(b) 794
<b>FOREIGN COUNTRIES</b>							
Mexico— Concentrates ..	(a)	(a)	—	56	163	89	(a)
Flue dust ( <i>V content</i> ) ..	(a)	(a)	(a)	(a)	—	61	(a)
United States— Ore and concentrates ( <i>V content</i> ) ..	51	3	6	11	10	1	1
Metal, alloys and scrap ..	—	51	80	107	87	37	55
Peru— Ore and concentrates ( <i>V content</i> ) ..	76	327	417	443	293	641	(a)

(a) Information not available.

(b)  $V_2O_5$  content of lead-vanadate concentrates, the gross weight of which is included under "Lead."

**IMPORTS OF VANADIUM**

(Less Re-exports)

(Long tons)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Ore .. .. ..	1,331	914	1,006	1,550	1,006	1,270	602
Oxide .. .. ..	(a)	20	46	42	121	173	68
Other compounds ..	(a)	3	94	—	3	—	(940 lbs.)
<b>FOREIGN COUNTRIES</b>							
France—							
Oxide .. .. ..	222	609	70	(a)	(a)	(a)	(a)
Italy—							
Oxide .. .. ..	(a)	(a)	(a)	17	14	(a)	5
Ferro-vanadium ..	—	—	—	—	52	53	59
Sweden—							
Ore .. .. ..	8	26	159	—	3	25	20
Ferro-vanadium ..	2	1	42	114	3	21	(a)
United States—							
Ore .. .. ..	3,918	1,243	1,462	1,801	906	2,281	1,738
(V content) .. ..	697	353	439	534	246	650	439
Flue dust (V content) ..	12	10	32	—	—	—	—
Japan—							
Ore .. .. ..	(a)	(a)	21	(a)	(a)	(a)	(a)

(a) Information not available.

**ZINC**  
**PRODUCTION OF ZINC ORE**  
*(In terms of metal)*  
*(Long tons)*

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Great Britain .. .	3,562	—	—	—	—	35	191
Kenya .. .	—	—	—	—	—	—	40
Nigeria .. .	—	—	6	357	73	—	—
Northern Rhodesia (b) .. .	15,576	17,568	21,600	23,940	27,180	37,668	36,259
South West Africa .. .	—	—	(d) 5,300	11,343	12,962	11,787	14,582
Canada (b) .. .	230,899	210,098	185,592	209,075	257,377	279,667	299,157
Newfoundland .. .	50,597	48,653	39,481	38,633	—	—	—
India .. .	—	—	—	—	(e) 300	—	1,050
Australia .. .	150,313	171,910	182,258	190,469	181,998	202,384	194,718
<b>TOTAL</b> .. .	<b>451,000</b>	<b>448,200</b>	<b>434,200</b>	<b>473,800</b>	<b>479,600</b>	<b>531,800</b>	<b>546,000</b>
<b>FOREIGN COUNTRIES</b>							
Austria .. .	(a)	900	1,450	3,104	3,770	3,960	4,613
Finland (b) .. .	1,363	1,880	1,901	2,447	2,435	2,142	3,001
France .. .	3,282	4,770	5,730	5,935	10,735	11,986	(e) 12,000
Germany (Federal) .. .	24,000	22,186	24,689	33,335	50,906	68,206	71,790
Greece .. .	(a)	485	1,239	2,624	2,960	3,134	8,302
Italy .. .	9,700	28,800	56,900	72,400	70,800	83,868	94,169
Norway .. .	1,806	4,243	5,548	6,220	6,499	4,657	5,383
Poland .. .	(a)	(c) 55,720	(c) 70,623	(c) 85,714	(a)	(a)	(a)
Spain (f) .. .	29,137	36,212	39,125	43,349	51,168	61,450	74,353
Sweden .. .	33,069	37,224	35,358	34,925	34,603	36,535	34,242
U.S.S.R. (smelter) (e) .. .	85,000	90,000	105,000	145,000	175,000	210,000	240,000
Yugoslavia .. .	(e) 10,000	22,000	34,000	35,000	43,000	37,491	38,798
Algeria .. .	1,876	3,800	5,760	6,030	6,396	7,064	7,116
Angola .. .	—	—	—	—	—	—	350
Belgian Congo .. .	23,319	34,981	39,519	44,894	55,919	75,107	88,138
French Equatorial Africa .. .	612	—	—	—	43	566	512
Morocco (French) .. .	965	1,660	1,722	2,290	2,707	11,232	19,140
Tunis .. .	755	1,529	2,540	2,342	3,263	2,886	3,460
Mexico .. .	206,624	137,331	192,721	176,202	175,585	220,000	177,220
United States (b) .. .	548,534	513,244	569,293	562,479	529,646	556,585	599,577
Argentina .. .	12,927	14,492	15,974	11,996	10,748	12,498	15,230
Bolivia (exports) .. .	20,644	18,885	14,381	20,789	17,388	19,269	30,053
Peru (b) .. .	60,188	58,793	57,262	57,913	70,899	86,491	99,699
French Indo-China .. .	374	—	—	—	—	—	—
Japan .. .	22,325	20,716	29,068	32,904	43,616	51,210	63,269
<b>TOTAL</b> .. .	<b>1,100,000</b>	<b>1,100,000</b>	<b>1,300,000</b>	<b>1,390,000</b>	<b>1,450,000</b>	<b>1,660,000</b>	<b>1,780,000</b>
<b>WORLD'S TOTAL</b> .. .	<b>1,550,000</b>	<b>1,550,000</b>	<b>1,730,000</b>	<b>1,864,000</b>	<b>1,930,000</b>	<b>2,192,000</b>	<b>2,326,000</b>

- (a) Information not available.
- (b) Recoverable.
- (c) Smelter production.
- (d) Content of ore sorted ex dumps.
- (e) Estimated.
- (f) Revised.

**METAL PRODUCTION OF ZINC**  
 (Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom .. ..	62,028	65,517	68,296	71,983	64,115	70,290	69,734
Northern Rhodesia .. ..	15,240	17,184	21,140	22,170	22,850	22,715	22,590
Canada .. .. ..	163,676	165,788	159,164	175,513	183,969	182,471	195,709
Australia .. .. ..	83,773	76,316	69,421	81,312	80,956	83,652	77,010
<b>TOTAL</b> .. ..	<b>324,717</b>	<b>324,805</b>	<b>318,021</b>	<b>350,978</b>	<b>351,890</b>	<b>359,128</b>	<b>365,043</b>
<b>FOREIGN COUNTRIES</b>							
Belgium .. .. ..	5,453	71,266	126,323	143,881	171,335	174,525	197,713
France .. .. ..	8,281	30,524	42,300	53,024	59,643	70,401	73,378
Germany (Federal) (b) ..	(a)	14,620	20,396	40,704	85,547	120,854	138,416
Italy .. .. ..	1,600	15,021	23,697	25,981	26,033	37,517	46,481
Netherlands .. .. ..	—	1,979	9,381	13,373	15,368	19,440	22,284
Norway .. .. ..	9,082	29,733	34,034	41,337	40,441	42,491	40,180
Poland .. .. ..	(a)	55,720	70,623	85,714	(a)	(a)	(a)
Spain .. .. ..	17,031	17,291	19,511	20,869	19,242	20,675	20,940
Sweden .. .. ..	2,882	—	—	—	—	—	—
U.S.S.R. (c) .. .. ..	85,000	90,000	105,000	145,000	175,000	210,000	240,000
Yugoslavia .. .. ..	(a)	3,242	6,396	6,340	8,682	10,673	13,014
Mexico .. .. ..	49,196	41,319	55,853	47,560	52,651	48,294	51,777
United States (d) (e) ..	682,644	650,234	716,513	703,361	727,484	753,096	787,172
Argentina .. .. ..	1,517	1,785	2,600	1,577	2,606	(c) 7,400	(c) 8,500
Peru .. .. ..	1,558	921	997	680	587	1,242	896
China .. .. ..	323	a)	(a)	(a)	(a)	(a)	(a)
Japan .. .. ..	25,373	11,078	14,598	20,845	31,806	48,234	55,450
<b>TOTAL</b> .. ..	<b>920,000</b>	<b>1,050,000</b>	<b>1,250,000</b>	<b>1,350,000</b>	<b>1,510,000</b>	<b>1,650,000</b>	<b>1,780,000</b>
<b>WORLD'S TOTAL</b> ..	<b>1,245,000</b>	<b>1,375,000</b>	<b>1,568,000</b>	<b>1,701,000</b>	<b>1,862,000</b>	<b>2,010,000</b>	<b>2,145,000</b>

(a) Information not available.

(b) British Zone only up to 1948. Including secondary.

(c) Estimated.

(d) In addition secondary zinc recovered was as follows (long tons):—

1945 .. .. ..	321,825	1949 .. .. ..	212,333
1946 .. .. ..	268,466	1950 .. .. ..	291,098
1947 .. .. ..	277,494	1951 .. .. ..	280,694
1948 .. .. ..	289,856		

(e) The production by grades (including redistilled secondary) was as follows (long tons):—

	1945	1946	1947	1948	1949	1950	1951
A—High grade—Special ..	196,644	210,879	213,637	221,737	205,871	242,570	251,403
Ordinary ..	171,106	161,041	170,026	175,430	184,510	171,496	156,696
B—Intermediate grade ..	43,845	28,834	32,868	34,725	19,208	19,260	18,512
C and D—Brass special ..	67,633	67,229	54,557	41,023	50,346	41,723	54,028
Selected ..	15,506	12,229	11,468	4,217	2,290	3,590	12,048
E—Prime Western ..	231,876	209,769	287,120	281,871	314,402	334,252	337,929

### PRODUCTION OF ELECTROLYTIC ZINC\*

(Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
Northern Rhodesia ..	10,531	7,176	14,753	15,114	15,372	14,923	10,676
Canada ..	163,676	165,788	159,164	175,513	183,969	182,471	195,709
Australia (Tasmania) ..	83,773	76,316	69,421	81,312	80,956	83,652	77,010
<b>FOREIGN COUNTRIES</b>							
Belgium ..	955	11,338	14,271	15,649	(a)	(a)	(a)
France ..	6,693	17,726	20,147	23,610	(a)	(a)	(a)
Italy ..	1,400	14,310	18,621	22,457	22,174	30,972	(a)
Norway ..	9,082	29,733	34,034	41,337	40,441	42,491	39,597
Poland ..	(a)	10,391	14,265	(a)	(a)	(a)	(a)
United States ..	241,004	251,156	263,857	278,997	291,207	305,433	300,078
Japan ..	(b) 12,000	(b) 5,000	(b) 7,000	(a)	19,813	(a)	(a)

\*This production is already included in the Metal table and is not additional.

(a) Information not available.

(b) Estimated.

### PRODUCTION OF ZINC DUST

(Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom ..	5,892	6,180	5,319	6,976	7,468	8,872	9,579
Northern Rhodesia ..	(a)	6	30	29	15	24	5
Canada (estimated) ..	(a)						
Australia (sales) ..	(a)	(a)	(a)	(a)	317	(a)	(a)
<b>FOREIGN COUNTRIES</b>							
Belgium ..	157	1,486	3,376	4,232	(a)	(a)	(a)
France ..	156	826	137	1,093	(a)	(a)	(a)
Germany (Federal) ..	(a)	(a)	(a)	1,753	2,482	4,876	6,976
Poland ..	(a)	1,198	2,148	(a)	(a)	(a)	(a)
United States ..	23,104	25,512	27,323	28,765	20,336	25,823	28,299

(a) Information not available.

### PRODUCTION OF ROLLED ZINC SHEETS, PLATES AND STRIPS

(Long tons)

Producing Country	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom ..	24,120	26,424	26,098	27,685	25,196	28,196	21,349
<b>FOREIGN COUNTRIES</b>							
Belgium ..	7,726	36,435	46,769	35,303	32,317	(a)	(a)
Poland ..	9,565	27,503	(c) 34,000	(c) 37,000	(a)	(a)	(a)
United States (b) ..	86,587	81,297	63,569	69,347	51,774	62,567	59,007
Japan ..	2,338	1,736	5,019	8,941	6,023	4,205	(a)

(a) Information not available.

(b) Excluding strip and ribbon zinc re-rolled from scrap originating in fabricating plants operated in connection with zinc rolling-mills, as follows :—

	Long tons	Long tons
1945 ..	28,543	1949 ..
1946 ..	16,670	1950 ..
1947 ..	13,350	1951 ..
1948 ..	13,421	10,381

(c) Estimated.

## EXPORTS OF ZINC

(Domestic Produce)

(Long tons)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Ore and concentrates ..	—	—	—	6,078	1	311	15
Ingots, bars etc. ..	2,084	1,840	308	1,044	358	71	10
Sheets, plates, etc. ..	1,299	4,353	2,556	2,909	3,545	3,745	2,097
Oxide .. ..	11,817	22,845	11,216	14,174	12,444	13,490	775
Lithopone, etc. .. ..	7,634	7,003	3,969	4,854	8,061	7,360	4,435
Northern Rhodesia—							
Ores and concentrates ..	—	—	—	—	5,275	—	—
Ingots .. ..	13,995	17,217	19,178	23,253	22,704	22,670	22,269
South West Africa—							
Ores and concentrates (b)	(a)	(a)	(a)	9,402	24,163	31,308	23,015
Southern Rhodesia—							
Fume, dust and shavings ..	19	10	8	—	—	—	—
Union of South Africa—							
Bars, sheets, etc. ..	381	{ 347	378	481	535	(a)	(a)
Fume, dust, shavings, etc.		{ 38	51	98	88	(a)	(a)
Canada (c)—							
Ore (Zn content) .. ..	81,946	51,965	36,228	48,417	95,254	115,680	138,030
Spelter .. ..	108,893	129,372	122,525	129,363	150,274	131,143	130,475
Dross, scrap and ashes ..	6,148	3,346	4,214	6,445	5,379	4,540	4,027
Newfoundland (d)—							
Concentrates .. ..	102,746	93,580	69,360	76,175	(d)	(d)	(d)
Hong Kong (re-exports)—							
Spelter .. ..	(a)	37	64	{ 1,446	1,336	1,912	1,392
Sheets etc. .. ..	(a)	1,197	3,991				
India—							
Concentrates, etc. ..	—	—	2	10	102	3,555	1,790
Malaya (e)—							
Sheets, etc. .. ..	(a)	19	104	164	430	182	148
Australia—							
Ores and concentrates ..							
(Zn content) .. ..	(f) 94,957	(f) 95,144	(f) 90,114	(f) 84,309	76,675	89,819	80,500
Dust .. ..	(£,495)	(£,42,448)	122	46	58	37	2
Blocks .. ..	58,021	49,821	28,408	33,715	33,595	43,001	20,529
Scrap and shavings ..	(a)	(f) 283	(f) 617	(f) 325	245	48	87
Plates and strips ..	172	1,223	1,871	1,535	339	1,265	228
<b>FOREIGN COUNTRIES</b>							
Austria—							
Ore .. ..							
Spelter and alloys ..							
(a)							
Scrap .. ..							
(a)							
Zinc-white and zinc-grey ..							
(a)							
Lithopone .. ..							
(a)							
Belgium-Luxemburg E.U.—							
Ore .. ..							
Spelter .. ..							
(a)							
Scrap .. ..							
(a)							
Sheets, tubes and wire ..							
(a)							
Dust .. ..							
(a)							
Oxide .. ..							
(a)							
Lithopone .. ..							
(a)							

(a) Information not available.

(b) Excluding zinc contained in lead concentrates.

(c) Including Newfoundland from April 1, 1949.

(d) Years ended March 31 following that stated. Included with Canada from April 1, 1949.

(e) Including re-exports.

(f) Years ended June 30 of year stated.

EXPORTS OF ZINC (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Czechoslovakia—							
Ore .. . . .	(a)	(a)	(b)	2,993	(a)	(a)	(a)
Spelter, scrap and alloys .. . . .	53	877	(b)	72	(a)	(a)	(a)
Sheets and plates .. . . .	653	181	(b)	267	(a)	(a)	(a)
Zinc-white and zinc-grey .. . . .	1,379	1,071	(b)	333	(a)	(a)	(a)
Lithopone .. . . .	783	2,593	(b)	1,025	(a)	(a)	(a)
Denmark—							
Spelter .. . . .	—	184	189	238	2	958	1,841
Scrap .. . . .	390	1,099	597	759	1,240	1,520	329
Finland—							
Concentrates .. . . .	—	3,486	4,029	10,785	8,168	5,505	6,815
Spelter and scrap .. . . .	3	—	—	—	—	—	—
France—							
Ore .. . . .	—	3,432	1,677	—	—	334	2
Spelter, bars and scrap .. . . .	4	54	113	37	698	3,695	535
Sheets .. . . .	118	853	1,808	1,835	3,915	3,734	2,720
Oxide .. . . .	77	398	1,163	1,614	1,699	2,450	2,075
Lithopone, etc. .. . . .	3	150	153	393	1,128	1,563	1,755
Germany (Federated) —							
Ore .. . . .	(a)						
Spelter, dust and alloys .. . . .	—	—	—	—	3	591	—
Scrap .. . . .	—	—	—	—	688	10,474	9,469
Sheets and wire .. . . .	—	—	—	—	432	98	—
Zinc-white, zinc-grey and lithopone .. . . .	—	—	—	—	187	4,580	3,771
Greece—							
Ore .. . . .	—	(a)	—	7,042	6,446	(a)	4,422
Italy—							
Ore .. . . .	—	24,802	68,143	90,304	81,970	87,439	74,414
Spelter, scrap and alloyed .. . . .	—	4,331	604	7,082	1,678	8,077	6,334
Sheets, wire and alloyed, etc. .. . . .	—	305	96	113	49	10	—
Oxide .. . . .	(a)	(a)	246	161	204	985	5,203
Lithopone .. . . .	(a)	(a)	169	1,647	1,972	3,656	5,307
Netherlands—							
Spelter .. . . .	(a)	3,338	4,731	{	785	5,179	10,098
Scrap .. . . .	(a)	360	375	{	1,103	1,172	1,446
Sheets .. . . .	(a)	—	—	{	758	704	2,105
Norway—							
Ore .. . . .	2,053	5,659	7,379	640	167	1,787	(a)
Electrolytic zinc .. . .	7,044	23,868	23,579	29,859	28,900	32,625	28,754
Bars, sheets, wire, etc. .. . .	86	361	6	2	4	345	(a)
Ashes and scrap .. . .	134	507	236	360	460	844	1,934
Poland—							
Spelter, dust and scrap .. . . .	(a)	(a)	13,968	(a)	(a)	(a)	(a)
Sheets, tubes and wire .. . . .	6,916	26,066	18,448	(a)	(a)	(a)	(a)
Oxide .. . . .	(a)	(a)	7,994	(a)	(a)	(a)	(a)
Lithopone .. . . .	(a)	(a)	638	(a)	(a)	(a)	(a)
Portugal—							
Bars .. . . .	14	27	10	139	54	72	291
Zinc-white .. . . .	23	18	27	33	21	21	33
Spain—							
Ore (Blende) .. . . .	6,148	45,074	52,043	49,897	38,294	80,352	77,244
Bars, scrap, sheets, wire, etc. .. . .	1,049	783	1,022	917	1,285	2,057	2,927
Sweden—							
Ore .. . . .	49,887	95,030	75,337	73,506	66,244	65,932	63,003
Spelter .. . . .	8	63	—	10	5	2	269
Scrap .. . . .	—	332	158	2,123	1,640	2,576	2,366
Zinc-white .. . . .	1	4	13	—	—	1	34

(a) Information not available.

(b) January to October only.

EXPORTS OF ZINC (Cont.)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Switzerland—							
Spelter and scrap ..	—	522	1,514	1,319	1,077	2,903	4,406
Zinc-white, etc. ..	2	7	46	89	82	66	210
Yugoslavia—							
Concentrates .. ..	(a)	(a)	(a)	(a)	(a)	33,798	14,615
Spelter .. .. ..	(a)	(a)	(a)	(a)	(a)	1,392	2,183
Dust .. .. ..	(a)	(a)	(a)	(a)	(a)	1,257	1,394
Oxide .. .. ..	(a)	(a)	(a)	(a)	(a)	153	240
Lithopone .. .. ..	(a)	(a)	(a)	(a)	(a)	690	711
Algeria—							
Ore .. .. ..	197	983	17,244	12,752	18,039	16,691	18,338
Spelter, plates and scrap ..	287	90	1,784	329	619	396	751
Oxide .. .. ..	2	—	13	40	—	23	9
Belgian Congo—							
Ores and concentrates ..	27,494	(a)	84,662	111,061	107,647	127,570	165,971
French Equatorial Africa—							
Ore .. .. ..	—	—	—	—	—	4,429	5,907
Morocco (French)—							
Ore .. .. ..	(a)	(a)	3,346	3,248	9,252	16,633	33,819
Tunis (including re-exports)							
Ore .. .. ..	492	2,810	6,939	5,281	5,908	5,822	(a)
Mexico—							
Ores and concentrates ..	318,453	228,571	285,780	238,167	254,706	223,075	257,458
Refined .. .. ..	38,880	41,162	38,723	42,376	37,695	47,695	41,400
Zn content (c) .. ..	200,075	128,143	184,672	170,146	160,756	203,671	(a)
Zinc oxide (metallurgical)	67	207	4,059	4,981	3,089	11,513	13,497
United States—							
Ore and dross (b) ..	—	79	1,253	3,167	2,612	1,017	2,759
Spelter .. .. ..	6,947	42,164	95,241	58,712	52,419	11,533	32,598
Scrap (b) .. .. ..	—	—	(a)	(a)	1,401	5,546	4,119
Sheets, strips, etc. ..	4,838	10,675	7,099	5,696	5,488	2,937	4,346
Dust .. .. ..	295	326	1,470	796	616	451	645
Oxide .. .. ..	6,341	9,781	17,037	7,716	4,500	2,762	7,942
Lithopone .. .. ..	10,336	8,617	12,190	18,763	12,910	8,354	18,280
Argentina—							
Ore .. .. ..	—	45,636	(a)	(a)	(a)	(a)	(a)
Spelter, bars and sheets ..	5	—	(a)	(a)	(a)	(a)	(a)
Bolivia—							
Ores (Zn content) ..	20,644	18,885	14,381	20,789	17,388	19,269	30,053
Chile—							
Bars .. .. ..	187	126	188	81	(a)	(a)	(a)
Peru—							
Ores, etc. (Zn content) ..	44,797	57,385	57,981	47,523	58,467	71,705	(a)
Bars (Zn Content) ..	1,558	921	825	680	587	1,853	(a)
French Indo-China—							
Spelter, sheets and scrap ..	(a)	247	48	109	56	(a)	(a)
Japan—							
Spelter .. .. ..	—	2,461	18,149	16,512	(a)	339	(a)
Oxide .. .. ..	(a)	(a)	98	(a)	(a)	171	248
Turkey—							
Ore .. .. ..	—	72	7,005	103	165	—	1,715

(a) Information not available.

(b) Zn content.

(c) Total metal content of above items and not additional.

### IMPORTS OF ZINC

*(Less Re-exports)*

*(Long tons)*

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom—							
Ore and concentrates ..	153,566	165,497	130,384	156,538	197,872	196,422	179,986
Ingots, bars, etc. ..	88,288	49,394	148,720	167,733	143,043	141,914	121,879
Sheets, plates, etc. ..	4	(b) 14	13	14	227	414	1,045
Oxide .. ..	—	—	—	49	25	51	1,982
Lithopone, etc. .. ..	—	70	270	1,202	10,630	12,067	14,693
Anglo-Egyptian Sudan							
Unwrought incl. scrap ..	13	19	34	6	7	11	(a)
Kenya (c)—							
Bars, plates, sheets, etc... ..	11	13	11	20	13	18	22
Southern Rhodesia—							
Sheets, dust, etc. ..	275	352	315	289	250	249	141
South West Africa—							
Spelter, sheets, etc. ..	—	2	7	3	13	1	(a)
Tanganyika—							
Bars, sheets, etc. ..	—	—	—	14	9	8	13
Union of South Africa—							
Bars, rods, and ingots ..	9,413	9,582	9,844	13,300	11,218	14,978	19,502
Sheets and strips ..	47	376	689	463	392	151	(a)
Lithopone .. ..	765	536	1,136	1,318	1,744	(a)	(a)
Oxide .. ..	2,250	2,164	3,556	1,216	208	(a)	(a)
Dust and shavings ..	10	21	89	265	6	(a)	(a)
Canada (d)—							
Dust .. .. ..	21	16	155	213	325	185	198
Sheets, plates, bars, etc. ..	1,761	1,933	1,704	2,633	1,916	1,586	2,870
Zinc-white .. ..	1,043	826	1,968	1,547	977	989	594
Lithopone .. ..	9,078	7,909	11,372	13,203	7,269	7,280	6,171
Newfoundland (e)—							
Bars, sheets, etc. ..	51	47	19	22	(e)	(e)	(e)
Ceylon—							
Blocks, ingots, etc. ..	—	1	—	—	5	—	—
Sheets and plates ..	—	9	76	16	29	25	29
Hong Kong (total imports)—							
Spelter .. .. ..	(a)	108	339	1,097	1,656	1,835	2,841
Sheets .. .. ..	(a)	2,095	3,130	1,097	1,656	1,835	2,841
India—							
Spelter .. .. ..	6,045	42,148	35,823	32,723	31,769	30,583	17,167
Sheets, etc. .. ..	1,076	1,335	1,586	1,722	1,902	2,826	2,842
Zinc-white .. ..	185	938	968	1,558	823	91	16
Lithopone .. ..	1,124	723	719	1,462	1,349	1,425	2,873
Malaya (total imports)—							
Sheets .. .. ..	(a)	254	958	538	781	1,039	1,053
Palestine—							
Spelter and sheets ..	104	783	(a)	(a)	(f)	(f)	(f)
Lithopone .. ..	109	163	(a)	(a)	(f)	(f)	(f)
Australia—							
Dust .. .. ..	—	(£.41)	—	(£.43)	—	—	9
Blocks, sheets, scrap, etc. ..	20	71	73	115	165	131	196
Oxides .. .. ..	608	1,102	105	20	428	(g) 401	33
Lithopone .. ..	999	1,257	1,149	2,088	4,069	2,467	3,666
New Zealand—							
Spelter, bars and sheets	134	493	1,236	943	985	1,214	1,480
Irish Republic—							
Sheets and plates ..	144	387	622	435	509	444	132
Zinc-white .. ..	(a)	(a)	(a)	(a)	614	740	864

(a) Information not available.

(b) Excess of re-exports.

(c) Includes Uganda up to 1948 inclusive.

(d) Includes Newfoundland from April 1, 1949.

(e) Years ended March 31 of year following that stated. Included with Canada from April 1, 1949.

(f) See "Israel" under Foreign Countries.

(g) Year ended June 30 of that stated.

IMPORTS OF ZINC (Cont.)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES</b>							
Austria—							
Spelter and alloys ..			2,189	1,722	8,146	5,954	7,021
Sheets, bars, etc. ..		(a)	22	29	11	4	24
Zinc-white and zinc-grey ..			32	—	599	115	202
Lithopone ..			11	8	676	297	—
Belgium-Luxemburg E.U.—							
Ore .. .. ..	50,912	216,456	284,114	363,685	370,939	397,316	445,478
Spelter .. .. ..				(a), 1,981	346	2,253	6,409
Scrap .. .. ..				(a), 778	3,476	350	424
Sheets, tubes and wire ..	2,961		(c), (a)	17	7	156	52
Dust .. .. ..			(a), (a)	(a)	236	25	3
Oxide .. .. ..			(a), (a)	64	190	543	973
Lithopone .. .. ..			(a), (a)	270	759	2,386	1,467
Bulgaria—							
Spelter, bars, sheets and scrap .. .. ..	201	261					
Zinc-white .. .. ..	12	—					
Lithopone .. .. ..	24	131					
Czechoslovakia—							
Spelter and alloys ..	(a)	1,998	22,944	(b), 19,879	(a)	(a)	(a)
Scrap .. .. ..		—	408	(b), —	(a)	(a)	(a)
Zinc-white, zinc-grey, etc. ..	(a)	96	44	(b), 1,006	(a)	(a)	(a)
Denmark—							
Spelter .. .. ..	2,308	4,803	5,293	5,636	7,441	6,503	7,394
Scrap .. .. ..	23	10	37	127	95	34	45
Plates and sheets .. .. ..	527	6,425	7,299	5,078	3,368	5,403	4,538
Zinc-white .. .. ..	1,019	3,369	2,911	3,129	2,191	3,029	1,966
Lithopone .. .. ..	177	710	998	2,325	1,942	3,420	3,343
Finland (total imports)—							
Spelter .. .. ..	107	1,700	4,309	1,684	3,201	4,251	4,236
Scrap .. .. ..	1	—	1	50	1	7	1
Sheets .. .. ..	—	131	307	461	1,104	618	643
Zinc-white .. .. ..	5	266	767	1,049	1,766	1,708	1,845
France—							
Ore .. .. ..	55,094	67,819	92,014	56,946	75,086	151,871	127,807
Spelter, bars and scrap ..	8,770	51,554	59,490	37,890	49,429	29,437	38,876
Sheets .. .. ..	12	29	4	161	—	6	183
Oxide .. .. ..	1,340	3,059	5,295	2,107	3,278	839	5,668
Lithopone .. .. ..	100	356	2,046	2,021	3,142	5,028	10,920
Germany (Federal)—							
Ores .. .. ..							
Spelter, dust, scrap and alloys .. .. ..							
Sheets and wire .. .. ..							
Zinc-white and zinc-grey .. .. ..							
Lithopone .. .. ..							
Greece—							
Spelter, etc. .. .. ..	2	138	231	411	1,059	860	477
Iceland—							
Zinc-white .. .. ..	284	85	(a)	(a)	81	100	10
Lithopone .. .. ..	63	16	(a)	(a)	(a)	(a)	(a)
Italy—							
Ore and ashes .. .. ..	(a)	(a)	1	—	—	24	—
Spelter, matte, scrap and alloyed .. .. ..	—	59	2,987	1,513	3,495	4,684	2,780
Sheets, wire, etc., and alloyed .. .. ..	—	—	284	295	662	102	—
Oxide .. .. ..	(a)	(a)	118	346	608	775	730
Lithopone .. .. ..	(a)	(a)	464	145	—	10	30

(a) Information not available.  
 (b) January to October only.

**IMPORTS OF ZINC (Cont.)**

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Netherlands—							
Ore .. . . .	(a)	22,840	18,478	24,676	50,761	45,260	53,518
Spelter .. . . .	{ (a)	6,460	6,951	8,042	9,017	10,809	8,373
Scrap .. . . .				101	24	244	63
Sheets .. . . .	(a)	325	411	585	1,135	3,576	3,878
Oxide and zinc-white .. . .	(a)	5,682	6,675	3,983	3,696	4,334	2,584
Lithopone .. . . .	(a)	—	242	134	480	1,403	484
Norway—							
Ore .. . . .	18,975	72,200	81,645	61,013	74,106	70,112	88,475
Ashes and scrap .. . . .	591	434	329	300	443	685	(a)
Spelter .. . . .	1,489	348	76	15	—	472	(a)
Bars and sheets .. . . .	14	187	81	86	96	63	(a)
Zinc-white .. . . .	136	951	4,235	1,232	1,746	172	793
Lithopone .. . . .	24	276	770	452	544	98	818
Poland—							
Ores and slag .. . . .	—	1,945	39,030	(a)	(a)	(a)	(a)
Portugal—							
Sheets, etc. .. . . .	817	1,791	1,561	1,069	1,289	1,432	676
Oxide .. . . . .	701	1,975	1,590	1,260	1,370	1,094	841
Lithopone .. . . .	98	162	411	586	610	835	928
Spain—							
Bars and scrap .. . . .	3	2,225	656	98	915	897	14
Sweden—							
Ore .. . . . .	—	—	—	—	—	—	(a)
Spelter .. . . .	6,464	25,037	19,209	19,484	21,292	19,888	20,264
Scrap .. . . . .	—	258	282	59	58	90	(a)
Sheets .. . . . .	214	3,538	3,091	3,036	2,248	2,316	3,775
Zinc-white .. . . .	6,404	10,496	11,076	7,150	5,038	8,221	(a)
Lithopone, etc. .. . .	630	3,464	3,703	5,634	4,430	6,851	(a)
Switzerland—							
Spelter and scrap .. . .	1,860	10,873	11,981	14,903	7,596	7,292	17,224
Dust .. . . . .	529	417	1,086	605	596	1,071	1,170
Bars, sheets, pipes and wire .. . . .	235	1,664	1,921	1,432	965	1,546	2,409
Zinc-white, lithopone, etc. .. . . .	1,245	5,177	5,115	4,987	4,231	7,055	7,668
Algeria—							
Spelter, sheets and scrap .. . . .	11	571	929	557	831	776	696
Oxide .. . . . .	202	379	741	614	469	601	692
Lithopone, etc. .. . .	24	—	49	284	227	455	513
Angola—							
Bars, sheets and tubes .. . . .	5	51	36	(a)	(a)	(a)	(a)
Egypt—							
Spelter, sheets and scrap .. . . .	125	545	859	408	726	190	(a)
Zinc-white .. . . . .	1,447	626	572	1,366	646	(a)	(a)
Lithopone .. . . . .	139	63	49	154	1,042	(a)	(a)
Madagascar—							
Spelter, bars and sheets .. . . .	32	65	200	65	(a)	(a)	(a)
Oxide .. . . . .	14	8	2	44	(a)	(a)	(a)
Morocco (French)—							
Spelter, sheets and wire .. . . .	18	54	26	(a)	(a)	(a)	(a)
Lithopone .. . . . .	144	198	225	(a)	(a)	(a)	(a)
Morocco (Spanish)—							
Spelter and sheets .. . . .	43	22	164	(a)	(a)	(a)	(a)
Lithopone .. . . . .	2	1	3	(a)	(a)	(a)	(a)
Mozambique—							
Spelter, bars and sheets .. . . .	13	24	8	19	16	13	11
Oxide .. . . . .	14	33	23	30	20	25	13
Tunis—							
Sheets .. . . . .	76	187	396	(a)	(a)	(a)	(a)
Oxide .. . . . .	(a)						

(a) Information not available.

IMPORTS OF ZINC (*Cont.*)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>FOREIGN COUNTRIES (Cont.)</b>							
Cuba (total imports)—							
Sheets .. ..	101	(a)	(a)	106	68	(a)	(a)
Mexico—							
Spelter, sheets and scrap	521	474	607	473	(a)	(a)	(a)
Zinc-white ..	95	104	(a)	(a)	(a)	(a)	(a)
United States—							
Ore (Zn content) .. ..	301,375	190,557	278,903	166,829	148,844	221,982	214,085
Spelter .. ..	86,133	92,915	64,411	82,631	112,111	138,665	78,557
Dross and scrap .. ..	6,517	3,650	4,490	9,172	3,332	2,250	5,895
Sheets .. ..	—	—	60	107	28	189	133
Dust .. ..	324	69	—	36	15	421	138
Oxide .. ..	—	37	105	24	213	4,549	1,591
Lithopone .. ..	—	—	—	—	11	1,073	709
Argentina—							
Spelter and bars ..	2,971	7,558	8,579	11,460	10,598	1,406	1,170
Sheets and plates ..	1,454	3,695	(a)	(a)	(a)	(a)	(a)
Zinc-white .. ..	322	1,018	(a)	(a)	(a)	(a)	(a)
Lithopone, etc. .. ..	86	509	(a)	(a)	(a)	(a)	(a)
Brazil (total imports)—							
Bars, sheets and plates ..	2,016	4,103	3,139	4,875	9,598	10,394	(a)
Zinc-white .. ..	4,040	4,126	7,412	3,873	3,378	(a)	(a)
Chile—							
Spelter .. ..	520	1,572	900	1,123	1,475	1,451	2,916
Bars, sheets, etc. ..	22	329	(a)	(a)	(a)	(a)	(a)
Zinc-white and lithopone	1,553	1,289	(a)	(a)	(a)	(a)	(a)
Colombia—							
Spelter, sheets, alloys, etc.	174	120	(a)	(a)	340	339	(a)
Zinc-white, etc. .. ..	291	331	(a)	(a)	446	593	(a)
Peru—							
Spelter, bars, sheets and powder	134	50	(a)	(a)	(a)	78	(a)
Zinc-white and lithopone	381	505	(a)	(a)	(a)	(a)	(a)
Uruguay—							
Spelter .. ..	(a)	(a)	(a)	{	268	418	500
Lithopone .. ..	(a)	(a)	(a)	{	812	297	305
Zinc-oxide .. ..	(a)	(a)	(a)	{	318	216	351
Venezuela—							
Spelter .. ..	4	1	3	100	(a)	(a)	(a)
Zinc-white .. ..	272	198	210	265	(a)	(a)	(a)
Lithopone .. ..	20	3	62	54	(a)	(a)	(a)
China—							
Spelter and dust .. ..	(a)	6,174	5,054	(a)	(a)	(a)	(a)
Zinc-white .. ..	(a)	2,541	2,520	(a)	(a)	(a)	(a)
Iran (total imports) (b)—							
Spelter, sheets and wire	(a)	38	177	(a)	(a)	(a)	(a)
Iraq—							
Spelter, sheets, etc. ..	..	11	(a)	(a)	(a)	(a)	(a)
Israel—							
Spelter and sheets .. ..	(c)	(c)	(c)	(c)	1,362	1,096	(a)
Lithopone .. ..	(c)	(c)	(c)	(c)	—	218	(a)
Japan—							
Ore .. ..	(a)	—	1,149	1,746	(a)	607	22,520
Spelter .. ..	5	(a)	742	(a)	(a)	1,397	12,153
Syria and Lebanon—							
Spelter .. ..	7	—	(a)	(a)	(a)	(a)	(a)
Sheets .. ..	7	143	(a)	(a)	(a)	(a)	(a)
Turkey—							
Spelter .. ..	3	218	328	113	196	38	169
Bars, tubes, and wire	207	2,355	2,154	1,239	2,396	2,237	1,341
Oxide .. ..	65	391	1,023	1,050	1,325	637	566
Lithopone .. ..	—	264	417	463	883	1,199	1,322

(a) Information not available.

(b) Years ended March 20 of year following that stated.

(c) See Palestine under British Countries.

**ZIRCONIUM MINERALS**  
**PRODUCTION OF ZIRCONIUM MINERALS**  
 (Long tons)

Producing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
India	1,020	466	(a)	(a)	(a)	(a)	(a)
Malaya—							
Zircon	(b)	—	—	—	—	—	—
Zircon-monazite	(c)	—	—	—	—	—	—
Australia—							
Zircon (d)	15,180	12,403	21,576	21,889	20,675	21,535	43,816
Zircon concentrates (e)	6,417	8,313	15,391	19,063	18,873	21,805	42,410
<b>FOREIGN COUNTRIES</b>							
Egypt	10	4	—	93	126	93	3
French West Africa	—	—	38	188	241	—	21
Madagascar	3	—	—	—	—	—	—
Brazil (exports)	746	4,382	3,915	3,581	2,243	950	(a)

Zircon is also produced in the United States.

(a) Information not available.

(b) Total production during Japanese occupation amounted to 741 tons.

(c) Total production during Japanese occupation amounted to 207 tons.

(d) Estimated zircon content of all zircon-bearing concentrates.

(e) Zircon content included above and not additional.

**EXPORTS OF ZIRCONIUM MINERALS**  
*(Domestic Produce)*  
 (Long tons)

Exporting Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
India—							
Zircon sand	—	279	6,499	(a)	(a)	(a)	(a)
Australia—							
Zircon concentrates	(a)	7,571	8,832	12,887	17,783	19,609	38,485
Zircon-rutile	(a)	5,768	10,370	4,160	2,964	1,564	—
Zircon-rutile-ilmenite	(a)	2,458	2,063	180	—	4	—
<b>FOREIGN COUNTRIES</b>							
French West Africa—							
Zircon	—	—	26	70	—	69	21
Brazil	746	4,382	3,915	3,581	2,243	950	(a)
United States—							
Ores and concentrates	97	232	295	278	273	468	330

(a) Information not available.

**IMPORTS OF ZIRCONIUM MINERALS**

(Less Re-exports)

(Long tons)

Importing Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>BRITISH COUNTRIES</b>							
United Kingdom— Zirconium ores ..	345	814	598	2,654	2,495	2,769	5,690
Canada— Zirconium oxide ..	(£9,240)	(£12,783)	(£15,444)	(£8,541)	(£14,725)	(£11,222)	(£7,834)
Zirconium silicate ..	(£4,375)	(£6,203)	(£9,271)	(£12,239)	(£20,516)	(£26,319)	(£29,950)
<b>FOREIGN COUNTRIES</b>							
United States— Zirconium ore (b) ..	23,634	15,013	27,407	14,973	18,601	15,023	24,367
Zircon (c) ..	15,307	10,303	20,492	12,587	1,780	(a)	(a)
Baddeleyite (d) ..	707	2,171	4,124	3,172	—	(a)	(a)

(a) Information not available.

(b) As recorded in official trade returns. The zircon and baddeleyite shown are *not* additional but have been separated by the U.S. Bureau of Mines from this item.

(c) Zircon content of zirconium ore, rutile and ilmenite concentrates imported from Australia.

(d) Imported from Brazil. May include some zircon.

## MISCELLANEOUS MINERALS

These minerals are not separately recorded in the statistical returns of several countries.

Country and Description	1945	1946	1947	1948	1949	1950	1951
<b>SELENIUM</b>							
<b>PRODUCTION—</b>							
Northern Rhodesia	Lb.	—	(b) 108,889	11,826	21,132	20,958	27,056
Canada ..	Lb.	379,187	521,867	501,090	390,894	318,225	261,973
Australia ..	Lb.	(a)	1,566	1,603	1,656	1,362	2,394
Finland ..	Lb.	(a)	(a)	(a)	2,075	2,793	1,517
Sweden (exports)	Lb.	750	122,246	89,098	50,521	21,305	83,776
Mexico ..	Lb.	—	—	(a)	(a)	(a)	1,458
United States ..	Lb.	458,486	291,103	512,648	561,156	468,502	511,325
Japan ..	Lb.	(a)	(a)	6,548	10,053	20,163	(a)
<b>EXPORTS—</b>							
Canada (?)	Lb.	442,084	723,490	673,588	447,885	343,784	542,401
Belgium-Lux. E.U.	Lb.	(a)	(a)	(a)	(a)	(a)	370,473
Sweden ..	Lb.	750	122,246	89,098	50,521	21,305	24,251
Mexico ..	Lb.	—	—	(a)	(a)	(a)	90,390
<b>IMPORTS—</b>							
United Kingdom	Lb.	142,816	168,004	142,932	150,350	137,791	197,873
Czechoslovakia ..	Lb.	(a)	4,850	12,346	(c) 2,205	(a)	(a)
Portugal ..	Lb.	(a)	2,020	(a)	(a)	(a)	(a)
Sweden ..	Lb.	—	2,017	1,105	1,241	2,513	—
United States ..	Lb.	219,215	475,881	529,175	267,118	171,581	363,312
Brazil ..	Lb.	3,100	5,723	5,384	9,270	7,496	(a)
Peru (d) ..	Lb.	110	617	187	(a)	(a)	(a)
<b>TELLURIUM</b>							
<b>PRODUCTION—</b>							
Canada ..	Lb.	484	15,848	9,194	11,425	11,692	10,075
United States ..	Lb.	80,750	3,765	45,248	48,806	109,021	59,713
Peru ..	Lb.	1,020	(a)	(a)	(a)	(a)	(a)
<b>LITHIUM MINERALS</b>							
<b>PRODUCTION—</b>							
Southern Rhodesia—							
Amblygonite ..	Ton	—	—	—	—	—	179
Lepidolite ..	Ton	—	—	—	—	—	170
South West Africa—							
Amblygonite ..	Ton	—	—	30	157	116	1,567
Lepidolite ..	Ton	1,135	1,680	2,950	1,215	799	261
Petalite ..	Ton	—	—	100	160	120	516
Uganda—							
Amblygonite ..	Ton	—	—	—	—	200	9,902
Union of South Africa—							
Amblygonite ..	Ton	—	—	—	—	—	13
Australia—							
Petalite ..	Ton	—	—	—	—	5	—
Portugal—							
Amblygonite ..	Ton	2	—	—	—	18	10
Lithium phyllite	Ton	—	—	—	—	—	6
Spain ..	..	—	—	—	—	—	(a)
Sweden—							
Spodumene ..	Ton	20	48	—	—	(a)	(a)
Mozambique—							
Lepidolite ..	Ton	—	—	—	—	—	275
United States (e) ..	Ton	2,184	2,737	2,179	3,465	590	218
						4,320	8,309
							10,700

(a) Information not available.

(b) Recovered from electrolytic copper refinery slimes accumulated during the war years.

(c) January to October only.

(d) Including salts.

(e) Shipments. Including compounds.

**MISCELLANEOUS MINERALS (Cont.)**

<b>Country and Description</b>	<b>1945</b>	<b>1946</b>	<b>1947</b>	<b>1948</b>	<b>1949</b>	<b>1950</b>	<b>1951</b>
<b>LITHIUM MINERALS (Cont.)</b>							
Brazil (exports)—							
Amblygonite .. Ton	(a) (a)						
Spodumene .. Ton							
<b>EXPORTS—</b>							
Southern Rhodesia—							
Amblygonite .. Ton	—	—	—	—	—	187	3,312
South West Africa—							
Amblygonite .. Ton	—	—	—	—	245	85	94
Lepidolite .. Ton	1,458	2,263	2,023	1,454	1,084	6,947	7,412
Petelite .. Ton	—	—	50	163	4	230	284
Uganda—							
Amblygonite .. Ton	—	—	—	—	200	265	19
Belgian Congo—							
Spodumene .. Ton	—	—	—	—	—	—	5
Brazil—							
Amblygonite .. ..	(a) (a)						
Spodumene .. ..							
<b>VERMICULITE</b>							
<b>PRODUCTION—</b>							
Kenya .. Ton	10	—	(4 cwt.)	—	5	4	3
Southern Rhodesia Ton	—	—	—	16	947	700	494
Tanganyika .. Ton	—	50	—	—	—	—	—
Union of South Africa							
Ton	2,469	4,942	14,085	12,329	20,861	41,753	24,120
Australia .. Ton	59	204	82	151	162	120	55
India .. Ton	—	—	—	—	—	52	232
United States (sales) Ton	57,864	77,134	117,308	123,781	150,731	185,800	185,700
<b>EXPORTS—</b>							
Union of South Africa Ton	593	1,551	7,921	7,636	10,342	25,442	19,069
Southern Rhodesia Ton	—	—	—	—	206	374	234
<b>IMPORTS—</b>							
Canada .. £	7,977	3,402	32,256	31,970	52,408	86,368	103,505

(a) Information not available.

## LIST OF STATISTICAL PUBLICATIONS

### GENERAL

- Colonial Annual Reports ; Colonial Office.  
Overseas Economic Surveys by H.M. Trade Commissioners, Commercial Diplomatic and Consular Officers on economic and commercial conditions in various countries ; Commercial Relations and Exports Department (Board of Trade).  
Statistical Yearbook ; United Nations.  
Monthly Bulletin of Statistics ; United Nations.  
Monthly Bulletin of Coal Statistics ; United Nations.  
Quarterly Bulletin of Steel Statistics for Europe ; United Nations.  
Annual Report of the Director of the United States Mint ; Washington.  
Minerals Yearbook ; United States Bureau of Mines.  
Mineral Trade Notes ; United States Bureau of Mines.  
International Petroleum Trade ; United States Bureau of Mines.  
Yearbook of the American Bureau of Metal Statistics.  
Phosphate and Superphosphate Statistics ; International Superphosphate Manufacturers' Association.  
Statistical Bulletin of the International Tin Study Group.  
Reports of the British Intelligence Objectives Sub-Committee (B.I.O.S.).  
Bulletin de la Chambre Syndicale de la Sidérurgie Française.

### UNITED KINGDOM

- Statistical Digest ; Ministry of Fuel and Power.  
Statistical Yearbook ; British Iron and Steel Federation.  
Monthly Statistical Bulletin ; British Iron and Steel Federation.  
Annual Statement of the Trade of the United Kingdom with British Countries and Foreign Countries.  
Annual Report of the Ministry of Commerce on the Mining and Quarrying Industries in Northern Ireland, and of the Inspectors of Mines.  
Annual Abstract of Statistics.  
Monthly Digest of Statistics.  
Bulletin ; The British Bureau of Non-Ferrous Metal Statistics.

### MALTA

- Customs Trade Statistics.  
Annual Blue Book.

### ANGLO-EGYPTIAN SUDAN

- Annual Report of the Department of Economics and Trade.

### GAMBIA

- Annual Blue Book.  
Supplement to the Report on the Trade and Shipping of the Colony.

### GOLD COAST

- Annual Report on the Mining Industry.  
Annual Trade Report.

### KENYA AND UGANDA

- Annual Trade Report.  
Annual Report of the Mining and Geological Department of Kenya.  
Annual Report of the Survey, Land and Mines Department (Uganda).

**MAURITIUS**

Annual Report on Trade.

**NIGERIA**

Annual Report of the Mines Department.

Annual Trade Report.

**NORTHERN RHODESIA**

Annual Report of the Mines Department.

Annual Report of the Customs Department.

Statistics of the External Trade of Northern Rhodesia.

**NYASALAND**

Annual Report on the Trade of the Protectorate.

**SEYCHELLES**

Annual Blue Book.

**SIERRA LEONE**

Annual Report of the Mines Department.

Annual Trade Report.

**SOMALILAND PROTECTORATE**

Annual Trade Report.

**SOUTHERN RHODESIA**

Annual Report of the Department of Mines and Public Works on Mines.

Annual Report of the Rhodesia Chamber of Mines.

Annual Statement of the Trade of Southern Rhodesia with British Countries and Foreign Countries.

**TANGANYIKA**

Annual Trade Report.

Annual Report of Mines Department.

**UNION OF SOUTH AFRICA**

*Union*

Annual Report of the Government Mining Engineer.

Quarterly Information Circular of the Department of Mines.

Report of Coal Commission 1946-47.

Annual Statement of the Trade and Shipping of the Union of South Africa, and of the Territory of South West Africa.

Monthly Abstract of Trade Statistics.

*South West Africa*

Quarterly Information Circular of the Department of Mines.

Annual Statement of the Trade and Shipping of the Union of South Africa, and of the Territory of South West Africa.

Monthly Abstract of Trade Statistics.

**ZANZIBAR**

Annual Trade Report.

**BRITISH HONDURAS**

Annual Blue Book

## BRITISH WEST INDIES

Administration Report of the Petroleum Department, Trinidad and Tobago.  
Administration Report of the Comptroller of Customs and Excise, Trinidad and  
Tobago.  
Returns of Imports and Exports, Grenada.  
Trade Report of Jamaica.  
Report on Customs, Bahamas.

## CANADA

Annual Report of the Mineral Production of Canada.  
Annual Trade Report of Canada.

## NEWFOUNDLAND

Customs Returns.

## BRITISH GUIANA

Annual Report on the Lands and Mines Department.  
Annual Report of the Comptroller of Customs on Trade and Shipping of the  
Colony.  
The Commercial Review.

## ADEN

Report of the Trade and Navigation of Aden.

## BRITISH BORNEO

### *Brunei*

Annual Report on the State of Brunei.

### *Sarawak*

Annual Statistics and Accounts, Department of Trade and Customs.

### *State of North Borneo*

Annual Report on the Territorial Customs Department.

## CEYLON

Customs Returns.

## CYPRUS

Annual Report of the Inspector of Mines.  
Statistics of Imports, Exports and Shipping.

## HONG KONG

Trade and Shipping Returns.

## INDIA

The Mineral Production of India ; Geological Survey of India.  
Statements of Trade at Stations Adjacent to Land Frontier Routes.  
Accounts relating to the Sea-borne Trade and Navigation of India.

## MALAYA

Malayan Statistics (Trade).  
Annual Report on the Administration of the Mines Department and on the Mining Industry.  
Bulletin of Statistics relating to the Mining Industry of Malaya.

## AUSTRALIA

### *Commonwealth*

The Australian Mineral Industry—Annual Review.  
The Australian Mineral Industry—Economic Notes and Statistics.  
Bulletin of Production Statistics. Part I—Secondary Industries ; Part II—Primary Industries.  
Statistics relating to Lead, Silver, Copper, Zinc and Tin ; Australian Mines and Metal Association (Inc.).  
Overseas Trade and Customs and Excise Revenue.

### *New South Wales*

Annual Report of the Department of Mines.

### *Queensland*

Annual Report of the Under Secretary for Mines.

### *Western Australia*

Annual Report of the Department of Mines.

### *Tasmania*

Annual Report of the Secretary for Mines.

### *South Australia*

Mining Review ; Department of Mines.

### *Victoria*

Annual Report of the Department of Mines.

## Fiji

Trade Report of the Comptroller of Customs.  
Annual Report of the Department of Mines.

## NEW ZEALAND

Annual Mines Statement.  
Statistical Report on Trade and Shipping in the Dominion of New Zealand.  
Parts I and II.

## IRISH REPUBLIC

Trade and Shipping Statistics.  
Irish Trade Journal and Statistical Bulletin.

### AUSTRIA

Monthly Bulletin of Austrian Statistics.  
Monatsberichte des Österreichischen Institutes für Wirtschaftsforschung.  
Statistische Nachrichten ; Österreichischen Statistischen Zentralamt.  
Statistik des Aussenhandels Österreichs.  
Österreichisches Montan-Handbuch.

### BELGIUM

Bulletin de Statistique.  
Annales des Mines.

### BELGIUM-LUXEMBURG ECONOMIC UNION

Bulletin Mensuel du Commerce avec les Pays Etrangers.

### CZECHOSLOVAKIA

Commerce Extérieur de la République Tchécoslovaque.  
Monthly Summary of the Foreign Trade of the Czechoslovak Republic.

### DENMARK

Danmarks Vareindførsel og Udførsel.  
Produktionsstatistik.

### FINLAND

Finlands Utrikeshandel.

### FRANCE

Statistique de l'Industrie Minérale en France et en Algérie.  
Tableau Général du Commerce Extérieur.  
Statistique mensuelle du commerce extérieur de la France.

### GERMANY

Monthly Statistical Bulletin of the Control Commission for Germany.  
Wirtschaft und Statistik.  
Der Aussenhandel der Bundesrepublik Deutschland.  
Die Industrie der Bundesrepublik Deutschland.

### GREECE

Statistique de l'Industrie Minière de la Grèce.  
Bulletin Mensuel du Commerce Spécial de la Grèce avec les Pays Etrangers.

### HUNGARY

Bulletin Statistique Mensuel Hongrois.

### ICELAND

Verzlunarskýrslur-Gefid út af Hagstofu Íslands.

### ITALY

Statistica del Commercio con l'estero.  
Annuario Statistico Italiano.  
Bollettino Mensile di Statistica.  
Metalli Non Ferrosi e Ferroleghi-Statistiche : Azienda Minerali Metallici Italiani.

### NETHERLANDS

Maandstatistiek van den In-, Uit-, en Doorvoer.

**NORWAY**

Norges Bergverksdrift.  
Norges Handel.  
Norges Industri.

**POLAND**

Statistical News of the Central Statistical Office of the Republic of Poland.

**PORTUGAL**

Estatística Comercial.  
Estatística Industrial.  
Boletin Mensal do Instituto Nacional de Estatística.

**SPAIN**

Anuario Estadistico de España.  
Boletin de Estadistica.  
Estadistica del comercio exterior de España.  
Estadistica Minera y Metallurgica de España.

**SWEDEN**

Industri och Bergshantering Berättelse av Kommerskollegium.  
Sveriges Handel.

**SWITZERLAND**

Statistique du Commerce de la Suisse avec l'Etranger.

**YUGOSLAVIA**

Statistics of the Foreign Trade of the Federal People's Republic of Yugoslavia.

**ANGOLA**

Estatística Comercial ; Direcções dos Serviços Aduaneiros.  
Boletim d'Agéncia Geral das Colónias.

**BELGIAN CONGO**

Statistique du Commerce Extérieur du Congo Belge.  
Annuaire Statistique de la Belgique et du Congo Belge.  
Bulletin Mensuel d'Information Generales de la Banque du Congo Belge.

**EGYPT**

Annual Statement of the Foreign Trade of Egypt.  
Monthly Summary of the Foreign Trade of Egypt.

**FRENCH POSSESSIONS IN AFRICA**

Statistique de l'Industrie Minérale en France et en Algérie.  
Documents Statistiques sur le Commerce de l'Algérie.  
Documents Statistiques sur le Commerce de la Tunisie.  
Statistiques du Mouvement Commercial et Maritime du Maroc (Protectorate  
Français et Zone de Tanger).  
Bulletin Mensuel de l'Agence Economique de l'Afrique Occidentale Française.  
Bulletin Economique de l'Afrique Equatoriale Française.  
La Chronique des Mines Coloniales.  
Annuaire Statistique du Cameroun.  
Bulletin Mensuel de Statistique d'Outre-mer.

**MADAGASCAR**

Statistiques du Commerce et de la Navigation.  
La Chronique des Mines Coloniales.

**MOZAMBIQUE**

Estatística do Comércio Externo e da Navegação.

**PORtUGUESE GUINEA**

Relatório e Mapas do Movimento Comercial e Marítimo.

**SPANISH POSSESSIONS IN AFRICA**

Estadística del Comercio en la Zona de Protectorado Español.

**COSTA RICA**

Informe de la Dirección General de Estadística.

**CUBA**

Comercio Exterior.

**DOMINICAN REPUBLIC**

Exportación y Importación de la República Dominicana.

**GUATEMALA**

Boletín de la Dirección General de Estadística.

**HAITI**

Annual Report of the Fiscal Representative.

**MEXICO**

Anuario Estadístico del Comercio Exterior de los Estados Unidos Mexicanos.

**NETHERLANDS WEST INDIES**

Statistisch Jaaroverzicht van Curaçao.

**NICARAGUA**

Report of the Collector General of Customs.

**SALVADOR**

Anuario Estadístico.

**UNITED STATES**

Foreign Commerce and Navigation of the United States.

Monthly Summary of Foreign Commerce of the United States.

Annual Statistical Report of the American Iron and Steel Institute.

Minerals Year Book.

**ARGENTINA**

El Comercio Exterior Argentino.

Anuario del Comercio Exterior de la República Argentina.

Estadística minera de la Nación.

BOLIVIA

Comercio Exterior de Bolivia.  
Revista Mensual.

BRAZIL

Comercio Exterior do Brasil.  
Estatisticas Econômicas.

CHILE

Direccion General de Estadistica—  
Comercio Exterior  
Mineria  
Industrias.  
Estadistica Chilena.

COLOMBIA

Anuario de Comercio Exterior de Colombia.  
Boletin Informativo.

DUTCH GUIANA

Statistisch Jaaroverzicht van Suriname.  
Handelsstatistiek.

ECUADOR

Boletin de Hacienda.

PARAGUAY

Memoria de la Dirección General de Estadística.

PERU

Anuario del Comercio Exterior del Peru.  
Anuario de la Industria Minera en el Peru.

URUGUAY

Boletin del Ministerio de Hacienda.  
Anuario Estadístico de la República Oriental del Uruguay ; Comercio Exterior.

VENEZUELA

Estadística Mercantil y Maritima.  
Anuario Estadístico de Venezuela.

CHINA

Statistical Abstract for the Republic of China.  
Statistical Monthly.

FRENCH INDO-CHINA

La Chronique des Mines Coloniales.

FRENCH PACIFIC POSSESSIONS

Statistique de l'Industrie Minérale en France et en Algérie.  
La Chronique des Mines Coloniales.

INDONESIA

Statistisch Maandoverzicht.

**IRAN**

**Statistique Commerciale de l'Iran. Tableau Général du Commerce avec les Pays Etrangers.**

**IRAQ**

**Administrative Report of the Department of Customs and Excise.  
Customs Circular.**

**ISRAEL**

**Statistical Bulletin of Israel.**

**JAPAN**

**Reports of the British Intelligence Objectives Sub-Committee (B.I.O.S./J.A.P.).  
Japanese Economic Statistics.**

**JORDAN**

**Annual Report of Customs and Excise, Trade and Industry of the Hashemite Kingdom of Jordan.**

**KOREA (CHOSEN)**

**Reports of the British Intelligence Objectives Sub-Committee (B.I.O.S./J.A.P.)**

**SYRIA AND LEBANON**

**Statistiques du Commerce Extérieur de Syrie et du Liban.  
Bulletin Economique Trimestriel des Pays sous Mandat Français.**

**TURKEY**

**Statistique Annuelle du Commerce Extérieur de la Turquie.  
Review of the Mining Research and Exploration Institute of Turkey (M.T.A.).**

**Printed in Great Britain under the authority of  
HER MAJESTY'S STATIONERY OFFICE  
by COLE & CO. (WESTMINSTER) LTD.**

# PUBLICATIONS ON PLANT AND ANIMAL PRODUCTS

*Prepared by the Colonial Products Advisory Bureau (Plant & Animal),  
Imperial Institute Building, London, S.W.7.*

## **Obtainable from H.M. Stationery Office :**

**COLONIAL PLANT AND ANIMAL PRODUCTS.** Quarterly journal of the Colonial Products Advisory Bureau, successor to the Plant and Animal Products section of the Bulletin of the Imperial Institute. 5s. [5s. 3d.] Annual subscription, 21s.

## **Obtainable from the Colonial Products Advisory Bureau :**

### **REPRINTS from Colonial Plant and Animal Products :**

THE PROCESSING OF SUGAR CANE .. . . . .	1950	2s. od.
NOTES ON SOME NATURAL AND SYNTHETIC INSECTICIDES .. . . . .	1951	1s. 6d.
DRIED BANANA PRODUCTS .. . . . .	1950	1s. 6d.
THE PRODUCTION AND MARKETING OF COLONIAL HIDES AND SKINS .. . . . .	1950	1s. 6d.
EUCALYPTUS SALIGNA WOOD FROM SOUTH AFRICA .. . . . .	1950	1s. 6d.
THE PREPARATION OF SILK GUT IN THE BRITISH COMMONWEALTH .. . . . .	1950	1s. 6d.
BRACHYSTEGIA WOOD FROM TANGANYIKA AS A PAPER-MAKING MATERIAL (Pt. I) .. . . . .	1951	1s. 6d.
BRACHYSTEGIA WOOD FROM TANGANYIKA AS A PAPER-MAKING MATERIAL (Pt. II) .. . . . .	1951	1s. od.
THE PRESSURE-BALING OF LINE-DRIED EAST AFRICAN GOATSKINS .. . . . .	1951	6d.
NOTES ON THE AROMATIC GRASSES OF COMMERCIAL IMPORTANCE .. . . . .	1951	1s. 6d.
THE MARKET FOR MANGOES AND MONGO PRODUCTS .. . . . .	1951	1s. 6d.
THE DRYING OF HIDES AND SKINS .. . . . .	1951	2s. od.
THE UTILISATION OF SHARKS .. . . . .	1951	1s. 6d.
THE USE OF ACACIA PODS AND BARK AS TANNING MATERIAL .. . . . .	1951	1s. 6d.
DECORTICATION OF GROUNDNUTS .. . . . .	1951	1s. od.

### **REPRINTS from Bulletin of the Imperial Institute :**

THE PROCESSING OF COPRA, OIL PALM PRODUCTS AND GROUNDNUTS .. . . . .	1949	1s. 6d.
THE PROCESSING OF SISAL AND THE MANUFACTURE OF SISAL GOODS .. . . . .	1949	1s. 6d.
THE COCOA PROCESSING INDUSTRIES .. . . . .	1948	9d.

**REPORT ON STANDING SUB-COMMITTEE ON METHODS OF ANALYSIS OF VEGETABLE INSECTICIDES  
ON WORLD-WIDE COLLABORATIVE ANALYSIS OF PYRETHRUM FLOWERS.** 1950. 4s.

*Prepared by the Imperial Institute, London, S.W.7*

## **Obtainable from Colonial Products Advisory Bureau :**

### **REPRINTS from Bulletin of the Imperial Institute :**

REPORT ON THE GUM MASTIC INDUSTRY OF CHIOS .. . . . .	1949	2s. od.
THE TRAINING OF HIDE INSPECTION OFFICERS AND FLAYING INSTRUCTORS .. . . . .	1949	1s. 6d.
ESSENTIAL OILS OF THE BRITISH COLONIES IN RELATION TO WORLD SUPPLIES .. . . . .	1949	1s. 6d.

## **Obtainable from the Imperial Institute :**

**EMPIRE FIBRES FOR MARINE CORDAGE.** Tests of tarred and untarred Cordage made from East African Sisal. Report of exposure tests carried out by the Admiralty. 1935. 1s. [1s. 2d.]

**THE COLLECTION OF REPTILE SKINS FOR COMMERCIAL PURPOSES, WITH REFERENCE TO THE  
POSSIBILITIES IN EMPIRE COUNTRIES.** 1935. 1s. [1s. 2d.]

**THE PREPARATION OF EMPIRE HIDES AND SKINS.** 1937. 3s. 6d. [3s. 10d.]

**A SURVEY OF INSECTICIDES MATERIALS OF VEGETABLE ORIGIN (NICOTINE, DERRIS,  
LONCHOCARPUS, PYRETHRUM, QUASSIA, ETC.).** 1940. 3s. 6d. [3s. 11d.]

### **REPRINTS from Bulletin of the Imperial Institute :**

**EMPIRE FIBRES FOR MARINE CORDAGE.** Sisal Hemp and New Zealand Hemp. Rope Tests. (Fourth Series). 1932. 6d. [7d.]

**THE DRYING OF EAST AFRICAN HIDES, WITH REFERENCE TO THE PREVENTION OF BLISTER.** 1934. 2s. [2s. 2d.]

**THE WORLD'S CINCHONA BARK INDUSTRY** .. . . . . 1939 1s. [1s. 2d.]

**CHICLE, JELUTONG AND ALLIED MATERIALS** .. . . . . 1940 1s. [1s. 2d.]

**WAR-TIME DRUG SUPPLIES AND EMPIRE PRODUCTION** .. . . . . 1941 1s. [1s. 2d.]

**PAPER-MAKING MATERIALS OF THE BRITISH EMPIRE** .. . . . . 1944 1s. [1s. 2d.]

**THE PAPER-MAKING PROPERTIES OF YAWA FIBRE** .. . . . . 1946 1s. [1s. 2d.]

**JUTE AND ITS SUBSTITUTES : POSSIBILITIES IN THE COLONIAL  
EMPIRE** .. . . . . 1948 1s. [1s. 2d.]

**TRIALS TO DETERMINE THE VALUE OF CERTAIN NEW INSECTICIDES AS PREVENTIVES  
AGAINST HIDE BEETLE.** 1949. 1s. 6d. [1s. 8d.]

[Post-free prices in brackets]

# PUBLICATIONS ON MINERALS AND MINERAL RESOURCES

Prepared by

The Mineral Resources Division, Colonial Geological Surveys,  
Imperial Institute Building, London, S.W.7.

- COLONIAL GEOLOGY AND MINERAL RESOURCES. The quarterly bulletin of Colonial Geological Surveys, containing illustrated feature articles, reports from the various Geological Surveys, laboratory investigations, notes and abstracts, book reviews, bibliography, and detailed mineral and metal prices. 5s. [5s. 3d.]. Annual subscription, 21s., including postage.
- STATISTICAL SUMMARY OF THE MINERAL INDUSTRY. An annual review of production, import and export statistics of the world. Volumes for 1938-44 (1948) and 1941-47 (1949), 21s. [21s. 4d.]; 1942-48 (1950), 1944-50 (1952), and 1945-51 (1953), 25s. [25s. 4d.].
- VERMICULITE. Mineral monograph by Dr. E. R. Varley. 1952. 7s. 6d. [7s. 8d.].

REPRINTS (separately bound) from *Colonial Geology and Mineral Resources*:

THE GEOLOGY AND MINERAL RESOURCES OF JAMAICA. By H. R. Hose	1951	1s. 6d.
A SUMMARY OF THE PROVISIONAL GEOLOGICAL FEATURES OF NORTHERN RHODESIA. By Dr. T. D. Guernsey, with foreword by Dr. J. A. Bancroft	1951	5s. od.
THE GEOLOGY AND MINERAL RESOURCES OF MAURITIUS. By Dr. E. S. W. Simpson	1951	1s. 6d.
THE GEOLOGY AND MINERAL RESOURCES OF SIERRA LEONE. By J. D. Pollett, O.B.E.	1952	2s. 6d.
THE GENERAL AND ECONOMIC GEOLOGY OF TRINIDAD, B.W.I. By Dr. H. H. Suter	In the press	

Prepared by

The former Mineral Resources Department, Imperial Institute.

STATISTICAL SUMMARY OF THE MINERAL INDUSTRY OF THE BRITISH EMPIRE AND FOREIGN COUNTRIES. Volumes for 1913-20, 1920-22, 1921-23, 1922-24, 1923-25, 1924-26, 1925-27, 1926-28, 1927-29, 1929-31, 1930-32, 1931-33, 1932-34, 1933-35, 1934-36, and 1935-37. 7s. 6d. [7s. 11d.].

## MONOGRAPHS ON MINERALS:

PLATINUM AND ALLIED MINERALS	1936	3s. od. [3s. 4d.]
MINING ROYALTIES AND RENTS IN THE BRITISH EMPIRE	1936	3s. 6d. [3s. 11d.]
MANGANESE	1938	3s. 6d. [3s. 10d.]
CHROME ORE AND CHROMIUM	1940	2s. 6d. [2s. 10d.]

REPRINTS from *Bulletin of the Imperial Institute*:

GOVERNMENT ASSISTANCE TO THE EMPIRE MINING INDUSTRY	1941	1s. od. [1s. 2d.]
A REVIEW OF GEOLOGICAL SURVEY WORK IN THE COLONIES	1944	1s. 6d. [1s. 8d.]
NIGERIA: GEOLOGY AND MINERAL RESOURCES. By Dr. F. Dixey, C.M.G., O.B.E.	1945	1s. od. [1s. 2d.]
PROGRESS IN GEOLOGICAL INVESTIGATIONS AND MINERAL DEVELOPMENT IN THE GOLD COAST. By Dr. N. R. Junner, O.B.E.	1946	2s. od. [2s. 2d.]
THE RELATIONSHIP OF THE GEOLOGICAL SURVEY TO THE MINING INDUSTRY OF MALAYA. By E. S. Willbourn	1946	1s. od. [1s. 2d.]
THE GEOLOGY AND MINERAL RESOURCES OF BRITISH GUIANA. By S. Bracewell	1948	2s. od. [2s. 2d.]
THE GEOLOGY AND MINERAL DEPOSITS OF UGANDA. By Dr. K. A. Davies, O.B.E., and C. B. Bisset	1948	2s. od. [2s. 2d.]
THE GEOLOGY AND MINERAL RESOURCES OF KENYA. By Dr. W. Pulfrey	1948	Gratis

[Post-free prices in square brackets]

● Obtainable from H.M. Stationery Office or through any bookseller.  
All other publications obtainable through Mineral Resources Division,  
Imperial Institute Building, London, S.W.7.



*Crown Copyright Reserved*

PUBLISHED BY HER MAJESTY'S STATIONERY OFFICE

To be purchased from

York House, Kingsway, LONDON, W.C.2      423 Oxford Street, LONDON, W.1

P.O. Box 569, LONDON, S.E.1

13a Castle Street, EDINBURGH, 2      1 St. Andrew's Crescent, CARDIFF

39 King Street, MANCHESTER, 2      Tower Lane, BRISTOL, 1

2 Edmund Street, BIRMINGHAM 3      80 Chichester Street, BELFAST

or from any Bookseller

1953

Price £1 7s. 6d. net