

Lead.—Lead has been produced in Canada since 1887, and is obtained largely from the ores of British Columbia. Bounties were paid on lead produced in Canada from 1899 to 1918 but the highest production of this period was 63,169,821 lb. in 1900. However, the successful solving by the Consolidated Mining and Smelting Company of the metallurgical problems connected with the separation and reduction of these lead-zinc ores accounts to a considerable extent for the rapid growth in lead production after 1920.

In the East and West Kootenay districts of British Columbia there are many important mines, the principal of which is the Sullivan lead-zinc mine near Kimberley which accounts for about 90 p.c. of the total Canadian output. One of the world's largest smelters treats these ores at Trail, B.C. The lead-zinc mines in western Quebec account for most of the remainder of Canada's production, the concentrates from these properties being exported for treatment, chiefly to the United States. There was a small production in 1946 from the silver-lead-zinc ores in the Mayo district of Yukon and from northwestern Ontario. Production by provinces in 1946 is shown in Table 7, p. 464. Table 12 gives the total quantities and values of lead produced in Canada from¹ 1936 to 1947.

12.—Quantities and Values of Lead Produced from Canadian Ores, 1936-47

NOTE.—Figures for the years 1887-1910, inclusive, will be found at p. 367 of the 1929 Year Book; for 1911-28 at p. 341 of the 1939 edition; and for 1929-35 at p. 333 of the 1946 edition.

| Year | Quantity | Value | Year | Quantity | Value |
|-----------|-------------|------------|-------------------------|-------------|------------|
| | lb. | \$ | | lb. | \$ |
| 1936..... | 383,180,909 | 14,993,869 | 1942..... | 512,142,562 | 17,218,233 |
| 1937..... | 411,999,484 | 21,053,173 | 1943..... | 444,060,769 | 16,670,041 |
| 1938..... | 418,927,660 | 14,008,941 | 1944..... | 304,582,198 | 13,706,199 |
| 1939..... | 388,569,550 | 12,313,768 | 1945..... | 346,994,472 | 17,349,723 |
| 1940..... | 471,850,256 | 15,863,605 | 1946..... | 353,973,776 | 23,893,230 |
| 1941..... | 460,167,005 | 15,470,815 | 1947 ¹ | 323,999,656 | 44,290,752 |

¹ Subject to revision.

Nickel.—The greater part of the world's output of nickel is produced in Canada and the source of all but a small percentage of the 235,561,113 lb. produced in 1947 came from the nickel-copper ores of the Sudbury district. Some nickel is also obtained as a by-product from the treatment of cobalt-silver ores. The nickel-copper industry includes the mining, smelting and, to a certain extent, the refining of nickel-copper ores. The ore is mined principally for the nickel-copper content, but silver, gold, selenium, tellurium and metals of the platinum group are profitably recovered in the metallurgical processes, although they are present in relatively small quantities. Smelting and copper refining operations are carried on by the International Nickel Company of Canada, Limited, at Copper Cliff, Ont., in close proximity to the mines, and refined nickel is produced at Port Colborne, Ont. The Falconbridge Mines Limited, has a smelter at Falconbridge, Ont., but the matte from this plant is shipped to Norway for refining. During the Second World War, Falconbridge matte was treated by the International Nickel Company at Copper Cliff, Ont. Recent discoveries of nickel-bearing ores in the Lynn Lake area in northern Manitoba appear to be quite promising.