

Subsection 6.—Cobalt.

The major portion of the world supply of cobalt was for almost two decades derived from the silver-cobalt-nickel arsenides of the Cobalt district, the cobalt produced by refineries in southern Ontario having practically controlled world production until recent years. Large deposits of cobalt-bearing ores occur in central Africa, and the introduction into the world's markets of cobalt from this source has limited the market for the Canadian product to such an extent that since 1926 Canadian production has dropped to less than half of the world production.

The ore bodies at Cobalt, discovered in 1903, carry silver, cobalt, nickel, bismuth and arsenic. The Deloro smelter treats ores and residues and disposes of cobalt oxide, metallic cobalt and unseparated oxides of nickel and cobalt. The smelter output of cobalt, computed as the metallic cobalt and cobalt in oxides together with the cobalt recovered in ores exported from the mines and including cobalt in residues exported, amounted in 1931 to 521,051 lb. valued at \$651,179, as against 1,116,492 lb. valued at \$2,328,517 in 1925. Production in 1932 is estimated at 490,631 lb.

Subsection 7.—Zinc.

The zinc-mining industry of Canada has recently made rapid strides, largely on account of the application of improved metallurgical methods in the treatment of the lead-zinc ores of British Columbia. The metallic recoveries from Canadian ores were 267,643,505 lb. in 1930, as compared with 5,600,000 lb. in 1913. From an insignificant position in 1913 the country advanced to the second position among the world's producers in 1931 with an output of about 15.9 p.c. of the world total. Production in 1932 is estimated at 172,283,558 lb.

British Columbia.—The principal zinc-mining regions are situated in the Kootenay district of British Columbia, where there are large deposits of silver-lead-zinc ore. The chief producing mine is the Sullivan near Kimberley, where the ore worked is a replacement deposit of considerable size. Other mines are located in the Ainsworth and Slocan divisions of the West Kootenay district. Further information regarding lead-zinc mining and metallurgical operations is given under "Lead"

Other Provinces.—There has been considerable exploration and development of zinc-bearing deposits during recent years in Eastern Canada, where these ores are often characterized by the close association of copper, zinc and gold. In north-western Manitoba the Flin Flon and Sherritt-Gordon mines have ores of this nature and refined zinc has been made at the Flin Flon smelter since the autumn of 1930. Some important deposits of zinc-bearing ore have been developed in the Rouyn district of Quebec. Zinc is associated with lead in the deposits at Galetta, Ontario, and at Notre-Dame-des-Anges, Quebec, and mines in both these districts have been producers of zinc concentrates, while the Errington mine in the Sudbury district was developing a lead-zinc deposit and made some small shipments of zinc concentrates. All these eastern lead-zinc properties were inactive in 1931 and 1932.