32, 139, 425

Sudbury.—The nickel-bearing rocks of the Sudbury district, with a width of about two and one-half miles, form a wide ellipse 36 miles long and 13 miles broad. The ore mined in the district contains nickel, copper and iron, but cobalt, gold, silver, selenium, tellurium, platinum and palladium are nearly always present in relatively small quantities. The proved deposits of nickel ore in Canada are estimated to be sufficient to provide for the world's requirements for many years, while there are still large reserves undeveloped.

World Production.—The world production of nickel was about 50,736 short tons in 1933, of which output about 82 p.c.\* was Canadian in origin, while the remainder was derived chiefly from New Caledonia.

## 18.—Quantities and Values<sup>1</sup> of Nickel Produced in Canada during the calendar years 1911-34.

Year.	Quantity.	Value.	Year.	Quantity.	Value.1	Year.	Quantity.	Value.1
	lb.	\$		lb.	8		lb.	\$
1911	34,098,744	10,229,623	1919	44,544,883	17,817,953	1927	66,798,717	15, 262, 171
1912 <sup>1</sup>	44,841,542	13,452,463	1920	61,335,706	24,534,282	1928	96,755,578	22,318,907
1913	49,676,772	14,903,032	1921	19,293,060	6,752,571	1929	110,275,912	27,11 <b>5,4</b> 61
1914	45,517,937	13,655,381	1922	17,597,123	6,158,993	1930	103,768,857	24,455,133
1915	68,308,657	20,492,597	1923	62,453,843	18,332,077	1931	65,666,320	15, 267, 453
1916	82,958,564	29,035,498	1924	69,536,350	12, 126, 739	1932	30,327,968	7,179,862

Note.—For figures for the years 1889-1910, see 1929 Year Book, p. 368.

73,857,114 15,946,672 1933...

## 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 ores occurring in recent discoveries at Great Bear lake, N.W.T., contain cobalt associated with pitchblende and silver.

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 1933 to 466,702 lb. valued at \$597,752, as against 1,116,492 lb. valued at \$2,328,517 in 1925. Production in 1934 is estimated at 588,566 lb. valued at \$589,933.

<sup>&</sup>lt;sup>1</sup> A change in the method of computing the value of nickel production accounts for the drop in value after 1923. <sup>2</sup> Preliminary figures.

<sup>\*</sup> From the Imperial Institute's Statistical Summary.