

Subsection 5.—Nickel.

With the exception of the small amounts of nickel recovered from the ores of the Cobalt district and a shipment to Japan in 1936 of nickel-copper ore from the B.C. Nickel Mines, Ltd., the Canadian production of nickel has been derived entirely from the well-known nickel-copper deposits of the Sudbury district, Ontario. A brief description of the history and development of the nickel-copper mining industry will be found under "copper" in Subsection 3 of this section. From 830,477 lb. in 1889, the production of nickel increased continually to a war-time peak of 92,507,293 lb. in 1918. After a slump to 17,597,123 lb. in 1922, production expanded rapidly again and in 1928 exceeded that of the war year 1918, while 1929 established a still higher record. The depression brought another decline to 30,327,968 lb. in 1932, but a remarkable recovery has again been made and new records established since 1933, as shown in Table 18.

18.—Quantities and Values of Nickel Produced in Canada, calendar years 1911-36.

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

Year.	Quantity.	Value.	Year.	Quantity.	Value.	Year.	Quantity.	Value.
	lb.	\$		lb.	\$		lb.	\$
1911....	34,098,744	10,229,623	1920....	61,335,706	24,534,282	1929....	110,275,912	27,115,461
1912....	44,841,542	13,452,465	1921....	19,293,060	6,752,571	1930....	103,768,857	24,455,133
1913....	49,676,772	14,903,032	1922....	17,597,123	6,158,993	1931....	65,666,320	15,267,453
1914....	45,517,937	13,655,381	1923....	62,453,843	18,332,077	1932....	30,327,968	7,179,862
1915....	68,308,657	20,492,597	1924....	69,536,350	12,126,739 ¹	1933....	83,264,658	20,130,480
1916....	82,958,564	29,035,498	1925....	73,857,114	15,946,672	1934....	128,087,340	32,139,425
1917....	82,330,280	33,732,112	1926....	65,714,294	14,374,163	1935....	138,516,240	35,345,103
1918....	92,507,293	37,002,917	1927....	66,798,717	15,262,171	1936 ²	169,737,864	43,878,413
1919....	44,544,883	17,817,953	1928....	96,755,578	22,318,907			

¹ A change in the method of computing the value of nickel production accounts for the drop in value after 1923. ² Preliminary figures.

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 of the district is mined principally for its nickel and copper content but gold, silver, selenium, tellurium, and metals of the platinum group, though present in relatively small quantities, are profitably recovered in the metallurgical processes. 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.

In recent years the producing companies have instituted extensive researches to discover and encourage new peace-time uses for the metal. The success attending their efforts in that direction accounted very largely for the marked increase in production during the nineteen-twenties. The automobile industry, electrical machinery, cooking utensils, new submarine cables, and various nickel alloys all helped to absorb this increased production.

World Production.—The world production of nickel was about 73,200 short tons in 1935, of which output about 84 p.c.* was Canadian in origin, while the remainder was derived chiefly from New Caledonia.

Subsection 6.—Cobalt.

The major portion of the world supply of cobalt was for almost two decades prior to 1925 derived from the silver-cobalt-nickel arsenides of the Cobalt district, the cobalt produced by refineries in southern Ontario having practically controlled world production. Large deposits of cobalt-bearing ores occur in Africa in the Belgian Congo, Northern Rhodesia, and French Morocco, and the introduction

* From the Imperial Institute's Statistical Summary.