Subsection 5.--Nickel.

With the exception of the small amounts of nickel recovered from the ores of the Cobalt district, 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 19,293,060 lb. and 17,597,123 lb. in 1921 and 1922 respectively there was an increase to 73,857,114 lb. in 1925. In 1928 production at 96,755,578 lb. exceeded that of the war year 1918, while 1929 established a record at 110,275,912 lb. Preliminary figures for production in 1932 are 30,327,968 lb.

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. Unfortunately the world-wide depression has seriously affected the demand for a commodity so dependent upon the world's industrial markets and production was greatly curtailed in 1931 and 1932.

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, 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 35,500 long tons in 1931, of which output $82 \cdot 6$ p.c.¹ was Canadian in origin, while the remainder was derived from New Caledonia, India, Norway and Greece.

18.—Quantities and Values¹ of Nickel Produced in Canada during the calendar years 1991-32.

Year.	Quantity.	Value.	Year,	Quantity.	Value.	Year.	Quantity.	Value.
	<u>lb.</u>	\$		 lb.	\$		lb.	\$
1901 1902 1903	9,189,047 10,693,410 12,505,510	4,594,523 5,025,903 5,002,204	1913	44,841,542 49,676,772 45,517,937	13,452,463 14,903,032 13,655,381	1924	62,453,843 69,536,350 73,857,114	15,946,672
1904 1905 1906	40 0TO 04 1	8,948,834	1918 1917	68,308,657 82,958,564 82,330,280	20,492,597 29,035,498 33,782,112	1928	65,714,294 66,798,717 96,755,578	14,374,163 15,262,171 22,318,907
1907 1908 1909	19,143,111 26,282,991	8,231,538 9,461,877	1920	92,507,293 44,544,883 61,335,706	37,002.917 17.817.953 24,534,282	1930 1931	$\begin{array}{r} 110.275.912 \\ 103.768.857 \\ 65.666.320 \end{array}$	27,115,461 24,455,133 15,267,453
1910 1911	37,271,083 34,098,744	11,181,310 10,229,623		19,293.060 17,597,123	6,752,571 6,158,993		30,327.968	7,179,862

Norm.-For figures for the years 1889-1900, see 1929 Year Book, p. 368.

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

¹ These figures, taken from the Imperial Institute's Statistical Summary, include some nickel produced in the U.S. as a by-product from the electrolytic refining of Canadian copper; such nickel is not included in Table 18.