

World's Production.—The world's production of lead in 1927 was about 1,856,441 short tons. The principal producers were the United States with 36 p.c., Mexico 15 p.c., Australia 10 p.c., Canada 8.4 p.c. and Spain 8.2 p.c.

Subsection 5.—Nickel.

With the exception of the nickel in the ores shipped from the Cobalt district the Canadian production of nickel is derived entirely from the well-known nickel-copper deposits of the Sudbury district, Ontario. From 830,477 lb. in 1889 the production of nickel increased continually to 92,500,000 lb. in 1918, constituting a record. After a slump to 19,293,000 lb. and 17,597,000 lb. in 1921 and 1922 respectively there was an increase to 73,857,114 lb. in 1925, followed by a drop to 65,714,294 lb. in 1926 and 66,798,717 lb. in 1927. The preliminary estimate for 1928 indicates a record production of 96,755,578 lb., exceeding that of the war year 1918.

In recent years the producing companies have instituted researches to find new peace-time uses for the metal. The success attending their efforts in that direction accounts very largely for the marked recovery in production during the past few years. The automobile industry, electrical machinery, cooking utensils, new submarine cables and various nickel alloys are all helping to absorb this increased production.

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 ores consist mainly of a mixture of pyrrhotite and chalcopyrite associated with norite, a basic intrusive rock. The nickel occurs in the pyrrhotite as pentlandite and varies somewhat in amount. The ore mined in the district varies considerably in richness, the average metal content being about 2 to 4 p.c. of nickel, 1 to 3 p.c. of copper and 45 p.c. iron. Cobalt, gold, silver, platinum and palladium are nearly always present in very small quantities. The matte produced by the companies at Sudbury has averaged about 50 p.c. nickel and 30 p.c. copper.

World's Production.—The world's production of nickel was about 37,898 short tons in 1927, of which output 90.0 p.c. was Canadian in origin¹, while about 10.0 p.c. was derived from the oxidized ores of New Caledonia. The proved deposits of nickel ore in Canada are estimated to contain 2,000,000 tons of nickel, and there are at present large reserves undeveloped.

16.—Quantity and Value of Nickel Produced in Canada during the calendar years 1889-1928.

Years.	Quantity.	Value.	Years.	Quantity.	Value.	Years.	Quantity.	Value.
	lb.	\$		lb.	\$		lb.	\$
1889.....	830,477	498,286	1902....	10,693,410	5,025,903	1915....	68,308,657	20,492,597
1890.....	1,435,742	933,232	1903....	12,605,510	5,002,204	1916....	82,958,564	29,035,498
1891.....	4,035,347	2,421,208	1904....	10,547,883	4,219,153	1917....	82,330,280	33,732,112
1892.....	2,413,717	1,399,956	1905....	18,876,315	7,550,526	1918....	92,507,293	37,002,917
1893.....	3,982,982	2,071,151	1906....	21,490,955	8,948,834	1919....	44,544,883	17,817,953
1894.....	4,907,430	1,870,958	1907....	21,189,793	9,535,407	1920....	61,335,706	24,534,282
1895.....	3,888,525	1,360,984	1908....	19,143,111	8,231,538	1921....	19,293,060	6,752,571
1896.....	3,397,113	1,188,990	1909....	26,282,991	9,461,877	1922....	17,597,123	6,158,993
1897.....	3,997,647	1,399,176	1910....	37,271,033	11,181,310	1923....	62,453,843	18,332,077
1898.....	5,517,690	1,820,838	1911....	34,098,744	10,229,623	1924....	69,536,350	12,126,739 ¹
1899.....	5,744,000	2,067,840	1912....	44,841,542	13,452,463	1925....	73,857,114	15,946,672 ¹
1900.....	7,080,227	3,327,707	1913....	49,676,772	14,903,032	1926....	65,714,294	14,374,163 ¹
1901.....	9,189,047	4,594,523	1914....	45,517,937	13,655,381	1927....	66,798,717	15,262,171 ¹
						1928 ² ..	96,755,578	22,318,907 ²

¹ A change in the method of computing the value of nickel produced accounts for the drop in value after 1923. ² Preliminary figures. ³ This figure includes some nickel produced in the U.S. as a by-product from the electrolytic refining of Canadian copper; such nickel is not included in the table.