GEOLOGICAL SURVEY OF CANADA

		Non Magnetic.	Magnetic.
LATINUM.		11-115 grams.	6.779 grams.
ccurrences.	Weight	69.19 */	78.43 °/
	Piatinum	0.26	0.09
	Palladium	3.10	1.70
	Rhodium.	1.21	1.04
	Iridium		
	Osmium	3.09	3.89
	Copper	7.87	9.78
	Iron	14.62	3.77
	Osmiridiuni.	1.95	1.27
	Gangue		
		100.29	99-97

This determination shows, therefore, a proportion of $72 \cdot 07^2/_{\circ}$ of platinum in the 17.894 grams of material analyzed. For the purpose of comparison, platinum contents of samples of platinum bearing material from different parts of the world are given: The analyses are by Messrs. Deville and Debray; Oregon, $51.45^{\circ}/_{\circ}$; Australia, 61.40; California, 85.50; Choco, Columbia, 86.20; Nischne Tagilsk, Urals, 76.40.

The following is a list of Canadian localities at which the occurrence of platinum has been noticed. With the exception of that at Sudbury, Ont., all the finds have been made in the alluvial deposits, usually while working for gold.

Rivière du Loup, and Rivière des Plantes, province of Quebec. (See note above.)

Sudbury, Ontario.—This occurrence is one of the very few in the world where platinum is found "in situ."—In this case the metal is found in combination with arsenic and associated with the nickeliferous pyrrhotite deposits. The arsenical platinum mineral was named sperrylite by H. A. Wells who described it, and found it to consist on analysis of : Platinum 52. 57 per cent; Rhodium 0.72; Antimony 0.50; Arsenic 40.98; Iron 0.07; Tin oxide 4.62.

At Sudbury the ore bodies consist of chalcopyrite and nicketiferous pyrrhotite, which are primarily worked for their nickel and copper contents, and yield a large proportion of the world's supply of nickel. The ore undergoes a first treatment at the mines, where it is smelted, the low grade matte first made containing approximately 15 per cent of nickel and about the same proportion of copper and the Bessemerized matte from 35 to 40 p.c. of nickel. This is shipped to the refinery in New

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