

might lead to an increase of the country's ore reserves. Results of investigations of the Windy Lake area which lies in that part of the Sudbury area known as the northern nickel range are presented by C. W. KNIGHT (3). A number of other occurrences of nickel minerals in Ontario are described by the same writer (3), and a deposit lying south of lake Shebandowan west of Fort William is described by J. G. CROSS (3). A deposit has been discovered on Maskwa river in the province of Manitoba in which minerals similar to those of the Sudbury district are associated with norite. R. J. COLONY (6) who made an examination states that the copper content of a large number of samples analysed ranged from 0.68 per cent to 3.60 per cent, the nickel content from 0.29 per cent to 1.68 per cent and the platinum content from 0.01 ounces to 0.03 ounces per ton. The deposit has also been examined and mapped by W. S. McCANN (1) who describes the geological relationships of the occurrence.

**Petroleum.**—The prominence of the oil question in recent years has led to much government investigation into the geological features of areas where it has been thought that conditions might exist favourable to the occurrence of petroleum. An area that has attracted world-wide attention is the Mackenzie River basin. Oil was struck in 1920 in a well drilled on Mackenzie river at a point 45 miles below Norman. The oil occurs in rocks of Devonian age. Formations of the Devonian system are of wide distribution throughout the Mackenzie basin, oil seepages are numerous, and further drilling operations may reveal great possibilities. The sedimentary succession and the structural features of the Norman area are described by E. M. KINDLE and T. O. BOSWORTH (1), and by J. NESS (6), and the question of oil possibilities on Great Slave lake is discussed by G. S. HUME (1).

Considerable drilling has been done in the province of Alberta. Notes on geological conditions existing at the points where drilling operations were conducted, and on the progress of operations are given by D. B. DOWLING (1). The results of detailed investigations in the operating oil field of Alberta on Sheep river are presented by S. E. SLIPPER (1), and a report on the geology of the Pouce Coupé area by J. A. ALLAN and A. E. CAMERON is to be found in the Mining and Engineering Record.

Attention has also been given to the oil possibilities of the Peace River section of British Columbia. Investigations into the geological formations were made by J. C. GWILLIM, J. A. DRESSER and E. M. SPIEKER for the Department of Lands, British Columbia, by which reports were published.

A study has been made by M. Y. WILLIAMS (1) of the palæozoic formations exposed along Abitibi, Mattagami and Albany rivers with a view to ascertaining their oil possibilities. Mr. WILLIAMS (1) has also reported on the oil possibilities of Manitoulin island and on parts of southwestern Ontario.