

ECONOMIC GEOLOGY IN CANADA

Bridge River district, British Columbia (1). A report by G. A. Young on the hydromagnesite of Atlin mining district, British Columbia (1) may also be had. The hydromagnesite forms beds lying in depressions upon the surface of the earth with a clear-cut boundary between it and the underlying clay-like soil. There are several small areas, the largest of which is about eighteen acres. The thickness of the beds varies from one to five feet, and it is estimated that there are 180,000 tons of hydromagnesite. There is no over-burden to remove in mining operations, and the deposits are so situated that they can be easily drained. Magnesite when calcined is a high-grade refractory material, and all deposits are of particular interest in these days because the product of the Austrian deposits, the most important in the world, are available only to the central European powers.

Molybdenum.—Owing to the increased demand for molybdenum for steel manufacture occasioned by the war, much attention has been devoted to the molybdenite deposits of Canada, and a number of these are being mined. Descriptions of certain deposits and the results of milling tests of molybdenum ores are given by G. C. Mackenzie, W. B. Timm and C. S. Parsons (2).

A deposit of molybdenite occurring on Lost creek in the Nelson mining division is described by C. W. Drysdale. An ore zone about ten feet thick occurs in a body of granite a few feet from its contact with intruded sediments. In the ore zone the joint planes of the granite are closely spaced, interfinger, and lie generally about parallel to the contact. The molybdenite forms reticulating veinlets following the joint planes and impregnates the granite between the veinlets. Drysdale infers that the molybdenite is slightly younger than the enclosing granite, although from the same parent sources, and that it either accompanied or followed the intrusion of pegmatite dykes, which represent the last stages of crystallization of the granite magma.

Nickel.—A short paper by C. W. Knight published in the *Engineering and Mining Journal* of May 6, 1916, volume 101, pages 811-812, is an important contribution to the literature treating of the origin of the nickel-copper ores of the Sudbury district.

Peat.—The report on the "Investigation of the Peat Bogs and Peat Industry of Canada, 1913-14," by A. Anrep (2), is a profusely illustrated report containing descriptions of a number of peat bogs examined in Ontario, Quebec, Prince Edward Island and Nova Scotia. Diagrams are given showing the area of the bogs and the thickness of the peat.

Phosphate.—After the discovery of float phosphatic rock in the vicinity of Banff by the Commission of Conservation, a closer examination of the district was made by Hugh S. de Schmid, of the Mines Branch. A number of occurrences of phosphate in place were discovered in the upper part of the Rocky Mountain Quartzite (Pennsylvanian), but unfortunately none of these can be considered of economic importance. The results of de Schmid's investigations were published as Bulletin No. 12 of the Mines Branch (2).

Road Materials.—The first memoir published by the Geological Survey on road materials (1) appeared in 1916. This sets forth the results of field work conducted by L. Reinecke, in 1914, on the north