

Section 2.—Economic Geology of Canada, 1934.*

The purpose of this paper is to call attention to the most important reports and articles treating of the economic geology of Canada published during 1934. The particular articles here referred to, although recently published, do not necessarily contain the best and most complete information on the subjects treated. For further information it is advisable to consult the Dominion and Provincial Departments of Mines. The reference numbers appearing throughout the text indicate the publishers as listed at the end of this paper.

Asbestos.—Investigations of the asbestos and chromite deposits of the Thetford area and the study of the general geology of the Thetford and Disraeli quadrangles, Quebec,¹ are continued by H. C. Cooke (see 1934-35 Year Book, p. 29). Some of the more important chromite deposits occur in the dunite; others are in the ordinary olivine-rich peridotite; and still others in the serpentinized pyroxene-rich peridotite. Although much chromite seems to be an original constituent of the rock and to form flowage bands, most of the best ore is of later date, and has been introduced into fault fissures in the consolidated rock.

Chromite.—D. F. Kidd presents a study of the geology of chromite deposits of Obonga-Kashishibog area, Thunder Bay district, Ontario.¹ Extending east to west through the area is a belt of volcanics and sediments with probably associated intrusives, bounded by granite-gneiss and granite, and overlain by little disturbed sediments and diabase sheets of Keweenawan age. Chromite occurrences are limited to a lenticular body of serpentine rock about three and a quarter miles long and three-quarters of a mile wide.

Clays.—A comprehensive report on buff and white burning clays in southern Saskatchewan¹ is made by F. H. McLearn and J. F. McMahon. Geological occurrence, winning, classification and description of occurrences of the clays are fully covered.

A report on the lignite and refractory clay deposits of the Onakawana lignite fields, northern Ontario, incorporating an appendix entitled "Laboratory Classification of Refractory Clays" by R. J. Montgomery,³ is made by W. S. Dyer and A. R. Crozier. Two types of refractory clays are found: dark carbonaceous plastic clays which occur along with the lignite, and various coloured clays which occur with thick beds of white quartz sand.

A. R. Crozier provides a study of refractory clay deposits on the Missinaibi river, Ontario.³ It may be stated safely that the preliminary survey indicates promising deposits.

Coal.—A detailed description of Michel coal area, British Columbia, and Coleman South area, Alberta,¹ is given by B. R. MacKay; Michel coal field is the most important in Western Canada. Coal in these two fields occurs in the Kootenay formation.

A technical and economic investigation of northern Ontario lignite³ made by the Northern Ontario Research Foundation indicates that immediate commercial development of the lignite in this area is not recommended.

Copper.—A description of the Hidden Creek ore bodies, Portland Canal area, British Columbia, is provided by N. E. Nelson in the *British Columbia Miner*. The ore deposits are replacement bodies in a remnant of argillites and greenstones caught up in the granite rocks of the Coast Range batholith.

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