Section 2.-- Economic Geology of Canada, 1932 and 1933.*

The purpose of this paper, continuing a series which has been published in the Year Book over many years, is to call attention to the most important reports and articles treating of the economic geology of Canada and published during 1932 and 1933. 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.—In a bulletin of the Department of Mines of British Columbia, a description is given by A. M. Richmond of asbestos deposits of British Columbia. The available data upon these deposits is not encouraging; the fibre in general is unsuited for anything but the lowest grade products.

An examination of the geology and asbestos deposits of Thetford map-area, Quebec, is made by H. C. Cooke. Cambrian sericite and chlorite schists, quartzite, basaltic lavas, and grey, green, and red slates, Ordovician black slates and impure quartzites, and post-Ordovician serpentinized dunite, peridotite, pyroxenite, and granite underlie the area. Alteration of the igneous rocks, faulting, the asbestos veins and other veins, and origin and localization of the asbestos deposits are described. Magnetometer observations made by A. H. Miller are also incorporated.

Barite.—In a bulletin of the Department of Mines of British Columbia, A. M. Richmond provides a description of barite deposits of British Columbia. Barite occurring in these deposits would have to be concentrated to be rendered suitable for industrial purposes; markets outside the province are difficult to reach on account of excessive haulage costs; and the United States tariff prevents shipping into that country.

Chromite.—A report is made by M. E. Hurst upon the chromite deposits of Obonga Lake area, Thunder Bay district, Ontario.³ The basement complex, consisting of volcanics and sediments, is intruded successively by pre-Algoman peridotite, Algoman granite, granite gneiss and pegmatites, and Keeweenawan diabase. Keeweenawan dolomite also occurs in the area. The chromite deposits are associated with a lenticular mass of serpentine and are found close to the contact. The concentrations of chromite are of two types, disseminated and massive.

Clays.—A report upon some undeveloped clay deposits of British Columbia by A. M. Richmond, is presented in a bulletin of the British Columbia Department of Mines. There are many undeveloped common clay deposits suitable for the manufacture of common red brick. Summarized information concerning them and other clay deposits may be found in this report.

A comprehensive study of the clay and shale resources of Turner valley and nearby districts, Alberta,² is afforded by W. G. Worcester. The examination of these clay deposits was undertaken with the hope that clays and shales of a kind of quality to warrant their development along commercial lines might be found, thereby helping to provide a market for part of the gas now being wasted. Notwithstanding the many deposits of excellent red-burning shales in the area, their commercial development at this time is not to be recommended on account of lack of suitable transportation and uncertainty of markets for finished products.

^{*}Contributed by P. J. Moran, B.Sc., Geological Survey, Department of Mines, Ottawa.