

Section 2.—Economic Geology of Canada, 1931.*

The purpose of this paper is to call attention to the most important reports and articles treating of the economic geology of Canada and published during 1931. The particular articles 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 through the text indicate the publishers as listed at the end of this paper.

Antimony.—A description is given by W. J. Wright of the Lake George antimony deposits of York county, New Brunswick.⁵ Palaeozoic interbedded shales and quartzites are intruded by granite and basic dykes. Quartz veins, carrying stibnite and minor amounts of pyrite, arsenopyrite, and dolomite, cut both the sediments and dykes.

Chromite.—A report is made by A. R. Graham upon the Obonga Lake chromite area, Thunder Bay district, Ontario.⁴ Precambrian volcanic and sedimentary schists, serpentine, talc-carbonate schist, granite and associated rocks, and diabase sills and dykes occupy the area. The chromite occurs in the serpentine as disseminated grains and as segregated deposits in form of irregular and vein-like bodies. All chromite observed is below commercial grade at the present time.

Clay.—Howells Frechette and J. F. MacMahon describe the clay and shale deposits of Prince Edward Island.² The prevailing rocks of the province are soft red sandstones and arenaceous shale probably of Permian or upper Carboniferous age. The sandstones generally contain a considerable percentage of clay matter and in some horizons may be regarded as sandy shales which are gritty. All shales, even those containing sandy matter, develop good plasticity. Marine clay, boulder clay, and clay resulting from the weathering of shales do not offer such good promise as do some of the shales.

Coal.—The stratigraphy and structure of the Corbin coal field, British Columbia,⁵ is described by B. R. MacKay. This field, of Cretaceous age, is one of the smallest and at the same time one of the principal producing bituminous coal areas in south-eastern British Columbia. It is unique on account of the great thickness of one of its coal seams and the remarkable concentration of coal in a small area that has occurred through intense folding and faulting of the measures. The coal is of bituminous rank and with a low sulphur content.

The results of further investigations of the Onakawana lignite deposit, Moose River basin, Ontario,³ is published by W. S. Dyer. Numerous drill holes indicate a series of nearly flat-lying seams with a total thickness varying from 10 to 64 feet. Analysis of the lignite together with logs of bore holes are incorporated.

Copper.—Forrest A. Kerr presents a paper outlining the mineralization of northern British Columbia.⁵ Highly altered Palaeozoic sediments capped by a thick series of Permo-Carboniferous limestone and Mesozoic volcanics are intruded by the coast range multiple batholith. Upper Cretaceous sediments in considerable thickness, and masses of Tertiary and recent lava flows, occur locally. The

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