2.—Economic Geology of Canada, 1923 and 1924.[8]

The years 1923 and 1924 were prolific of contributions to the economic geology of Canada. The purpose of this article is to call attention to the most important reports and articles; outlines of some of these are presented. It is scarcely necessary to remind the reader that although the articles referred to are of recent date, they do not necessarily give the most complete information on the subjects with which they deal, and that it is advisable to consult the Dominion and Provincial Departments of Mines for further information. The numbers appearing throughout this paper refer to the publishers and publications listed at the end.

Coal.—The results of important investigations in several different coal fields have been published. F. H. McLearn[1], in describing the coal seams of the Kootenay formation exposed in Peace River canyon, states that as compared with seams of similar age in southern Alberta they are comparatively thin. Eight of the ten seams described attain a thickness of 2 feet 6 inches to 4 feet 8 inches in parts of the area. One seam varies from 5 feet 5 inches to 5 feet 9 inches and another, known over a large area, varies in thickness of coal from 3 feet 7 inches to 8 feet 4 inches. They vary in rank from bituminous to semi-bituminous.

A rather detailed statement is given by J. MacVicar[1] on the coal fields of western Alberta lying about the headwaters of Smoky river. The results are given by D. B. Dowling[1] of an examination of coal seams in the Bow River valley within the Rocky mountains, where coal suitable for domestic use occurs. The investigations were directed towards an examination of the seams in what appeared to be the least disturbed area south of Canmore.

The Scientific Research Council of Alberta has published the results of studies by John A. Allan and Ralph L. Rutherford in the Saunders Creek and Nordegg coal basins and in the Blackstone, Brazeau and Pembina River areas of the foothills of Alberta. Geological conditions are described and sections of the coal measures given. A concise description of the structural features of the Crowsnest coal area, Alberta, has been given by Bruce Rose[5]; and W. J. Dick[5], in a paper entitled "Economic Study of Coal Mining in Alberta and Southeastern British Columbia," presents a great deal of valuable information. A report by A. O. Hayes and W. A. Bell[1] on the southern part of the Sydney coal field presents detailed information regarding the structure of the area, measured sections and the logs of borings. Four coal seams of determined workable thickness occur within the area mapped. A paper read by W. S. Dyer[4,5] before the Canadian Institute of Mining and Metallurgy gives a description of the Minto coal basin, New Brunswick, where a thin seam of bituminous coal is mined.

Copper.—In a detailed report on the Flinflon ore-body, Manitoba, F. J. Alcock[1] states that the ore consists of two types, solid sulphide and disseminated ore. The solid sulphide consists chiefly of fine-grained pyrite containing sphalerite and chalcopyrite, which shows in places a banded structure. The disseminated ore consists of country rock, mainly chlorite schist, impregnated with sulphides. It has been calculated that there is more than 16,000,000 tons of ore in the whole mass. The deposit was formed by replacement in a shear zone in greenstone.

The Hidden Creek copper mine at Anyox, B.C., has been described by V. Dolmage[1], who drew largely on information contained in an unpublished report by J. Austen Bancroft. There are several ore-bodies lying well to the centre of a

[8] By Wyatt Malcolm, M.A., Geological Survey, Ottawa.