

Clay.—The Mesozoic clay deposits of the Mattagami and Missinaibi rivers, Northern Ontario, are briefly described by W. S. Dyer⁵. These fire clays and silica-sands are of two types; the mottled clay and white sand type and the dark clay or lignite type. Outcrops of the deposits are small, seldom exceeding 15 feet in vertical section, and are at water level; many of them may be seen only at low water. They are distributed over a wide area, but exposures are few in number, since in most cases glacial boulder clays or sands extend down to water level. Laboratory tests indicate that these fire clays are of first-class quality.

Coal.—In the Bulletin of the Imperial Institute D. H. Curren Briggs makes comments upon the coal-mining situation in Canada, outlining various factors that influence production and making comparisons with coal-mining methods and practice in the British Isles. The physiography, geology, stratigraphy and economic deposits, including coal, building stone, gravel, and placer gold, of the area between North Saskatchewan and McLeod rivers, Alberta, are described by R. L. Rutherford in the Bulletin of the Scientific and Industrial Research Council, Alberta. W. A. Bell⁶ briefly outlines the complex carboniferous stratigraphy and geologic history of the Maritime Provinces of Canada. Briefly, the geological history of the area throughout the carboniferous period is a record of sedimentation, pre-eminently fresh-water, in subsiding lineal basins of deposition that are partially or more rarely wholly separated by lineal rising areas of erosion. The subsidence of the floors of deposition was not continuous or uniform but intermittent and variable in character. This is inferred from the rhythmic repetition of similar facies, *e.g.*, soil beds, coal seams, heavy sandstones or conglomerate members with buried erect trees, etc. The outlines of these basins were mainly determined by orogenic disturbances, accompanied by batholithic intrusion in Devonian times.

Copper.—The copper situation in Canada is reviewed by Arthur Buisson⁴. The discovery of important copper deposits at Rouyn, the Frood Extension, Errington, Flin Flon, Sherritt-Gordon, Britannia, Copper mountain and Quatsino sound are new factors likely substantially to increase Canadian production. Improved and lower treatment charges and the high price of copper enhance the value of these deposits. In picturing the copper situation in the world, comparing the production and possible future production of various countries, and presenting the various factors influencing it, S. J. Cook⁵ predicts a greater growth in the copper output of Canada in the next decade than in any other country in the world, that Canada's estimated output will reach 12.7 p.c. of the world's supply and that Canada will occupy third place in copper production. Sydney C. Mifflin⁴ describes the history, geology and development of the Coxheath copper mine. Precambrian felsites passing into quartz-diorites, crossed by many breaks, occupy the area. Chalcopyrite carrying gold and silver values, occurs in fissure fillings in old altered andesite. The exploratory and detailed examination that has been carried on by the Geological Survey for the past six years in the Rouyn area is outlined by H. C. Cooke and W. F. James.⁴ The sulphide deposits in this area are of two types:—(1) vein fillings, (2) replacements. The vein fillings are comparatively small and economically unimportant. Classified according to composition the replacement deposits fall into two classes:—(1) those composed of iron sulphides; (2) those which contain in addition important quantities of copper and zinc sulphides. The copper and zinc sulphides are later than the iron sulphides and replace them. The deposition of copper sulphide appears to be dependent upon two factors only:—(1) the pre-existence of a body of easily replaceable material such as iron sulphide or chlorite and