occurs suitable for use in manufacturing brick, drain tile, sewer pipe and fire-brick. It also gives the results of tests made to determine the physical properties of the clays and shales and suggests the treatment to which they should be subjected to obtain the most satisfactory commercial results. The shales used in the clay industry of Ontario are derived almost wholly from the Lorraine and Queenston formations and are of glacial origin. Of particular interest is the description of clays on Mattagami and Missinaibi rivers of Cretaceous age. High-grade materials suitable for stoneware, sewer pipe, fire-brick, retorts, crucibles, electric or sanitary porcelain, floor and wall tiles are found.

Coal.—Several articles on coal appeared during the year. John A. Allan[5] presented a paper on the geology of the coal of Alberta and made an estimate of the reserves, and Edgar Stanfield[5] presented a consideration of the chemical composition of Alberta coals. The Scientific and Industrial Research Council of Alberta published a report by R. L. Rutherford on the results of his field work in tracing the coal-bearing strata from McLeod River and Coalspur districts north to Athabaska river. The Smoky River coal field of Alberta has been described by J. McEvoy.[1] In this field there is a large tonnage of very high-grade bituminous coal, one 14-foot seam grading in places as semi-anthracite. The results of certain field work in the coal fields of Nova Scotia, and a critical analysis of reports on earlier field work, are given by W. A. Bell in a paper entitled "The New Glasgow conglomerate member of Pictou Co., Nova Scotia."[5] The character of the conglomerate is described, its origin discussed and consideration is given to its relation to the coal-bearing series.

Copper.—In a paper entitled "Recent developments in northern Quebec"[5], H. C. Cooke gives concise notes on the geology, mode of occurrence and development of numerous ore bodies discovered in recent years in the belt of ancient Precambrian rocks of northern Quebec. A. O. Dufresne also describes these deposits in the "Report on mining operations in the Province of Quebec." Notes on the character of the ore and the possible methods of metallurgical treatment are given by W. B. Timm and A. H. A. Robinson.[5, 4] The copper deposits of the north shore of lake Huron have been described by W. H. Collins.[1] J. F. Wright[5] describes the copper-bearing sulphides of Oiseau River valley, Manitoba. These deposits occur along jointed and schistified zones in andesitic lava and tuffaceous sediments, along the contacts between these two classes of rocks, or between them and peridotite, gabbro and granite. Some of the sulphides carry nickel.

A description is also given by C. E. Cairnes[1] of a number of mineral deposits in the Pemberton area, B.C., where the ore bodies are related genetically to the Coast Range batholith. The common type of mineralization is the replacement of limestone by a variety of ore minerals, the most important of which is chalcopyrite. There are also in the area instances of the replacement of other rocks, chiefly along shear zones or other lines of weakness.

Gold.—Many important contributions to our knowledge of the economic geology of the gold deposits of Canada were made during the year 1925, principally by the Ontario Department of Mines and the Geological Survey of Canada. One of the most important is an illustrated report by A. G. Burrows[3] on the Porcupine gold area. A study of the structural features reveals that the Keewatin lavas were folded and partially eroded before the deposition of the Timiskaming sediments, that further folding involved both lavas and sediments, producing the major synclinorium, and that this great deformation probably occurred before the intrusion of the porphyries. The gold deposits are composite in their structure, consisting of quartz and mineralized schist in varying proportions. Many irregular lines of