In northern Manitoba a body of copper ore at the Mandy mine was found sufficiently high grade to permit of long haulage by horse teams and by water to the railway and by rail to the smelter at Trail in southern British Columbia. Notes on the discovery and exploitation of this ore body are given by J. E. SPURR in the Engineering and Mining Journal and G. R. BANCROFT in a bulletin of the Canadian Institute of Mining and Metallurgy. A description of the Flinflon mineral deposit, a large low grade copper deposit in the vicinity of the Mandy mine, is given by R. C. WALLACE in the Canadian Mining Journal, 1921. The Geological Survey publishes the results of a careful study of the Sunloch ore bodies, Vancouver island, made by V. DOLMAGE. Valuable papers describing the geological features of a number of copper deposits have appeared in scientific periodicals. In Economic Geology are papers by V. DOLMAGE on the Marble Bay mine, Texada island, and by E. L. BRUCE and GEORGE HANSON on the copper deposits of Manitoba. In the Transactions of the Canadian Mining Institute papers by E. E. CAMPBELL on the Hidden Creek mine at Anyox and by J. J. O'NEILL on native copper deposits of the Arctic appear.

Fluorspar.—This mineral is used as a flux in metallurgical processes and as a source of fluorine in the manufacture of hydrofluoric acid. The two sources of fluorspar in Canada are the Rock Candy mine near Grand Forks, southern British Columbia, and a number of mines in the vicinity of Madoc, Ontario. The Madoc deposits have been examined by M. E. WILSON (1), who gives a general description of their mode of occurrence, discusses the problem of their origin, and describes in detail the various properties.

Gold.—Several valuable reports on gold mining districts or prospective gold mining districts of Canada were published by government departments during 1920 and 1921. Among the most valuable of these are several reports on Ontario gold deposits. An important contribution to our knowledge of the geology and ore deposits of Kirkland lake, next to Porcupine the most productive gold mining district of Ontario, is made by A. G. BURROWS (3) and P. E. HOPKINS. The report is accompanied by a detailed map on a scale of 600 feet to one inch. The ore bodies consist of lodes or composite veins formed under strong compressive forces with the solutions following openings along fracture planes in an irregular manner and partly replacing porphyry or other country rock adjacent to the fracture planes. The lenses of quartz are sometimes several feet wide and contain visible gold with tellurides, pyrite, chalcopyrite and molybdenite. Some of the ore shows very little vein quartz, and specimens of altered red syenite have been found to contain grains of gold in the secondary minerals.

Other gold areas in Ontario that have been described are: Matachewan area by H. E. COOKE (1) and A. G. BURROWS (3); West Shining Tree by P. E. HOPKINS (3); Ben Nevis and Argonaut areas by C. W. KNIGHT (3); Schreiber by T. L. TANTON (1); and Goudreau by A. G. BURROWS (3).