

The ore bodies of one of the most important copper mines of British Columbia, the Britannia mine, have been briefly described by S. J. SCHOFIELD (1). The ore is in lenticular masses in a great shear zone; the schist of this zone has been impregnated or replaced by pyrite, chalcopyrite and cupriferous pyrite with minor amounts of zincblende. In his study of the geology of Quatsino sound and other parts of the west coast of Vancouver island V. DOLMAGE (1) made an examination of the Old Sport copper mine. A limestone series overlying a thick flow of andesite has been intruded by a mass of diorite and has been extensively metamorphosed. The ore is chalcopyrite, which occurs as small rounded grains and large irregular bodies associated with a large amount of magnetite and smaller amounts of pyrite and pyrrhotite. It is deposited mainly at the base of the limestone where it rests upon the main body of andesite. It probably had its origin in the intrusive diorite.

Gold.—A number of reports were published in 1919 dealing with the geological features of several Precambrian areas of the Laurentian plateau of Manitoba, Ontario, and Quebec, in which gold mining is being carried on or in which prospecting may be conducted with reasonable chances of success. The reports of Resident Engineers of the Mineral Survey district of British Columbia (5) contain brief notes on the gold mines and prospects of British Columbia.

The Cariboo placers, British Columbia, that have since 1860 yielded about \$45,000,000 of gold were examined by B. R. MACKAY (1) in 1918. The preglacial gulch, creek and bench gravels are the source of the greater part of the present output of the Cariboo. Owing to the fact that these deposits occur in most cases buried under a heavy mantle of drift, glacial outwash, and recent stream gravels, many of them were entirely overlooked or the mining of them had to be abandoned on account of water and other difficulties. The cheaper methods of mining of the present day renders some of these deposits commercially attractive. The tracing of these preglacial gravels is a matter of detailed study and mapping. Some notes by J. B. TYRRELL on the placer mines of Cariboo were published in *Economic Geology*, Volume 14.

The origin of the gold deposits of Matachewan district, northern Ontario, is dealt with by H. C. COOKE in *Economic Geology*, volume 14. The gold occurs in veinlets of quartz cutting granite porphyry and in schists surrounding the intrusive porphyry. In the schists the ore bodies consist of a pegmatite dyke in the centre, a middle zone of mineralized rock on each side of the pegmatite and an outer zone of altered rock without mineralization which grades into unaltered country rock. The ores were genetically connected with the porphyry. A report and map by C. W. KNIGHT, A. G. BURROWS, P. E. HOPKINS and A. L. PARSONS (3) on a stretch of country extending east from near Porcupine, Ontario, to the interprovincial boundary, should be of great value to prospectors for gold. Geological formations are exposed that are promising and a number of gold prospects have been opened. Other reports on gold areas in Ontario have been presented by A. G. BURROWS (3) and P. E. HOPKINS (3). Notes on