large mass of greenstones and metamorphosed argillaceous sediments which forms an inclusion in the Coast Range batholith. The common metallic minerals are pyrite, pyrrhotite, chalcopyrite, zinc blende, magnetite and arsenopyrite in a gangue of silicified argillite and greenstone. The ore is found at or near the contact between the greenstone and the argillaceous sediments, and is thought by Bancroft to have been formed by the replacement of these two rocks by solutions that began to circulate towards the close of the intrusion of greenstones, and continued during the advance and cooling down of the Coast Range batholith.

A copper deposit that has recently drawn much attention to itself because of its size and its occurrence in volcanics of Keewatin age is the deposit on the Horne claims, Rouyn township, northern Quebec. This is described by H. C. Cooke.[1] The ore minerals are pyrite, pyrrhotite and chalcopyrite, found in all degrees of concentration from scattered grains to solid masses in a gangue of rhyolite. There are several bodies. They differ widely in composition, some consisting mainly of pyrite, others of pyrrhotite, with some running high in chalcopyrite. Gold values also vary a great deal. The ore-bodies are replacement deposits in rhyolite and rhyolite tuff. Although there is little evidence bearing on their origin it is thought that the ores were segregated from some deep-seated body of gabbro magma and injected into their present position somewhat after the manner of an igneous rock.

The native copper deposits of Bathurst inlet, Northwest territory, have been described by J. J. O'Neil in a report of the Canadian Arctic Expedition, 1913-1918. There is in Bathurst inlet a series of copper-bearing amygdaloidal basalts that have a total thickness of something over 850 feet. The copper occurs as minute grains in the ground mass of the rock, as grains or tiny flakes in the amygdules, and as grains and small flakes in narrow seams and veins. Although the copper-bearing rocks are of wide distribution, the general conclusion is that, while the Bathurst inlet deposits probably form an important reserve of copper ore, they are not sufficiently attractive under present conditions of accessibility, transportation and demand to warrant the large expense necessary to prove and develop them.

Gold.—A great deal has been written recently on the gold deposits of Canada. H. S. Robinson[7] describes those of the Pearl Lake area of the Porcupine camp. The area includes the two producing mines, the Hollinger and the McIntyre. The fractures which are now represented by veins seem to have been the results of readjustments following the solidification of the porphyry. The mineralization of the fractures and their schistose and brecciated wall rocks followed closely on the solidification of the porphyry. The coarsely crystalline pegmatitic character of the quartz suggests that the time interval between intrusion and first vein filling was short. The quartz is not auriferous except where it is fractured. After deposition of the quartz additional stresses opened and extended the veins. The solutions assumed a basic character. Pyrite invaded the fractures and the schistose wall rocks. It was most abundantly deposited on the contacts between the quartz and the schists and in the schists. This contact mineralization is not appreciably auriferous, though ordinary methods of assay often give low gold values and some of the pyrite is itself gold-bearing. Towards the end of the deposition of pyrite fracturing again took place. The greater part of the gold was introduced after this period and was deposited in cracks in the pyrite and quartz.

The veins of the Porcupine gold district consist primarily, according to J. E. Spurr[6], of rather typical and definite gold-quartz veindykes fully representative and characteristic of the deep-seated gold zone. After the forcible intrusion of the