

This list is intended to refer rather to the divisions known to contain ores, than to be a complete geological scale of the province.

Geographically speaking, in Nova Scotia proper these divisions are represented as follows: On the Atlantic coast are the Cambrian of the gold-fields with their associated granites. Then follow the measures of the Cobequids running through Cumberland, Pictou, Colchester and Antigonishe counties, supporting Silurian and Devonian strata, the latter being met also in the western part of the province. The Carboniferous occupies the Gulf shore, and much of the district surrounding the Basin of Minas. The Triassic measures are met in narrow fringes and outliers around the Bay of Fundy. In Cape Breton the northern part of the island is largely composed of Laurentian, which occurs also between the arms of the Bras d'Or Lake. The Carboniferous rests on it, and forms fringes, while it is replaced in Richmond County by several large areas of Devonian.

Taking the divisions in descending order, their best known minerals are:

*Modern.*—Beds of bog iron-ore, manganese wad, peat, infusorial earth and clays are frequently met. A number of years ago the iron-ore was smelted in connection with older ores, at Clementsport near Annapolis. Deposits of considerable extent have been observed in Shelburne, Queens, Kings, and Pictou counties, and no doubt exist at many other localities. The wads are met in Cape Breton at several points, in deposits of considerable size, yielding from 20 to 40 per cent. of ore with water, iron, silicious matter, etc. Smaller deposits are not unfrequently found, but as there is no demand they are not sought after. The deposits of infusorial earth have been used locally for insulating steam-pipes, and as an absorbent in the manufacture of dynamite.

*Triassic.*—The trap and associated ash-beds yield numerous varieties of zeolitic and other minerals. At several points they are penetrated by veins of massive and crystalline magnetite and specular ore of remarkable purity. The thickest vein that has come under the writer's notice, of magnetite, was about 15 inches wide.

At numerous points, most noticeably at Margaretville, copper-ores, principally carbonates with native copper, are found in veins in the trap and ash. These veins have been explored several times without success. No records have been made of the "low-grade" values of these rocks, and I believe from the frequent occurrence of copper-ores over so wide an extent of territory that locally, beds may be found carrying the disseminated metal in amounts of econo-