

what are regarded as the Lower Cambrian quartzites and slates of that area.

Briefly speaking, the structure of the metamorphic rocks of south-eastern Quebec may be said to consist of a series of approximately parallel ridges or anticlinals of Pre-Cambrian age, of which at least three have been definitely located. The most easterly of these is found along the boundary between Maine and the eastern limit of the Province, the middle is seen in the Stoke Mountain range and its expansion south-westerly to Lake Memphremagog, while the third constitutes the Sutton Mountain range and its prolongation to the north-east through the Province to Gaspé.

The intervals between these ranges are occupied by overlying sediments, mostly sandstones and slates of various colors, which, in places, are fossiliferous, and are now regarded and described in the Geological Report for 1886 as of Cambrian and Cambro-Silurian age. With these are associated areas, often of large size, of diorites, serpentines and granitic rocks. At several points, also, small, isolated and, at times, closely infolded basins of fossiliferous Silurian strata are observed. Between the most westerly of the old ridges and the St. Lawrence River the country is apparently occupied to a very large extent by rocks of Cambro-Silurian and Upper Cambrian age, much of which constitute what has for many years been regarded as the unaltered portion of the Quebec group, while the newer portion or that nearest the river is characterized, throughout a large extent, by fossils of the Hudson River and Utica formations.

The mineral wealth of this portion of Quebec is confined, for the most part, to the older systems, viz., the Pre-Cambrian and Cambrian, and though traces of various ores are occasionally found in the newer, in no case yet observed do these occur in quantity sufficient to be of economic value. Thus the workable deposits of *copper* ore exist principally in the Pre-Cambrian schists, though they have been located and worked, to a limited extent, in rocks of the overlying system. The ores of *iron* are found also mostly in the lowest series, and when found in the upper are largely confined to the volcanic portion, sometimes in the serpentines where veins often of large size occur. The *gold*, which, however, has not as yet been worked except as an alluvial deposit, pre-