

- II. Huronian: To include
1. The typical or original Huronian of Lake Superior and the conformably—or unconformably as the case may be—overlying upper copper-bearing rocks.
  2. The Hastings, Templeton, Buckingham, and Grenville groups.
  3. The supposed upper Laurentian or Norian.
  4. The altered Quebec group as shewn on the map now exhibited, and certain areas not yet defined between Lake Matapedia and Cape Maquereau in Gaspé.
  5. The Cape Breton, Nova Scotia and New Brunswick, pre-primordial sub-crystalline and gneissoid groups.
- III. Cambrian: In many of the areas especially the western ones, the base of this is well-defined by unconformity, but in the Eastern Townships and in some parts of Nova Scotia it has yet to be determined. The limit between it and Lower Silurian is debatable ground upon which we need not enter.

The apparent great unconformity of the Nipigon group to the Huronian around Lake Nipigon may perhaps be explained by our having here the deep-seated parts of an ancient volcanic crateriform vent greatly denuded and the crater now occupied by the waters of the lake. The eruptions from this crater may have commenced in the Huronian epoch and been continued at intervals even up to the Triassic period; but in the meantime we have no evidence of any of the eruptions being newer than Cambrian. One point I wish particularly to insist on is that great local unconformities may exist without indicating any important difference in age, especially in regions of mixed volcanic and sedimentary strata, and that the fact of crystalline rocks (greenstones, diorites, dolerites, felsites, norites, &c.,) appearing as stratified masses and passing into schistose rocks, is no proof of their not being of eruptive or volcanic origin—their present metamorphic character is as the name implies a secondary phase of their existence, and is unconnected with their origin or original formation at the surface.