

Much more is given in the same report shewing the highly disturbed condition of these rocks which are, like those of the north shore of Anticosti, of Utica and Hudson River age, a fact which had not, however, then been ascertained, and the section from the coast to the summit of the mountains was considered to be, as indicated by the constant south easterly dips, an ascending one, and thus the Pre-Cambrian chloritic and micaceous schists, diorites, felsites and serpentines, which form the axis of the mountains, are depicted on the geological map of 1866, as Sillery and Lauzon, or the upper members of the Quebec group, a similar mistake having, as I have elsewhere pointed out, been made throughout the entire range.

Resting unconformably either on the rocks of the Levis formation, or on the older schists of the axis are those of the Siluro-Devonian basin, already referred to. Where unaltered they consist of dark-blue clay shales, grey sandstones and limestones often dipping at high angles and shewing, especially to the south-east, other evidence of repeated disturbance. They are interrupted by large areas of grey and white granite and in proximity to these the limestones are crystalline and the argillites changed to micaceous and staurolitic schists. These rocks are described in detail under the heading "The Gaspé Series" in the xvi chapter of the Geology of Canada 1863, to which the reader is referred for further information. The wooded, mountainous and generally inaccessible character of a large part of the area occupied by these Siluro-Devonian rocks, has prevented much further or closer investigation of the relations of the several members of the group, than that made prior to 1863. Recent explorations in the Gaspé Peninsula and northern New Brunswick have however shewn that the upper or Devonian members are somewhat more widely distributed than indicated in the geological map published in 1866, and an abundant and characteristic assemblage of fossil fishes, new to Canada, and plants has been discovered around the shores of the Bay of Chaleurs in these Devonian rocks. Many other smaller trough-like areas of Siluro-Devonian strata occur in southern New Brunswick and along the north-western limits of Nova Scotia, from the head of the Bay of Fundy to the Strait of Canso. These are for the most part in contact either with Lower Cambrian or with Pre-Cambrian rocks, while in some cases as at Nictaux they are limited and altered by the granitic and dioritic masses of Devonian age, which also form the central highlands of Nova Scotia from Cape Sable to Cape Canso.

It must be observed that though for the purpose of the present sketch the Silurian and Devonian strata have been grouped together, there exists between them almost everywhere a very distinct break and unconformity, and they are further distinguished by a very character-