

break or unconformity and the stratigraphy entirely bears out the views of the late Mr. Billings who says:—* “From the top of the Hudson River down to the base of the Chazy there is no break, but all is occupied by a single immense, highly characteristic and compact fauna.”..... “At the base of the Chazy, in Canada and New York, there occurs a great break, the importance of which has only become apparent during the last six years. The Lower Silurian of America can be divided into two principal groups, the one above the break at the base of the Chazy, the other below.”

In the present sketch, the terms Cambrian and Cambro-Silurian are used to indicate this break, also distinct tints on the map, except in the south-eastern disturbed area, where, owing to the folding and faulting to which, as already stated, this area has been subjected, it has not yet been possible to determine the respective limits of the two systems. The Cambro-Silurian formations are, however, represented, for the most part, by those beds which are referred to by Logan as the lower or underlying black slates, pp. 240 and 241 *Geology of Canada*, 1863. They are well developed on the St. Francis and Nicolet Rivers, also at Farnham and Bedford, and again on the Etchemin River as well as at various points on the south shore of the St. Lawrence below Quebec. Their distribution shows that they are quite unconformable on the older red and green slates and sandstones, called Lauzon and Sillery, while, in some cases, they occur as small outliers intimately associated, by folding and faulting, with the Pre-Cambrian schists, as at Tingwick, Melbourne Ridge, Danville, &c. § The most conspicuous geographical divisions of the Southern and Western Basin are:—1. The Island of Anticosti. 2. The Ottawa and St. Lawrence Basin, extending from Quebec to the Thousand Islands. 3. The region between Lakes Erie, Ontario and Huron, extending from Kingston south-westerly, 300 miles to Lake St. Clair, and thence along the eastern and northern shores of Lake Huron to Sault St. Mary. 4. The Cambrian basin of Lake Superior. 5. The basins of Lake Winnipeg and Hudsons Bay. Subordinate to these are the outliers of Palæozoic rocks, which have been found in various parts of the great Northern area such as those of Lakes St. John, Nipissing, Abittibbe and Temiscamang. These are highly interesting relics which show that the present limits of the Palæozoic formations do not even approximately indicate those of the Ocean in which they were deposited. And it may yet be demonstrated, by the discovery of more such outliers in the vast unexplored northern regions of Canada, that the whole of the Archæan Continental Nucleus has, more than once, been entirely submerged during the Palæozoic ages.

*Catalogue of the Silurian Fossils of the Island of Anticosti, 1866, p. 79.