

Such is the series of rocks seen by me in the vicinity of Quebec. Mr. Logan says, "from the physical structure alone no person would suspect the break that must exist in the neighborhood of Quebec; and without the evidence of the fossils every one would be authorized to deny it;" thus throwing on Paleontology all the mistakes made and all the difficulties accumulated in his Quebec Group. I ask permission to say that the Stratigraphical and Lithological differences between the Silurian and Taconic rocks of the vicinity of Quebec are to me at least as great and as plain as the Paleontological ones; and that I find no facts whatever which show any conflict between Paleontology and Stratigraphy.

It is doubtful if all the shales between the chasm of Montmorency Falls and the waters of the St. Lawrence are of the Utica Slate age; the *Graptolites bicornis* and *G. pristis* are found in the *black shales* near their contact with the Trenton Limestone, but as yet no fossils have been found in the *gray shales*. In the ravine east of the Falls, there is probably a fault between the black and gray Shales; the dipping of the Trenton Limestone, the black Shales and gray Shales, disagrees, and varies from fifteen to eighty degrees, in a space of less than 150 feet. I am inclined to consider the gray Shales as the upper part of the Calciferous Sandstone group, but it will require further investigations in the field to determine the true stratigraphical structure of Montmorency Falls.