

ascending order, and each characterized by some fossils, most of which, however, were at that time of very uncertain age. I remember his showing me in the autumn of that year the note-books in which he had carefully sketched the stratigraphical arrangements he had observed, and also the forms of characteristic fossils. But both wanted an interpreter. The plants of the Gaspé Devonian were undescribed; many of them of forms till then unheard of. The shells and corals and graptolites of the older formations could be only roughly correlated with some of those in the New York reports. The rock formations were very unlike those of the New York series. Still this work of 1842 and '43 was plain and easy compared with that which arose in the tracing of these formations to the south-west. I may add here that I have since studied some of these Gaspé sections with Sir William's manuscript note-books in my hand, and have been amazed by the extraordinary care and exactitude with which every feature of the rocks had been observed and noted down. Much of the detail in these early note-books of Sir William, still remains unpublished. Those who would detract from the work of Sir William Logan, if there are any such, should remember these early beginnings, and compare them with the massive foundations which have been laid for us to build upon.

And now, after the labour of more than thirty years on the part of Sir William and those he had gathered around him, how do these subjects stand? (1) We have all the comparatively flat and undisturbed formations of the great plains of Upper and Lower Canada, our share of the interior continental plateau of America, worked out and mapped, and their fossils characterized so that a child may read them. (2) The complex hilly districts with their contorted, disturbed and altered beds, which extend from New England to Gaspé, have been traversed in every direction,* the limits of their different formations marked, and a theory as to their age and structure put forth, which, whether we accept it or not, has in it important features of the truth, and rests on facts on which every disputant must take his stand. (3) We have the still older formations of the Laurentide hills traced in their

* The extent of measured and paced sections in these districts by Sir William and Mr. Richardson is almost incredible; and these have been made the basis not only of the geology but of the excellent topographical maps prepared by Mr. Barlow.