

like the author have not examined the whole of the region as I have.

The statement, page 408, that Sir William knew that rocks even up to the Carboniferous had been "profoundly altered," may perhaps be questioned. In any case I have never seen even Devonian strata in eastern Canada, to which such a term could be correctly applied—and the succeeding sentences respecting the progressive alteration of the Quebec rocks to the south and southeast, are also wholly incorrect. The rocks are, as a fact, neither more nor less altered at Cape Rosier in Gaspé than they are at Philipsburg on the Vermont boundary, nor on the shores of the St. Lawrence, than they are on the Atlantic coast. Throughout, there are cases of local alteration, but these are clearly due to local causes, which can be pointed out; then again that the fossiliferous slates in the Eastern Townships *alternate* with the crystalline rocks named is absolutely incorrect, as it is also that any such crystalline rocks "seemingly represent the shales of Point Lévis, if not still newer members of the series." The fossils alluded to occur not in nacreous slates, but in plumbaginous limestones, clearly of Trenton age, and these have no connection with the chloritic and other crystalline schists named, except as unconformably overlying and folded in outliers. Here again the author has never worked out the stratigraphy and is therefore not in a position to express an opinion. I have worked it out personally, and more or less examined the facts on the ground, from the Vermont boundary to the Gaspé peninsula, and from Maine, New Hampshire, and the Maritime Provinces, to the shores of the St. Lawrence. I am further prepared to demonstrate my conclusions either in the field or in the museum, where the whole series of specimens, carefully collected and labelled, is available for examination. These facts are well known to the author, and it is certainly remarkable under such circumstances to find a note by Sir William appended to Mr. Murray's report on Newfoundland of 1865, quoted (page 407) as "presenting as clear a view of the whole matter as we can give up to the present time," and one's astonishment is only increased after perusal of the note quoted as doing this.

On page (409) we find a repetition of the statement already alluded to, "that the Quebec group rocks become altered to the south," and another tacit admission of the contemporaneous volcanic action. The older metamorphic group, like the parallel ranging fossiliferous group, is no more altered in the township of Potton on the Vermont boundary, than it is in the Shickshock Mountains in Gaspé, and the "*unequivocal superposition*" in Newfoundland, mentioned, same page, will, I venture to say, be found to be as equivocal as is that of the Utica slates under-