

Prof. Emmons has always regarded these black slates of Georgia as part of his Taconic system, and more, he refers them to the base of the upper division of the Taconic rocks (see "*American Geology*," part II. p. 49). The strata are dislocated and upheaved at Georgia, and as far as my knowledge of the geology of the vicinity of Burlington, Isle La Motte, Chazy, and Rouse's Point extends, acquired in an exploration of a few days in 1849, I am far from agreeing with the statement made by Messrs. Logan and Hall that the strata of Georgia are of the age of the Hudson River group. Mr. Emmons, I think, rightly refers them to the Taconic system, and the discovery of the three primordial trilobites confirms the view arrived at by him only through their stratigraphical and lithological characters.

In another letter, dated Paris, 14th August, 1860, M. Barrande says:—

"You will easily perceive the interest and importance of the question, even if it were only raised on account of the three *Oleni* of Georgia; but it takes in now a much wider field, owing to a letter I have just received from Mr. Billings, official paleontologist of the Geological Survey of Canada, who informs me that he has found lately, in the schists and limestones near Quebec, considered as being the prolongation of those in question in Vermont, nearly one hundred species, almost all new. Twenty-six of these come from a white limestone, and seem to him to be the true representatives of the Primordial fauna, and he cites among them *Conocephalites*, *Arionellus*, *Dikellocephalus*, etc., that is, very characteristic forms of this fauna.

"In another limestone, which is gray, he finds thirty-nine species, all different from the first, and representing, on the contrary, the most distinct types of the second fauna. Finally, the black schists furnish him with *Graptolites*, *Lingulæ*, etc., etc., fossils which at first sight cannot determine a horizon, because they are found upon several Silurian horizons.

"While waiting for the very obscure stratigraphical relations to be disentangled, and without engaging in any manner Mr. Billings, who should preserve the independence of his opinion, I may yet express to you my view wholly personal, and of which at this moment I take the entire responsibility. I think, then, that this region of schists and limestones of Vermont, in other words the *Taconic system*, will reproduce in America that which took place in England as to the Malvern Hills, and in Spain for the Cantabrian chain,—that is to say, the Primordial