

I have been informed lately that Messrs. Logan, Hunt, and Hall maintain the age of the Hudson River group for the strata of Quebec and Georgia on stratigraphical grounds, which to Mr. Logan are very clear; and that they are disposed to think the so-called Primordial fauna extends much higher in Canada than in Europe, and has *reappeared after a first extinction*. Such a decision should not be reached without the most decisive proofs, for it breaks through the laws of paleontology, and annihilates almost all the results arrived at by the labors of Smith, Cuvier, Brongniart, De Buch, D'Orbigny, Agassiz, Barrande, etc., for the last fifty years. Nor is this the first attempt of geologists recognizing Mr. James Hall as their leader against the recognized laws of paleontology. During the last six years they have placed an Oligocene flora *below* the cretaceous rocks, a Triassic flora *among* what they call Jurassic rocks, Jurassic fossils *in* cretaceous rocks, the mountain limestone fauna *above* the coal-measures, cretaceous fossils *in* Triassic rocks, etc. etc.

There is at least one proof that Messrs. Hall, Logan, and Hunt can give, to show that the Primordial fauna extends over the second fauna, — it is to show, in those parts of New York where the strata are without dislocation and succeed regularly, such as Utica, Loraine, Pulaski, and the neighborhood of Rome, that the Primordial fauna is *above* the second fauna.

There is only one point on which I differ from Prof. Emmons, — it is as to the propriety of placing the Potsdam sandstone as the *base* of the Silurian. Until now not a single fossil of the Calciferous sandrocks, of the Black River group, or of the Trenton group, has been found in the Potsdam of the State of New York; on the contrary, it contains the Primordial fauna, such as *Conocephalites*, *Dikellocephalus*, *Orthis*, and *Lingula*. Thus, the Potsdam group is paleontologically entirely independent of the Lower Silurian, while it possesses fossils belonging to the Taconic system. I am not sufficiently acquainted with its distribution and position as regards the Taconic and the Calciferous sandrocks to give a decided opinion based on stratigraphical grounds, but from the description of Prof. Emmons in his *Taconic system*, and from what I have seen at Little Falls, the Calciferous sandrocks are certainly very differently distributed from the Potsdam, and a dislocation and disturbance of strata have taken