

from its resemblance to the gypsiferous red marls above the coal in Europe, as the uppermost formation in Nova Scotia. Mr. Logan, in his first brief excursion in 1841 to the Windsor district, where the beds are greatly disturbed, had little more than time to collect some of the most abundant fossils; and these, when submitted to several able palæontologists (to M. de Verneuil among others), were thought to confirm the opinion previously entertained, that the strata were newer than the coal. That geologists should at first have arrived at this result will surprise no one who is aware how many of the fossils of our Magnesian limestone and coal resemble each other, or who studies the list given at p. 218, in which several species both of shells and corals from Nova Scotia, identical or closely allied to well-known Permian or Magnesian limestone forms, are enumerated. By these considerations my friend Mr. Murchison was induced, in his Anniversary Address to the Geological Society of London, in 1843, to pronounce the gypsiferous rocks of Nova Scotia as the equivalents in age of the Permian group of Russia. My first inspection of the country near Windsor, followed by an examination of the cliffs near Minudie, described in the last Chapter, led me to an opposite view, strengthened by discussions with Mr. Richard Brown of Sydney, and Mr. J. W. Dawson of Pictou, with whom I explored the cliffs of the East River, south of the Albion Mines, near Pictou. I then examined with care, in company with Messrs. Dawson and Duncan, the fine section laid open in the cliffs of the Shubenacadie, a river which intersects Nova Scotia from south to north, cutting through the gypsiferous strata for a