

### Red Sand-Stones in the Lower Provinces.

The age, geologically considered, of the red sand-stones of Nova Scotia, New Brunswick and Prince Edward Island, has not yet been determined. And another question equally uncertain is, whether there is not a difference between the ages of the red sand-stones of the Bay of Fundy, and those of the straits of Northumberland.

The red sand-stones of Prince Edward Island, which extend across the straits, and are visible at the extreme point of Cape Tormentine, and partially visible in other places along the Nova Scotia and New Brunswick side of the Straits, overlie the other rock formations; while the red sand-stones of the Bay of Fundy, in some places, underlie the trap and other rocks. Geologists class all the red sand-stones of the Lower Provinces among the 'New Red Sand-stone;' how far this is true, is somewhat a question. The red sand-stones of the Bay of Fundy are much softer than those of the Island; the waters of the Bay become charged with an extremely fine sediment, being derived from the destruction, by the action of the water and frost, of cliffs of red sand-stone and shale,—hence the 'muddy waters of the Bay of Fundy;' while the red sand-stones of Prince Edward Island are harder and coarser, and do not decompose and mix with the waters—hence, 'the waters of the Straits are clear.'

The red sand-stones of the Bay of Fundy belong to the carboniferous or coal measures, while no minerals have been discovered connected with the red sand-stone of the Island, except some thin beds of impure limestone. It is very important to fix the age of the red sand-stone formation, as upon it depends, in a great measure, the existence of coal.

And in an agricultural point of view, these sand-stones are no less important; wherever they are exposed to the surface of the ground, as in Prince Edward Island; and the western part of Nova Scotia, they afford fine loamy, friable soils, highly adapted to the culture of potatoes, wheat and fruit, and other products.

During the great failure of the potato crop, throughout Europe as well as America, these red sand-stone districts seldom failed to produce large crops; hence, potatoes, during the years of failure, were a source of profit to Western Nova Scotia and Prince Edward Island. And even along the Nova Scotia and New Brunswick side of the Straits, the soil being similar in many places, to that of the Island, the potato-crop was much better than it was in the gray sand-stone districts. The great drawback to the production of wheat, in the red sand-stone districts of Nova Scotia, is the Bay of Fundy fogs, causing the grain to rust while growing. The red sand-stone districts of Western Nova Scotia, export large quantities of apples and other fruit, which compensates in a measure, for the failure in the growth of wheat.