

the precipice, and here the Great Cataract may have remained nearly stationary for ages.

In regard to the future retrocession of the Falls, it will be perceived by the same section (fig. 4.), that when they have travelled back two miles, or to *i*, *k*, the massive limestone (8), now at the top of the Falls, will then be at their base; and its great hardness may, perhaps, effectually stop the excavating process, if it should not have been previously arrested by the descent of large masses of the same rock from the cliff above. It will also appear that the Falls will continually diminish in height, and should they ever reach Lake Erie, they will intersect entirely different strata from those over which they are now thrown.

The next inquiry into which we are naturally led by our retrospect into the past history of this region, relates to the origin of the Falls. If they were once seven miles northward of their present site, in what manner, and at what geological period, did they first come into existence? In tracing back the series of past events, we have already seen that the last change was the erosion of the great ravine; previously to which occurred the deposition of the freshwater deposit, including fossil shells of recent species, and the bones of the Mastodon. Thirdly, of still older date was the drift or boulder formation which overspreads the whole platform and the face of the escarpment near Queenston, as well as the low country between it and Lake Ontario. Fourthly, the denudation of the line of cliff or escarpment, in which the table-land ends abruptly, preceded the origin of the drift. I shall endeavour to show, in a subsequent chapter, when speaking of Canada, that this drift was of marine origin, and formed when the