

submerged, and this event took place during the glacial period, at which time the surfaces of the rocks already denuded were smoothed, polished, and furrowed by glacial action, which operated successively at different levels. The country was then buried under a load of stratified and unstratified sand, gravel, and erratic blocks, occasionally 80, and in some hollows more than 300, feet deep. An old ravine terminating at St. David's, which intersects the limestone platform of the Niagara, and opens into the great escarpment, illustrates the posteriority of this drift to the epoch when the older rocks were denuded. The period of submergence last alluded to was very modern, for the shells then inhabiting the ocean belonged, almost without exception, to species still living in high northern, and some of them in temperate, latitudes. The next great change was the re-emergence of this country, consisting of the ancient denuded rocks, covered indiscriminately with modern marine drift. The upward movement by which this was accomplished was not sudden and instantaneous, but gradual and intermittent. The pauses by which it was interrupted are marked by ancient beach-lines, ridges, and terraces, found at different heights above the present lakes. These ridges and terraces are partly due to the denudation and re-arrangement of the materials of the drift itself, which had previously been deposited on the platform, the sloping face of the escarpments, and in the basins of the great lakes.

As soon as the table-land between Lakes Erie and Ontario emerged and was laid dry, the river Niagara came into existence, the basin of Lake Ontario still continuing to form part of the sea. From that moment