

red. It contains pebbles of small-grained, red granite, red quartz rock, red feldspar, red porphyry, an impure red iasper, red hornstone, and a red granitic gneiss, identical with the well-marked gneiss of the neighboring Sutors. This last is the only rock now found in the district, of which fragments occur in the conglomerate. It must have been exposed at the time to the action of the waves, though afterwards buried deep under succeeding formations, until again thrust to the surface by some great internal convulsion, of a date comparatively recent.*

The period of this shallow and stormy ocean passed. The bottom, composed of the identical conglomerate which now forms the summit of some of our loftiest mountains, sank throughout its wide area to a depth so profound as to be little affected by tides or tempests. During this second period there took place a vast deposit of coarse sandstone strata, with here and there a few thin beds of rolled pebbles. The general subsidence of the bottom still continued, and, after a

* The vast beds of unconsolidated gravel with which one of the later geological revolutions has half filled some of our northern valleys, and covered the slopes of the adjacent hills, present, in a few localities, appearances somewhat analogous to those exhibited by this ancient formation. There are uncemented accumulations of water-rolled pebbles, in the neighborhood of Inverness, from ninety to a hundred feet in thickness. But this stratum, unlike the more ancient one, wanted continuity. It must have been accumulated, too, under the operation of more partial, though immensely more powerful agencies. There is a mediocrity of size in the enclosed fragments of the old conglomerate, which gives evidence of a mediocrity of power in the transporting agent. In the upper gravels, on the contrary, one of the agents could convey from vast distances blocks of stone eighty and a hundred tons in weight. A new cause of tremendous energy had come into operation in the geological world.