

of new waters, over a surface which had been previously dry land; for such must have been a deluge rising for 150 days, and then beginning to subside, and in a little more than the same period coming completely to an end. On the contrary, the rounded forms of the pebbles and bowlders must have required a very long time of rubbing and grinding by currents, eddies, and tides at the bottom of the sea; and the occurrence of sea-shells, in considerable variety and abundance, affords evidence that the area itself had not been dry land, but the regular bed of the ocean.

It was mentioned above that the newer or northern drift was bounded on its eastern flank by a range of elevated land. It must be added, that the eastern portion of our island affords copious evidence of having received several other deposits of drift, at different and distant periods, brought from nearly all the primary and secondary rocks in the northern parts of Great Britain, from the mountains of Sweden and Norway, and probably from land which once occupied that which is now the bed of the German Ocean.*

In another European region, the effects have been traced of a series of phenomena more magnificent and astonishing still. To bring into view the physical reasons for the conclusions is impossible, in this brief sketch; nor indeed could they be made intelligible to a general audience. A statement of the results must suffice.

Many will perhaps be surprised and incredulous at hearing the position, which many appearances render probable, that, for countless ages after the elevation of the great mountain-chains of Great Britain, the region of the Alps, in the heart of Europe, was a champaign country, in many parts marshy, and enjoying a mean tempera-

* Paper of Dr. Mitchell's read to the Geol. Society, Nov. 7, 1838.