

transported marine shells, we obtain the lowest limit of depression. But, as above remarked, the mere presence of marine shells cannot always be accepted as conclusive. Again, the renewed ice and snow, after re-elevation, may well have destroyed most of the shell-beds, and their destruction would be most complete where the snow-fields and glaciers were most extensive. Beds of sand and gravel with recent shells have been observed on Moel Tryfaen, in North Wales, at a height of 1350 feet, but the shells are broken, and show such a curious commingling of species as to indicate that they are probably not really in place. In Cheshire marine shells occur at 1200 feet. In Scotland they have been obtained at 524 feet in the boulder-clay at the Lanarkshire locality already referred to; but the layer containing them may have been transported by the ice-sheet. Subsequent elevation of the land has brought up within tide-marks some of the clays deposited over the sea-floor during the time of the submergence. In the Clyde basin and in some of the western fjords these clays (Clyde Beds) are full of shells. Comparing the species with those of the adjacent seas, we find them to be more boreal in character; nearly the whole of the species still live in Scottish seas, though a few are extremely rare. Some of the more characteristic northern shells in these deposits are *Pecten islandicus*, *Tellina lata* (*T. calcarea*), *Leda truncata*, *L. lanceolata*, *Yoldia arctica*, *Saxicava rugosa*, *Panopæa norvegica*, *Trophon scalariformis* (*T. clathratus*), and *Natica clausa* (Fig. 458).

Of the later stages of the Glacial Period, the records are much the same all over Britain, allowance being made for the greater cold and longer lingering of the glaciers in the north than in the south, and among the hills than on the plains.

In Scotland the following may be taken as the average succession of glacial phenomena in descending order:

Last traces of glaciers, small moraines at the foot of corries among the higher mountain groups. The glaciers, no doubt, lingered longest among the higher mountains of the northwest (Highlands, Galloway, Lead Hills, Hartfell and Loch Skene, Arran, Mull, Skye, Harris, Orkney, Shetland).

Marine terraces (50 feet and higher). Clay-beds of the Arctic sea-bottom (Clyde Beds) containing northern mollusks. The marine terraces prove a submergence of at least 100 feet beneath the present level of the