

sion of many hundred feet. No such inference, however, could be based on any of the Bute deposits which we have yet seen ; and yet we might safely conclude, even from them, that when these deep-sea shells lived where we now find them, the land must have sat comparatively low in the water. When scalps of *Pecten Islandicus* throve on the argillaceous bed cut open above tide-mark by the little stream which falls into Balnakaillie Bay, and noble Panopea burrowed in its stiff clay, Bute must have existed, not as one, but as three islands, separated from each other by ocean sounds occupying the three valleys by which it is still traversed from side to side. In the neighbouring mainland many a promontory and peninsula must have also existed as detached islands. The long promontory of Cantyre and Knapdale, traversed by open sounds at Tarbert and Crinan, must have formed two of these ; the larger part of the shire of Dumbarton, cut off from the mainland by straits passing inwards through the valleys of the Leven and of Loch Long, must also have borne an insular character ; Loch Lomond must have existed, not as a fresh-water lake, but as an interior sea ; and, in fine, the whole geography of the British islands must have been widely different from what it is now. There are other localities, however, in which, from the elevation of the boreal shell-bed over the present sea-level, we are justified in inferring that the depression of the land must have been much greater than that indicated by the beds of Bute. The same bed, and containing the same shells, was laid open in forming the Glasgow and Greenock Railway, a little to the west of Port-Glasgow, at an elevation of about fifty feet over the high-water line. It was detected at Airdrie, about fifteen miles inland, in the first instance, at a height of three hundred and fifty feet over the sea, and subsequently at the still more considerable height of five hundred and twenty-four feet. We ourselves have disinterred the same shells from