

the glen occupied by Loch Eck to Strachur or Loch Fyne. The glaciation of these valleys is full of attraction to the geological student. Moraines come down in some of the glens (as in Glen Messan at the head of the Holy Loch) to within a short distance of the sea-level.

The eastern side of the Firth of Clyde, from Gourock to Ardrossan, shows a long line of volcanic hills which, above Largs, rise in terraced slopes for several hundred feet above the sea [333]. The same rocks appear at the south end of the larger Cumbrae Island, form nearly the whole of the little Cumbrae, and also the southern end of Bute. In the two last-mentioned islands the influence of the successive sheets of lava in producing a step-like outline on the hills is singularly marked. From Stevenston a range of sandhills runs southward nearly as far as Ayr [23]. In the interior the group of the Dundonald and other hills mark the positions of the igneous masses that have pierced the Ayrshire coal-field.

Bute and **Arran** are well deserving of a visit from the traveller who is interested in tracing the influence of geological structure upon scenery. The boundary line between the rocks of the Highlands and the Lowlands runs obliquely across both islands. Hence the northern half of each of them lies within the Highland region, and the southern within that of the Midland Valley. The contrast between the aspect of the ground on the two sides of the boundary is especially marked in Arran. To the north tower the granite peaks [181], with their surrounding belt of schist; to the south lie the rolling moorlands, formed of the Old Red Sandstone and its igneous rocks. Many of the details of Arran scenery are full of instruction. Such, for instance, are the corries and ballochs in the granite [Fig. 40]; the moraines [273]; the erratics, especially on the eastern shore from Clachland Point to Glen Sannox; the dykes [331] which abound along the east coast, but still more at the southern extremity of the island, and the raised beach which forms the platform for the coast road from Brodick to Glen Sannox, and runs interruptedly round the island.

Bute consists of two contrasted portions, the northern half being a continuation of the Highland ridges of Cowall, the southern half consisting of the rocks of the opposite shores of Ayrshire and the Cumbraes. The glaciation of the island is well marked [Fig. 55], and the raised beach forms a striking