

distinct ripple marks and lines of flow, and the rock mass is evidently a comparatively recent lava flow from a small broken-down crater which stands on the shore close by. The remains of the crater are now in the form of three fantastic irregularly conical masses, composed of very numerous thin layers of scoriæ, conspicuous because of their varied and strongly contrasted colours and very irregular bedding. The lava flow is seen in section in the low cliffs forming the coast line of the harbour.

The rocks collected at Heard Island have been referred to augite-andesite, felspathic basalt, and tufa, composed of basaltic fragments and minerals. Some specimens are transitional between basalt and augite-andesite.

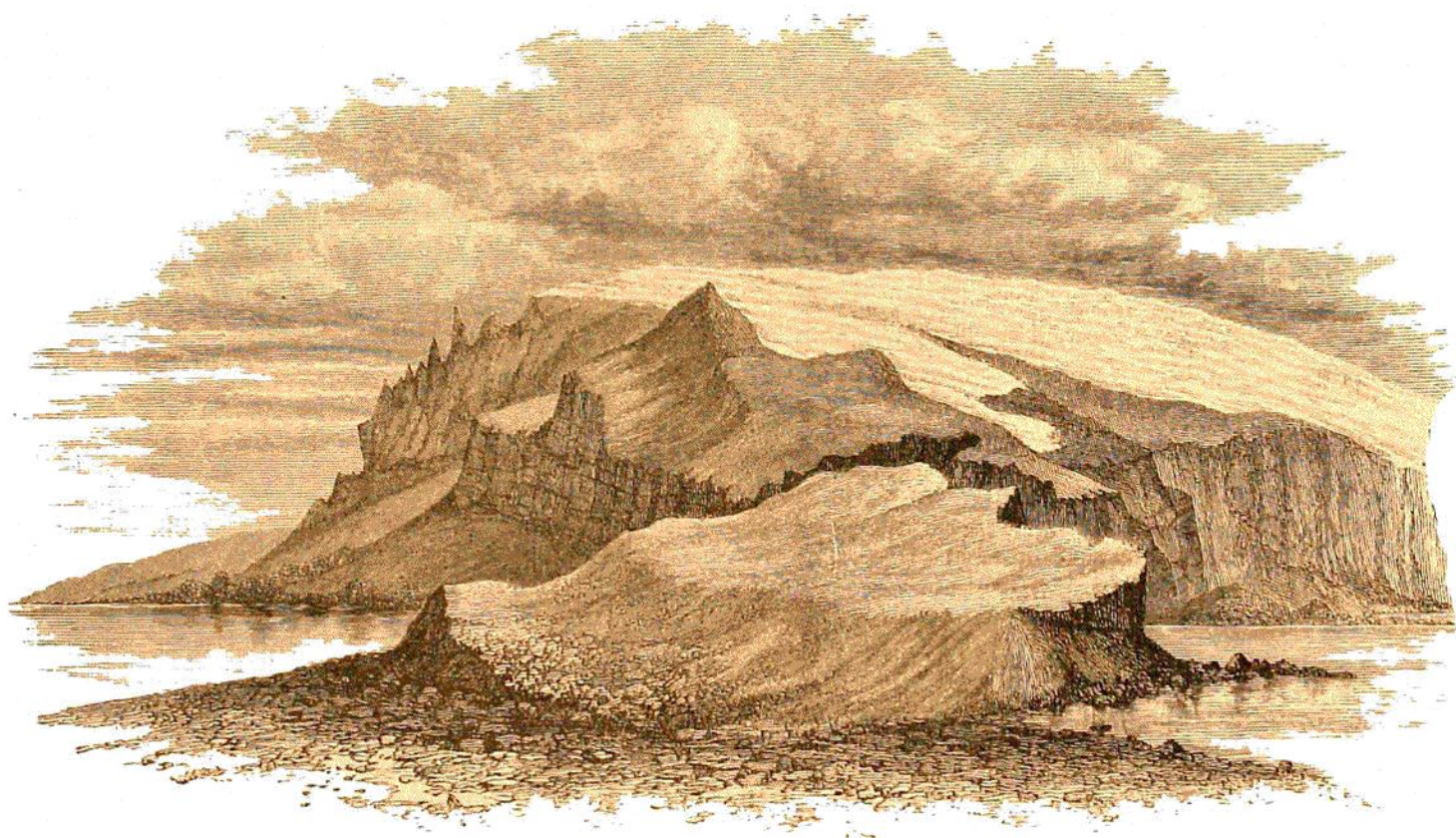


FIG. 137, from a sketch by Mr Buchanan, represents the mountainous promontory forming the northwestern end of the island. The top of the mountain was enveloped in cloud, below which the greater part of its sides were covered by a glacier descending to the edge of the precipitous rock cliffs over which the ice masses fell thundering. The sketch was taken from the shoulder of a red conical hill against which the ice, descending from the main mountain of the island to the sea, splits and passes on both sides of it.

The present condition of Heard Island is evidently that which obtained in Kerguelen Island formerly. Glaciers once covered Kerguelen Island almost entirely and dipped down into the sea. It is, however, an extraordinary fact that Heard Island, only 300 miles south of Kerguelen Island, should thus still be in a glacial period, whilst in Kerguelen Island, a very much larger tract, the glaciers should have shrunk back into the interior, and have left so much of the land surface entirely free from ice, the ice epoch being there already a thing of the past. The great height of Big Ben, and consequent