

6120 feet in altitude; Mount Richards, 4000 feet; Mount Crozier, 3250; Mount Wyville Thomson, 3160; Mount Hooker, 2600; Mount Moseley, 2400. Therefore, when viewed from the sea at a distance, the island presents a remarkable jagged outline of sharp peaks, which is most strikingly observed from the south side. All the valleys run down to the sea, broadening out as they approach it; and the coast is broken up everywhere by deep sounds or fjords, which resemble closely in form the fjords of Norway, and of all other parts of the world where fjords exist. They are long channel-like excavations of the coast-line, occupied by arms of the sea, often shallower at the mouths than at the upper extremities, and bounded on either hand by perpendicular cliffs.

“Kerguelen is of volcanic formation as far as it has yet been investigated, and there is no doubt that it is entirely so formed, the beds of coal alone excepted, and certain beds of red earth, which are of the same origin as the coal, but merely different in that they have undergone a more intense heating. It has undergone immense denudation, and on its whole north-eastern and southern regions there is no trace of any volcanic cone or signs of comparatively modern volcanic action, as at Marion Island. Every appearance bespeaks considerable antiquity. Nevertheless, it seems to be certain that there exists towards the south-west of the island a still active volcano, with hot springs in its neighbourhood. We fell in with an American whaling captain, Captain Fuller, who has been often on the weather shore, and is well acquainted with the position of the volcano, and though he had not been actually at it himself, some of his men had; and in Tristan da Cunha we received independent testimony in the matter from old sealers.

“The appearance of the island in the region of the volcano must thus be very different from that of the north-eastern and south-eastern portions. As necessarily follows from the presence of fjords, the whole of the lower rock surface of the island shows most marked evidence of glaciation. Christmas Harbour, almost on the extreme north of the island, is a small example of one of the fjords. It is a deep inlet, with dark frowning cliffs on either hand at its entrance; the land on either side running out into long narrow promontories, which separate the harbour from another similar fjord on the south and from a bay on the north. The promontories thus formed are high, and bounded throughout almost their entire stretch by sheer precipices on either hand. On the north side only of Christmas Harbour, somewhat above its mouth, does the land rise in a steep, broken slope, which can be ascended directly from the sea.

“At the termination seawards of the southern promontory is the well-known arched rock of Christmas Harbour, a roughly rectangular, oblong mass, evidently formerly continuous directly with the rest of the promontory, but now separated from it, except at its very base, by a chasm, and perforated so as to form an arch. Above the high cliffs on the south side of the harbour towers up a huge and imposing mass of black-looking rock with perpendicular faces; this overhanging somewhat towards the harbour, from the weathering out of soft strata beneath it, looks as if it might fall some day and fill the upper part of the harbour. On the north side rises a flat-topped, rocky mass 1215 feet in height, called Table Mountain.

“At the head of the harbour is a sandy beach and small stretch of flat land, as exists at the heads of all the fjords; and beyond this the land rises in a series of steps, separated by short cliffs towards the bases of Table Mountain and the great rock on the south.

“The flat stretch of land at the head of Christmas Harbour is covered with a thick, rank growth of grass (*Festuca cookii*), and a composite herb with feathery leaves and yellow flower (*Cotula plumosa*), also with *Azorella*, as at Marion Island, with *Accena*, *Montia fontana*, and *Callitriche verna* about the dampest places. The soil is black and peaty, and saturated with water. It is almost impossible to