cliff and descends upon the beach. The streams are thus busy digging out the valley and working their way backward to each other. The same process must have been going on previous to the Ice Age, for the valley is older than the boulder-clay. Nor can it be doubted, that if time enough be allowed, these tiny rivulets will in the end cut down the ridge, and allow the sea to force its way to the plains of Easter Ross through a narrow gorge similar to that between The process is another example of the cutting the Sutors. down of mountain passes, and of long nearly level valleys crossing watersheds. Only, in the present instance, the changes are going on close to the sea-level, and it can be readily seen that the later stages of the work may be done by the co-operation of the wild breakers of the northern sea. As I have just said, it cannot be demonstrated that the present outlet of the Cromarty Firth has been opened in this way, but I think no one can watch the effects of the streams near Shandwick without a conviction that the explanation has high probability in its favour.¹ We must remember also that a very slight depression of the land would be enough to bring such low cols as that near Shandwick within reach of the waves, and that in this way subterranean movement may have indirectly contributed to the scouring out of the passage.

The greater depth, steepness, and number of the fjords on the west side of the island, may be partly attributed to the greater height and abruptness of the country on that side. Probably also more extensive submergence of the West Highlands has helped to indent the western sea-

¹ This excavation, which was begun long before the Glacial period, may have been greatly helped by the mass of ice that filled up the Cromarty Firth, and, as shown by the striations, slanted across the ridge of the Black Isle. There could not fail to be a great pressure of ice through the gorge between the Sutors. A deep mass of boulderclay now lies in the bottom and on the sides of that gorge.

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