partly exposed at ebb. Over this barrier the flowing tide rushes into the loch, and the ebbing tide rushes out, with a rapidity which, during part of the time, breaks into a roar of angry foam. For a brief space of time, there is here a veritable cataract of sea-water. The greatest depth of the loch above these falls is 420 feet; at the falls themselves there is a depth of only 6 feet at low water, and outside the barrier the soundings reach, at a distance of two miles, 168 feet. Loch Etive is thus a characteristic rock-basin, and an elevation of the land to the extent of only 20 feet would isolate the loch from the sea, and turn it into a long, winding, deep fresh-water lake. Of the third stage, where the lake has been brought down close to, but has not quite reached, the present sea-level, Loch Maree, Loch Morar, and Loch Lomond may be taken as illustrations.[1] If the downward movement were to recommence, these lakes would ere long be turned into arms of the sea.

It is curious to watch the efforts made by the land for the recovery of its lost territory at the head of many of the sea-lochs. At the upper end of Loch Carron and of Loch Broom, for example, the rivers are pushing their alluvial flats out into the salt water, and gradually driving it backward, regaining in this way, step by step, the site over which they once rolled. In other cases, the tides and currents of the sea itself are raising barriers against it. Thus Loch Fyne is nearly cut in two by the long sand-bar thrown up by the tides at Otter. The Gareloch, in like manner, is almost barred across by the similar spit which runs out at

[1] For the sake of simplicity I have left out of account the later upheavals of the land, which have to a trifling extent restored what the older depression had submerged. Maritime lakes, such as Loch Lomond, must of course have been arms of the sea when the land stood at the level of the 40-foot raised beach, that is, 40 feet lower than it stands to-day.