

Stevenson found in 1816 that at the town of Stranraer, the houses along shore had formerly gardens between them and high water, but that of late years the inhabitants had been under the necessity of erecting bulwarks to secure the walls and approaches to their houses. Farther down the loch, at the village of Kirkolm, a neck of land called the Scar Ridge had once extended into the sea about half a mile. Cattle were wont to graze upon it, but it was then nearly washed away, and in high tides it was laid almost wholly under water.<sup>1</sup>

The southern coast-line of Scotland lies open to the full fury of the Irish Sea. When the wind blows strongly from the south-west, the rocky precipitous shores of Wigton and Kirkcudbright are white with foam, headland after headland standing out into the breakers that roll eastward far up into the recesses of the Solway Firth. In a series of experiments made during the fine summer of 1842, at the Island of Little Ross, on the coast of Kirkcudbright, it was found that the average force of the waves was about 328 lbs. on the square foot, or rather more than half the average summer force of those at Skerryvore, the greatest recorded pressure being one of 664 lbs.<sup>2</sup>

From this short and incomplete survey of what has been done by the waves round the Scottish coast during the last two or three hundred years, it is evident that although here and there from local causes, such as the accumulation of sand and shingle, there may have been a slight gain of land, the general result has been a loss. Where the coast is rocky and precipitous, this loss may not be measurable, but yet the ruined masses, undermined by the waves, tell their story not less convincingly than where there are historical records of the devastation.

<sup>1</sup> R. Stevenson, *Mem. Wer. Soc.* ii. p. 476.

<sup>2</sup> T. Stevenson, *Trans. Roy. Soc. Edin.* xvi. 30.