

between this point and the shores of America. The average results of these experiments for five of the summer months during the years 1843 and 1844, give to the breakers a force of 611 lbs. per square foot; and for six of the winter months of the same years 2086 lbs. per square foot, or thrice as great as in the summer months. The greatest result obtained was during the heavy westerly gale of 29th March 1845, when a pressure of 6083 lbs. per square foot was registered. This was a force of little short of three tons on every square foot of surface. The next in magnitude was a force of 5323 lbs.<sup>1</sup>

North-west of Skerryvore lies the island of Barra Head, the last of the long chain of the broken and deeply embayed Hebrides. It is recorded that on this island, during a storm in January 1836, a mass of gneiss containing 504 cubic feet, and estimated to be about 42 tons in weight, was gradually moved five feet from the place where it lay, having been rocked to and fro by the waves, until a piece broke off, which, jamming itself between the block and the rock below, prevented any further movement.<sup>2</sup>

Fortunately the rock which has had to withstand this tremendous battery, is a tough gnarled gneiss. But where the coast is low, and more especially where the hard gneiss passes under a covering of blown sand, the Atlantic breakers have made sad inroads even within the last few generations. 'The most destructive process of nature,' says the author of the description of the Isle of Harris in the old *Statistical Account of Scotland* 'is the continual wasting of the land on the western shore by the perpetual drifting of the sand, and the gradual encroachment of the sea. This is evinced by the clearest testimonies. Lands which were ploughed within

<sup>1</sup> T. Stevenson, *Trans. Roy. Soc. Edin.* xvi. p. 25.

<sup>2</sup> *Ibid.* p. 28.