

ridge stretches half-way across and bears Fort-George at its extremity. From Fortrose on the west side, another spit of the same kind runs out into the middle of the firth, the two bars actually overlapping each other, so that if they lay exactly opposite they would meet and turn the Inverness Firth into a lake. The Dornoch Firth is likewise intersected by a long ridge of gravel extending from the south bank at Meikle Ferry, and with a corresponding but smaller spit a little farther down on the north bank.

The Cromarty Firth perhaps furnishes to the geologist more matter of interesting inquiry than any of the others. At its upper end, where the Contin brings down the drainage of a large tract of eastern Ross-shire, this noble arm of the sea has been so encroached upon by the advance of the river alluvium, that, as already referred to, several square miles of sandy and muddy flats are laid bare at low water. From these higher shallows, the firth stretches, with a tolerably uniform breadth of rather more than a mile, as far as Invergordon, where it reaches a maximum depth of seventy feet. It then expands into a wider basin, forming the sheltered spacious anchorage for which the inlet is so well known. This expansion of the firth is not so deep as the narrow channel at Invergordon. But a little to the east of the town of Cromarty, where the channel suddenly contracts to a breadth of less than a mile, it shelves down to a depth of 170 feet, and passing between the two precipitous headlands of the Sutors, enters the open Moray Firth. One who approaches from the east is at once struck with the narrow chasm-like entrance of the Cromarty Firth, cut through a long lofty range of red sandstone precipice. It is wholly unlike the mouth of any other firth in the country, for it is not the seaward expansion of a land-valley, but seems, in some abnormal fashion, to have been broken