

has also its accompanying patch of Lias, which, though lying beyond the fall of the tide, strews the beach, after every storm from the east, with its shales and its fossils. The hill of Eathie is yet another knob of the series, and it, too, has its Lias patch. The granitic wedges have not only uptilted the sandstone, but they have also upheaved the superincumbent Lias, which, but for their agency, would have remained buried under the waters of the Frith, and its ever accumulating banks of sand and gravel. I had remarked at an early period the correspondence of the granitic knobs with the Lias patches, and striven to realize the original place and position of the latter ere the disturbing agent had upcast them to the light. What, I have asked, was the extent of this comparatively modern formation in this part of the world, ere the line of wedges were forced through from below? A wedge struck through the ice of a pond towards the centre breaks its continuity, and we find the ice on both sides the wedge; whereas, when struck through at the pond edge, it merely raises the ice from the bank, and we find it, in consequence, on but one side the wedge. Whether, have I often inquired, were the granitic wedges of this line forced through the Lias at one of its edges, or at a comparatively central point? and about ten years ago I set myself to ascertain whether I could not solve the question. The Southern Sutor is a wedge open to examination on both its sides; — the Moray Frith washes it upon one side, the Cromarty Frith on the other. Was the Lias to be found on both its sides? If so, the wedge must have been forced *through* the formation, not merely *beside* it. It occurs, as I have said, on the Moray Frith side of the wedge; and I resolved, on carefully exploring the Frith of Cromarty to try whether it did not occur on that side too.

With this object I set out on an exploratory excursion, on a