

rock, and ravine on the northern or Cromarty Frith side of the tongue of land, with its terminal point of granitic gneiss to which I have had such frequent occasion to refer, and then turned to explore the southern, or Moray Frith side, in the rectilinear line of the great valley. And here I was successful on a larger scale. A range of lofty sandstone cliffs, hollowed by the sea, extends for a distance of about two miles between two of the granitic knobs or wedges of the line — the Southern Sutor and the hill of Eathie. And along well nigh the entire length of this range of cliffs, I succeeded in tracing a continuous ichthyolite bed, abounding in remains, and lying far below the Lias, and unconformable to it. I pursued my researches, and in the sides of a romantic precipitous dell, through which the Burn of Eathie — a small, mossy stream — finds its way to the Moray Frith, I again discovered the fish-beds running deep into the interior of the country, with immense strata of a pale yellow sandstone resting over them, and strata of a chocolate red lying below. But their place in the geological scale was still to fix.

I had seen enough to convince me that they form a continuous convex stratum in the sandstone spear-shaft, covering it saddle-wise from side to side, dipping towards the Moray Frith on the south, and to the Cromarty Frith on the north — that, as in a *bona fide* spear-shaft, the annual ring or layer of growth of one season is overlaid by the annual rings of succeeding seasons, and underlaid by those of preceding ones; so this huge semi-ring of fossiliferous clays and limestones had its underlying semi-ring of Red Sandstone, and its overlying semi-rings of yellow, of red, and of gray sandstone. I knew, besides, that beneath there was a semi-ring of conglomerate, the base of the system; and that, for more than two hundred yards upwards, ring followed ring in unbroken