

delightful morning of August, 1830. The tide was falling, it had already reached the line of half ebb; and from the Southern Sutor to the low, long promontory on which the town of Cromarty is built, there extended a broad belt of mingled sand-banks and pools, accumulations of boulders, and shingle, and large tracts darkened with algæ. I passed direct by a grassy pathway to the Sutor, the granitic spear-head of a late illustration,—and turned, when I reached the curved and contorted gneiss, to trace through the broad belt left by the retiring waters, and in a line parallel to what I have described as the shaft of the huge spear, the beds and strata of the Old Red Sandstone in their ascending succession. I first crossed the conglomerate base of the system, here little more than a hundred feet in thickness. The ceaseless dash of the waves, which smooth most other rocks has a contrary effect on this bed, except in a few localities, where its arenaceous cement of base is much indurated. Under both the Northern and Southern Sutors the softer cement yields to the incessant action, while the harder pebbles stand out in bold relief; so that, wherever it presents a mural front to the breakers, we are reminded, by its appearance, of the artificial rockwork of the architect. It roughens as the rocks around it polish. Quitting the conglomerate, I next passed over a thick bed of coarse red and yellow sandstone, with here and there a few pebbles sticking from its surface, and here and there a stratum of finer-grained fissile sandstone inserted between the rougher strata: I then crossed over a strata of an impure grayish limestone, and a slaty clay, abounding, as I long afterwards ascertained, in ichthyolites and vegetable remains. There are minute veins in the limestone (apparently cracks filled up) of a jet black bituminous substance, resembling anthracite; the stratified clay