

oryctology of the older rocks — little, indeed, of that of the Old Red Sandstone, in its proper character as such ; and with no such guiding clew as has since been furnished by Agassiz and the later researches of Mr. Murchison, the writer of the appendix had recorded as his ultimate conclusion, that “ the middle schistose system of Caithness, containing the fossil fish, was intermediate in geological character and position between the Old and New Red Sandstone formations.” The ichthyolites of Gamrie he described as resembling those of Caithness ; and I at once recognized, in his minute descriptions of both, the fossil fish of Cromarty. The mineralogical accompaniments, too, seemed nearly the same. In Caithness, the animal remains are mixed up in some places with a black bituminous matter like tar. I had but lately found among the beds of the little bay a mass of soft adhesive bitumen, hermetically sealed up in the limestone, which, when broken open, reminded me, from the powerful odor it cast, and which filled for several days the room in which I kept it, of the old Gaulish mummy of which we find so minute account in the Natural History of Goldsmith. The nodules which enclosed the organisms at Gamrie were described as of a sub-crystalline, radiating, fibrous structure. So much was this the case with some of the nodules at Cromarty, that they had often reminded me, when freshly broken, though composed of pure carbonate of lime, of masses of asbestos. The scales and bones of the Caithness ichthyolites were blended, it was stated, with the fragments of a “ supposed tortoise nearly allied to trionyx ;” one of the ichthyolites, a *Dipterus*, was characterized by large scales, a double dorsal, and a one-sided tail ; the entire lack of shells and zoöphytes was remarked, and the abundance of obscure vegetable impressions. In short, had the accomplished writer of the appendix been briefly describing the beds