

scale than those with which the system began. There have been scales of the *Holoptychius* found in Clashbennie which measure three inches in length by two and a half in breadth, and a full eighth part of an inch in thickness. There occur occipital plates of fishes in the same formation in Moray, a full foot in length by half a foot in breadth. The fragment of a tooth still attached to a piece of the jaw, found in the sandstone cliffs that overhang the Findhorn, measures an inch in diameter at the base. A second tooth of the same formation, of a still larger size, disinterred by Mr. Patrick Duff from out the conglomerates of the *Scat-Craig*, near Elgin, and now in his possession, measures two inches in length by rather more than an inch in diameter. (See Plate XIII., fig. 4.) There occasionally turn up in the sandstones of Perthshire ichthyodorulites that in bulk and appearance resemble the teeth of a harrow rounded at the edges by a few months' wear, and which must have been attached to fins not inferior in general bulk to the dorsal fin of an ordinary-sized porpoise. In short, the remains of a Patagonian burying-ground would scarcely contrast more strongly with the remains of that battle-field described by Addison, in which the pygmies were annihilated by the cranes, than the organisms of the upper formation of the Old Red Sandstone contrast with those of the lower.*

Of this upper formation the most characteristic and most abundant ichthyolite, as has been already said, is the *Holop-*

* I have permitted this paragraph to remain as originally written, though the comparatively recent discovery of a gigantic *Holoptychius* (?) in the Lower Old Red Sandstone of Thurso, by Mr. Robert Dick of that place, (see introductory note,) bears shrewdly against its general line of statement. But it will at least, serve to show how large an