

color, non-calcareous,—for they do not effervesce on the application of the most powerful acids,—and containing usually a brown oxydized substance in their interior. In the better, at least more distinct, specimens, they somewhat resemble fragments of *serpula*, or those segments of *dentalia* which one occasionally finds in the boulder-clay of Caithness; but they are in all probability not the remains of either annelid or mollusc, but mere effects of the oxydization, under peculiar circumstances, that has discolored the matrix in which they lie. Iron pins or nails we find not unfrequently represented on sea-beaches where wrecks have taken place, or near some dock-yard or harbor, by mere oxydized tubes, hollow within; and it is not improbable that to minute, pin-like crystals of some mineral or metal now represented by only the oxydized substance enclosed within the hollow, do these little tubes owe their origin. I at least wholly failed to satisfy myself that they are organic in their character; nor do I suppose that they would be by any means the oldest of Scottish fossils, even if they were.

This upper quartz rock forms the highest and most modern deposit of the marble districts. Taking the summit of Benmore as its apex, a shaft sunk on the top of that noble hill, to the depth of perhaps eight or ten thousand feet, would pass in succession through the first or upper quartz, through the limestone with its associated marbles and flagstones, through the second or lower quartz, through the red sandstone, with its conglomerate beds; and finally, it would reach the unconformable gneiss, on which the whole system rests; for as one system must these four great deposits be regarded. Where, among the other systems of Scotland, I ask, are we to seek for its analogue and representative?

Let me first remark, that the Lower Old Red Sandstone of the east coast of Scotland, as developed in Inverness, Ross,