

Kinnaird, it would be well that some ichthyologist had access to the collection, in order to determine whether in Scotland, as in England, we have more than one species of this singular genus. Dr. Fleming found in this Middle Old Red formation an apparent fern, with kidney-shaped leaflets; and it yielded several years ago, near Clockbriggs, in Forfarshire, a large specimen of *Lepidodendron*, which exhibits the internal structure. I owe a fragment of this fossil to an intelligent geologist, Mr. William Miller, banker, Dundee; but so imperfect is its state of preservation, that, though it presents to the microscope the large irregularly-polygonal cells of its genus, it bears none of the nicer specific marks which might serve to distinguish it from the several greatly more modern species which occur in the Coal Measures.

Above this Middle formation lies the Upper Old Red Sandstone, with its peculiar group of organisms, chiefly fishes. And of it, too, much remains to be known. Save that it has not yet produced a *Coccosteus*,—a genus which seems restricted to the oldest ichthyic group of the system,—its fishes more resemble those of the Lower than of the Middle Old Red. It has its three species of *Pterichthys*, its *Diplopterus*, and apparently its *Dipterus*; and its Celacanth, chiefly of the Holoptychian genus, represent not inadequately the Celacanth of the genera *Asterolepis* and *Glyptolepis*, which occur chiefly, though not exclusively, in the Lower formation. The two formations appear, however, to have no *species* in common. In looking over the fine collection of Mr. Patrick Duff, derived chiefly from the Scat Craig, in the neighborhood of Elgin, I found only a single ill-preserved gill-cover,—seemingly that of a *Dipterus*,—which I could not at once determine to be specifically different from aught produced by the inferior deposit. Rocks of this Upper formation have not yet been detected in Scotland to the north of the Moray Frith; and its richest Brit-