

as appears from their forms, as kindred species. It were very desirable that we had a good monograph of the Irish Old Red plants, the contemporaries of the latter, as the completest and best preserved representatives of the Middle Palæozoic flora yet found. Sir Roderick Murchison has figured a single pinnæ of this Cyclopterus in his recently published "Siluria;" and Sir Charles Lyell, both that and one of its contemporary Lepidodendra, in the last edition of his "Elements." These interesting fragments, however, serve but to excite our curiosity for more. When urging Professor Edward Forbes on the subject, ere parting from him for, alas! what proved to be the last time, he intimated an intention of soon taking it up; but I fear his purposed monograph represents only one of many works, important to science, which his untimely death has arrested for mayhap long years to come.

In the uppermost beds of the Upper Old Red formation in Scotland, which are usually of a pale or light-yellow colour, the vegetable remains again become strongly carbonaceous, but their state of preservation continues bad,—too bad to admit of the determination of either species or genera; and not until we rise a very little beyond the system do we find the remains of a flora either rich or well preserved. But very remarkable is the change which at this stage at once occurs. We pass at a single stride from great poverty to great wealth. The suddenness of the change seems suited to remind one of that experienced by the voyager, when—after traversing for many days some wide expanse of ocean, unvaried save by its banks of floating sea-weed, or where, occasionally and at wide intervals, he picks up some leaf-bearing bough, or marks some fragment of drift-weed go floating past—he enters at length the sheltered lagoon of some coral island, and sees all around the deep green of a tropical vegetation descending in tangled luxuriance to the water's edge,—tall, erect ferns, and creeping lycopodiaceæ, and the pandanus, with its aerial roots and