

—from the consideration that that meagreness is only too truly representative of the present state of our knowledge regarding them ; and that if my descriptions be scanty and inadequate, it is only because the facts are still few. How much of the lost may yet be recovered I know not ; but the circumstance that two great floras,—remote predecessors of the existing one,—which once covered with their continuous mantle of green the dry land of what is now Scotland, should be represented by but a few coniferous fossils, a few cycadaceous fronds, a few ferns and club-mosses, must serve to show what mere fragments of the past history of our country we have yet been able to recover from the rocks, and how very much in the work of exploration and discovery still remains for us to do. We stand on the farther edge of the great floras of by-past creations, and have gathered but a few handfuls of faded leaves, a few broken branches, a few decayed cones.

The Silurian deposits of our country have not yet furnished us with any unequivocal traces of a terrestrial vegetation. Professor Nicol of Aberdeen, on subjecting to the microscope the ashes of a Silurian anthracite which occurs in Peeblesshire, detected in it minute tubular fibres, which seem, he says, to indicate a higher class of vegetation than the algæ ; but these may have belonged to a marine vegetation notwithstanding. I detected some years ago, in the Trilobite-bearing schists of Girvan, associated with graptolites of the Lower Silurian type, a vegetable organism somewhat resembling the leaf of one of the pond-weeds,—an order of plants, some of whose species, such as *Zostera*, find their proper habitats in salt water. I have placed beside this specimen a fragment of the same graptolite-bearing rock, across which I have pasted part of a leaf of *Zostera marina*, the only plant of our Scottish seas which is furnished with true roots, bears real flowers inclosed in herbaceous spathes, and produces a well-formed farinaceous seed. It will be seen, that in the few points of comparison which