and when every breeze that rustled through the old forests bent in mimic waves their slim flexible stems and light and graceful foliage.

In 1844, when Professor Nicol, of Marischal College, Aberdeen, appended to his interesting "Guide to the Geology of Scotland," a list of the Scottish fossils known at the time, he enumerated only two vegetable species of the Scotch Oolitic system,—Equiselum columnare and Pinites or Peuce Eiggensis; the former one of the early discoveries of our distinguished President, Sir Roderick Murchison; the latter. of the late Mr William Nicol of Edinburgh. Chiefly from researches in the Lias of Eathie, near Cromarty, and in the Oolites of Sutherland and the Hebrides, I have been enabled to increase the list from two to rather more than fifty species,—not a great number certainly, regarded as the sole representatives of a flora; and yet it may be deemed comparatively not a very small one by such as may remember, that in 1837, when Dr Buckland published the second edition of his "Bridgewater Treatise," Adolphe Brogniart had enumerated only seventy species of plants as occurring in all the Secondary formations of Europe, from the Chalk to the Trias In a paper such as the present, I can of course inclusive. do little more than just indicate a few of the more striking features of this Scottish flora of the middle Secondary ages. Like that of the period of the true Coal, it had its numerous As shown by the fossil woods of Helmsconiferous trees. dale and Eigg, old Oolitic Scotland, like the Scotland of three centuries ago, must have had its mighty forests of pine; \* and

<sup>\*</sup> Trees must have been very abundant in what is now Scotland in these Secondary ages. Trunks of the common Scotch fir are of scarce more frequent occurrence in our mosses than the trunks of somewhat resembling trees among the shales of the Lower Oolite of Helmsdale. On examining in that neighbourhood, about ten years since, a huge heap of materials which had been collected along the sea-shore for burning into lime in a temporary kiln, I found that more than three-fourths of the whole con-