

the Norfolk-Island pine, — a noble araucarian, that rears its proud head from a hundred and sixty to two hundred feet over the soil, and exhibits a green and luxuriant breadth of foliage rare among the Coniferæ, — than any other living tree.

Beyond the Coal Measures terrestrial plants become extremely rare. The fossil botanist, on taking leave of the lower Carboniferous beds, quits the land, and sets out to sea; and it seems in no way surprising, that the specimens which he there adds to his herbarium should consist mainly of *Fucales* and *Conserveæ*. The development hypothesis can borrow no support from the simple fact, that while a high terrestrial vegetation grows upon dry land, only algæ grow in the sea; and even did the Old Red Sandstone and Silurian systems furnish, as their vegetable organisms, fucoids exclusively, the evidence would amount to no more than simply this, that the land of the Palæozoic periods produced plants of the land, and the sea of the Palæozoic periods produced plants of the sea.

In the Upper Old Red Sandstone, — the formation of the *Holoptychius* and the *Stagonolepis*, — the only vegetable remains which I have yet seen are of a character so exceedingly obscure and doubtful, that all I could venture to premise regarding them is, that they *seem* to be the fragments of sorely comminuted fucoids. In the formation of the Middle Old Red, — that of the *Cephalaspis* and the gigantic lobster of Carmylie, — the vegetable remains are at once more numerous and better defined. I have detected among the gray micaceous sandstones of Forfarshire a fucoid furnished with a thick, squat stem, that branches into numerous divergent leaflets or fronds, of a slim parallelogrammical, grass-like form, and which, as a whole, somewhat resembles the scourge of cords attached to a handle with which a boy whips his top. And