

sure during silicification." As, however, they also occur in the best preserved fragment of the plant which I have yet seen,—a Thurso specimen which I owe to my friend Mr. Dick,—I deem it best to regard them, provisionally at least, as one of the characteristics of the plant. I may mention, that while I disinterred one of my specimens from the Thurso flagstones, where it occurred among remains of *Dipterus* and *Asterolepis*, I derived another specimen from the great overlying formation of pale Red Sandstone to which the lofty hills of Hoy and the tall mural precipices of Dunnet Head belong; and that this plant is the only organism which has yet been found in this uppermost member of the Lower Old Red, to at least the north of the Moray Frith. Another apparently terrestrial organism of the lower formation, of, however, rare occurrence, very much resembles a sheathing bract or spathe. It is of considerable size,—from four to six inches in length, by from two to three inches in breadth,—of a broadly elliptical and yet somewhat lanceolate form, deeply but irregularly corrugated, the rugæ exhibiting a tendency to converge towards both its lower and upper terminations, and with, in some instances, what seems to be the fragment of a second spathe springing from its base. Another and much smaller vegetable organism of the same beds presents the form of a spathe-enveloped bud or unblown flower wrapped up in its calyx; but all the specimens which I have yet seen are too obscure to admit of certain determination. I may here mention, that curious markings, which have been regarded as impressions made by vegetables that had themselves disappeared, have been detected during the last twelvemonth in a quarry of the Lower Old Red Sandstone near Huntly, by the Rev. Mr. Mackay of Rhynie. They are very curious and very puzzling; but though some of the specimens present the appearance of a continuous midrib, that throws off, with a certain degree of regularity, apparent leaflets, I am inclined to regard them rather as lying within the province of the ichnologist than of the fossil botanist. They bear the same sort of resemblance to a long, thickly-leaved frond, like that of the "hard fern," that the cast of a many-legged annelid does to a club moss; and I was struck, on my first walk along the Portobello beach, after examining a specimen kindly sent me by Mr. Mackay, to see how nearly the tract of a small shore crab (*Carcinus Menas*) along the wet sand resembled them, in exhibiting what seemed to be an obscure midrib fringed with leaflets.