

diagonally across the stems, interrupted and very irregular lines of knobs. These I find referred to by Dr Joseph Hooker, in describing a set of massive but ill-preserved remains of the same organism detected in South Ness quarry, near Lerwick, by the Hon. Mr Tuffnell, as taking, in two of the specimens, "the appearance of transverse knobs and bars (mayhap spirally arranged) that cross the striæ obliquely. But though the knobs," he adds, "may perhaps indicate a peculiar character of the plants, they have more probably been caused by pressure 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