

of 1882, and they form the subject of a short paper recently published in the Proceedings of the Royal Society (*loc. cit.*).

Two specimens were secured, but owing to the excessively fragile nature of the test, both were much broken. The largest fragment is represented in figs. *a*, *b*, drawn to the natural size. This specimen is about an inch and a half (38 mm.) in diameter, and about eight-tenths of an inch (20 mm.) in thickness, but it is probable that the latter dimension may not be much more than half that of the entire organism; indeed, it is evident that the test when complete was a rounded mass, which, if developed with any degree of symmetry, must have been a sphere of about an inch and a half diameter. The structure revealed by the fractured surfaces is that of a congeries of branching and inosculating tubes radiating from a common centre.

The fragile nature of the investment is due to the fact that the walls are composed of fine sand, with scarcely a trace of inorganic cement. In this respect the organism bears a close resemblance to several well-known arenaceous Rhizopods, notably to *Astrorhiza arenaria*, but the difference in size renders the absence of incorporating cement a much more noticeable feature; for whilst the test of the latter species, though loosely arenaceous, has sufficient strength and substance to bear handling without injury, that of the present form will scarcely support its own weight when taken out of water, and crumbles into a mass of sand on the gentlest attempts at manipulation.

The central portions of the test appear to consist of a network of branching and often contorted tubes, of somewhat smaller diameter than those of the exterior, and less regularly disposed. Nearer the periphery the system of tubes takes a distinctly radial character, and in a favourable section appears divided into concentric layers or tiers of gradually increasing depth (fig. *c*). The concentric "partitions" exhibited in the radial section of the test (fig. *c*,—*cc*) are not, like the "labyrinthic layers" of *Parkeria*, continuous septa of cancellated structure, but are formed by lateral tubular branches, given off at intervals, which unite so as to produce a more or less regular network. As nearly as can be made out, there may have been ten or eleven such reticulated "partitions," at intervals varying from $\frac{1}{20}$ th inch (1.26 mm.) near the centre, to $\frac{1}{10}$ th inch (2.5 mm.) near the periphery.

As already stated, the tubes are not of uniform size, those near the centre measuring sometimes no more than $\frac{1}{80}$ th inch (0.5 mm.) in external diameter, whilst near the periphery they sometimes exceed $\frac{1}{5}$ th inch (1 mm.), the average diameter being about $\frac{1}{35}$ th inch (0.735 mm.). Their external surface is granular, but, in the dry condition, tolerably smooth; the interior is smooth and well finished. The internal cavity, whether of the radial tubes or the branches, is continuous, exhibiting neither constrictions, septa, nor labyrinthic subdivision. The thickness of the walls is about $\frac{1}{200}$ th inch (0.125 mm.).

The peripheral ends of the tubes are rounded, and closed by an aggregation of sand-grains of somewhat lighter colour than the rest of the test, in precisely the same way as