chambers measure about 0·0316 mm. in diameter; they communicate with the incurrent canals by wide prosopyles or short prosodal canals, and with the excurrent system by aphodal canals of no great length.

*Skeleton.*—As in other spherical Stellettids the megascleres are arranged in radial fibres proceeding from the centre outwards. Triænes first occur in the choanosome in the immediate vicinity of the cortex; here the cladomes of young anatriænes, and of orthotriænes, now in a protriæne stage, are first seen. The adult triænes extend their cladi within the cortex, at various levels, the orthotriænes mapping out the overlying epithelium into intercladal areas in which the pores are situate. Associated with the outer epithelium, coating its inner surface, a dense layer of sanidasters occurs; less numerously, but still abundantly, these microscleres occur scattered throughout the cortex, particularly below the epithelium of the intercortical canals; within the choanosome they are sparingly distributed.

*The Cloacal Tube—Skeleton.*—The megascleres of the cloacal tube consist wholly of orthodiænes collected in parallel, more or less equidistant, fibres which extend the whole length of the tube. Each fibre consists of several spicules lying side by side, others overlapping them at the ends, the overlap taking place in such a manner that the cladal end of the one spicule is always exterior to the oxeate end of the other, in other words, the spicules are imbricated with the cladomes outwards. The cladal ends of the spicules are directed distally, the cladomes, lying immediately beneath the outer epithelium and its associated tissue, succeed one another in the same fibre at more or less regular intervals, the cladal centres of succeeding spicules alternating with more or less regularity on each side of a medial line. The cladi of adjacent or pænadjacent[1] fibres are given off at about the same levels, and as each cladus extends across the space between three fibres or even further, the cladi of neighbouring fibres overlap. And further, since the cladi make right angles with the rhabdomes, the foregoing arrangement leads to the formation of a rectangular spicular framework, with interspicular rectangular spaces (Pl. XLI. fig. 5). The regularity of this arrangement is disturbed in various ways; the longitudinal fibres occasionally branch, and the interval between the branch and the main fibre, at first very narrow, increases till it reaches the average; thus not only exceptionally narrow areas are produced, but areas with diverging longitudinal sides. The cladi of adjacent fibres are not always given off at the same level, and thus the interspicular rectangles may become transversely subdivided into two or more of less than the average length.

The spicules are more numerous in each fibre, and the cladi arise at closer intervals as one approaches the origin of the tube; near its distal extremity there may not be more than two or three spicules to a fibre, and the cladi are as often as not separated by intervals of from 0·75 mm. to nearly 1·0 mm., while in the middle of the tube the intercladal intervals are about 0·08 to 0·3 mm. long, and on average about 0·24 mm.

[1] We have "pænultimate," why not "pænadjacent"?