

inferiorly. Owing to the insufficient preservation of the single specimen, it was impossible to determine whether a *Palythoa*-crust enveloped the basal tuft, below the inferior extremity of the body. Below the superior terminal sieve-plate, there is a flat hollow space, from which four cruciately arranged wide passages, furnished with lateral and terminal diverticula and canalicular prolongations extend into the parenchyma. Nearly up to the sieve-plate, the centre is occupied by a columella, ending freely in a conical prominence. From this central pillar the four cruciately arranged septal plates radiate outwards, separating the four gastral spaces from one another (Pl. XXVII. fig. 14).

Of the external skin, as also of a delicate narrow cuff-like fringe which surrounds the sieve-plate and separates it from the skin, only a few pieces are preserved.

The spicules supporting the parenchyma consist of simple, flat oxyhexacts of medium size, which are usually radially disposed at right angles to the surface, and distributed with general uniformity over the whole body. The six rays are all of equal length, and are very gradually narrowed towards their somewhat conically pointed extremities. Besides these, numerous simple smooth oxydiacts occur, partly isolated, partly disposed in strands. These sometimes exhibit a central swelling, either in the form of a simple ring, more or less sharply marked off, or in the form of four cruciate, or more rarely of two opposite roundish protuberances. In these well-developed central portions an axial-canal cross can usually be seen. Less abundantly than these diacts, triacts occur, which generally exhibit two long rays, lying in one axis, and a much shorter third ray, at right angles to the former and springing from a slight median swelling.

Near the narrowed end of the body, and especially in the porous basal cushion, hexacts, pentacts, tetracts, triacts and diacts occur, with cylindrical rays, which do not run out to a point, but exhibit a truncated or even swollen end, and are terminally, and to a greater or less distance inwards, thickly beset with conical tubercles. As an illustration of the peculiarly modified spicules of the basal cushion, I have figured a triact on Pl. XXVII. fig. 18. Tetracts are there, however, most abundant.

I have here and there found such a simple regular form of small oxyhexact, with delicate narrow rays, as is represented in Pl. XXVII. fig. 20. Very frequently, on the other hand, and throughout the whole parenchyma, such forms occur as are seen in Pl. XXVII. fig. 23. The long narrow rays, covered with small, not oblique but directly transverse protuberances and peaks, are more or less markedly bent round in their distal portions, and the bendings of the two rays which lie in the same axis are always in the same plane, but in opposite directions. The planes of curvature of the three axes of the spicule form with one another equal angles of 120° . The representation of these hexacts with curved rays in Pl. XXVII. fig. 23 is so far unsatisfactory, since one cannot recognise in it that three rays are approached by their ends, and their three