

also partly invaginated and retracted into the radial chambers in a way which is more common among the Octocorallia than among the Hexacorallia ; in this case the sequence of the layers is inverted in transverse sections, as the ectoderm is turned inwards, the endoderm outwards. There are fourteen tentacles in all, each of them belonging to a radial chamber.

On the œsophagus there are alternately eight longitudinal furrows and eight longitudinal thickenings (Pl. XIII. fig. 3), but little can be said about their constitution, as it was plainly very much influenced by the contraction of the body. The deepest furrow belongs to the interspace between the two directive septa, and may be regarded as an œsophageal groove, even though I was not able to make out distinctly that it is covered by a specially constituted epithelium. The transverse section of the œsophagus is roundish, so that the flattening in the direction of the transverse axis, common to many Actiniæ, is wanting.

The septa are perfect without exception. They are thin lamellæ bearing a very strong muscular pennon, in the middle between the œsophagus and the wall. At this point the longitudinal muscles are pleated in a sharply defined space nearly as thickly as in *Tealia bunodiformis*; besides these, a special cord of longitudinal muscles runs along the wall and a rudimentary parietobasilar muscle lies in a similar position on the side of the transverse muscles. A wide marginal stoma can be seen in transverse section between the two longitudinal muscular cords.

The arrangement of the septa and the nature of the reproductive organs is of the highest importance. *Scytophorus striatus* is the only Actinia known at present, in which the number of the pairs of septa is unequal. This is not an accidental abnormality, as it is caused by the absence of the second pair of directive septa and not by irregular growth of the different parts of the body; this was clear from both the specimens under examination, as in each one wall was furnished with fourteen longitudinal furrows, corresponding exactly to the fourteen septa, *i.e.*, to the seven pairs. The existing pair of directive septa is only distinguished from the other septa by the lamellæ being shorter, on which account the wall and the œsophagus approach nearest to one another at this point.

Scytophorus striatus belongs to the small number of Actiniæ in which hermaphroditism has been undeniably observed; all the septa (the directive septa included) bear ova in their upper sections, many of which were almost mature in the specimen I examined, whilst the lower sections bear testes, though these were not so numerous as the ovicells.

Tribe IV. EDWARDSIÆ.

Actiniaria with eight septa; among which are two pairs of directive septa, whilst the remaining four septa are not paired; all the septa furnished with reproductive organs; tentacles simple, usually more numerous than the septa.