

a sagittal tentacle is at first very narrow, and the lumen continues slit-like until the insertion of the tentacle is reached. Fig. 7 shows on the right side the slit-like lumen, together with a section of the tentacle, into the base of which it ultimately opens. On the left side, which represents the appearance below the insertion of the sagittal tentacle, the mesenteries are seen to be more important, and the lumen is very large. The reproductive organs are connected with the transverse mesenteries, but the sexual elements are chiefly included in a specialised band of cells, situated obliquely and united to the stomodæum and body-wall by strands of fibrous tissue.

Parantipathes.

This genus appears to form a connecting link between the Antipathinæ and the Schizopathinæ, and indicates a mode by which the dimorphic genera may have been derived from such forms as *Antipathella*, &c. The zooid is enormously elongated in the transverse axis, so that the members of each lateral pair of tentacles are widely separated, and the two near each extremity of a zooid appear to form a pair. The length in the transverse direction is usually four times as great as that in the sagittal. The peristome is somewhat depressed on each side of the oral prominence, so that the zooid is imperfectly divided into three lobes. The whole arrangement is such as might be produced by a great elongation along the sclerobasic axis of such bilateral zooids as frequently occur in the genus *Antipathella*. *Parantipathes larix* is evidently allied to *Antipathella*, and I was at first inclined to regard it as an extreme type of that genus. Besides the most marked elongation of the zooid, in which truly it differs only in degree, there are several other important points in which the species differs from *Antipathella*, so that I have been induced to institute a new genus for its reception. The elongation of the mouth in the sagittal axis is not well marked, and in its lower section the greatest diameter of the stomodæum often corresponds with the transverse axis. This, it will be remembered, is the case in Amphianthidæ amongst the Actiniaria.

Horizontal sections through the middle of the oral cone pass also through the upward dilation of the cœlenteron at each extremity of the zooid, the centre of which is occupied by the distal portion of a transverse mesentery. Around the stomodæum the mesenteries form an oval figure, the longer axis of which is situated transversely. There are here ten mesenteries of varying breadth. The broadest occupy the transverse axis, the others gradually decreasing in size towards the sagittal axis; there is a corresponding diminution in the interseptal lumen. This arrangement is shown in fig. 8. A little lower down, just about the point corresponding with the lowest depression of the peristome, the secondary mesenteries extend as far as the body-wall, but soon lose their connection with it. Fig. 9 represents a subhorizontal section, in which three of the secondary mesenteries have lost their connection with the body-wall, whilst the fourth still adheres to it. The lower