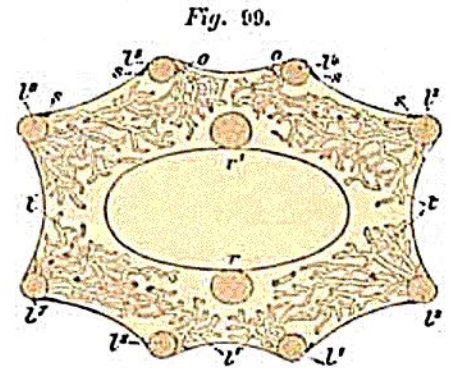


send off along their whole course innumerable branches, ramifying in the thickness of the spherosome (Pl. II. *Fig. 10*). These ramified tubes,<sup>1</sup> everywhere visible through the transparent spherosome, give it a very peculiar appearance, as if made up of irregular meshes. Nothing of the kind is seen in any other type of Ctenophoræ. The coeliac tubes alone are simple, and do not give off or receive any branches. The origin and ramification of the minor tubes pervading the spherosome present some striking peculiarities. Those of the anterior and lateral interambulacra (*Figs. 1 and 2*), running nearer to the surface and consisting of thinner branches, arise from the ovarian side of the ambulacral tubes, and, in fact, are direct prolongations of the ovisacs; while those occupying the anterior and the posterior pairs of interambulacra have a deeper origin, from the inner side of the ambulacral tubes, and, bending over the spermatie sacs, ramify nearer the inner surface of the spherosome, and are, on the whole, wider than the others (Pl. II. *Fig. 10*). *Fig. 99*, which gives a transverse section across the middle of the body, shows the origin and distribution of these different branches, and makes it evident that none arise, either from the side of the spermatie sacs or from the coeliac tubes.



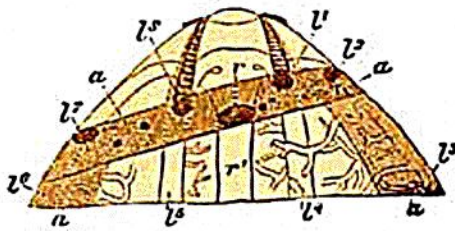
IDYIA ROSEOLA, Ag.

Transverse section across the middle of the body.

*r r'* coeliac tubes.—*l l'* lateral tubes.—*l l'*, *l l'* anterior and posterior tubes.—*o o* ovaries.—*s s*, *s s* spermaties.—*t t* internal ramifications of the anterior and posterior tubes.—*t t'* internal ramifications of the lateral tubes.

*Fig. 10*, Pl. II., representing a vertical section of the whole animal nearly to the abactinal pole where the spherosome is cut transversely, gives the best idea of the ramifications of the chymiferous tubes on

Fig. 100.



IDYIA ROSEOLA, Ag.

*r r'* coeliac tubes, *r* is cut near its origin.—*l l'* lateral ambulacral tubes cut near their origin.—*l l'* anterior and posterior ambulacral tubes, cut near their origin; all the cut ambulacral tubes are on the same side of the body; on the opposite side the following organs are visible from their internal face:—*l l'* anterior and posterior ambulacral tubes.—*l l'* lateral ambulacral tubes.—*a a a* represents the section of the spherosome.

the inner surface of the spherosome, and shows how much they differ on that side from those on the external surface (Pl. I. *Fig. 1*). *Fig. 100* is a reproduction of the abactinal part of *Fig. 10*, Pl. II. Along its margins are seen one of the anterior and one of the posterior ambulacral tubes for their whole length, the corresponding tubes *l' l'* (*Fig. 100*) of the opposite side being cut through. In the centre is the large coeliac tube of one side, and its corresponding tube of the opposite side *r* is cut through. The two lateral ambulacral tubes of one side are also seen for their whole length, and the corresponding tubes of the opposite side,

*l' l'*, are cut through. Between the abactinal end of these branches the short but

<sup>1</sup> Among some Echinoderms there is something quite similar to these ramifications of the ambu-

lateral tubes; for I do not doubt that the tube extending throughout the thickness of the shell of