

suckers or parapodia visible, even by the help of a lens; the first are entirely absent and the latter are represented by a rudimentary hook-apparatus projecting but little beyond the surface of the body, and scarcely equalling in length the same structures in the male. Fig. 13 represents the manubrium (*ma.*) and the tip of a hook (*u.*) of the female, highly magnified; the obtuse form of the latter is remarkable, and is of course a sign of degeneration. Neither in the male nor in the female are any cirri present.

The male (fig. 11) is a thin transparent circular disk, 1.15 mm. in diameter by 1.3 mm. in length. The body of the female was quite full of eggs, which entirely prevented any minute examination into its structure; in the male the testes only occupy a small space on either side of the body, and do not conceal the other viscera. The genital aperture of one side (δ) is slightly withdrawn from the margin of the body; on the other side it is slightly prominent, and its margin is rather swollen. The alimentary tract is furnished with a terminal mouth and anus; the pharynx (*ph.*) is large and well developed, the rectum (*r.*) densely beset with fine long cilia; there are on either side three intestinal cæca (i_1-i_3), the terminal ramifications of which do not penetrate within the marginal border. Besides the pharyngeal valves, which are always present, there is another valve-like circular fold (*v.*), which divides the middle intestine into two parts. There are no suckers, but the parapodia (*p.*) are present as obtusely-pointed conical elevations, each enclosing a hook of .2 mm. in length, which differs from that of the female in being pointed, and a manubrium .15 mm. long. The cyst on the arm I did not open, as there appeared to be no doubt about its belonging to the same species.

Figs. 5 and 6 represent a stalked cyst from the disk of *Antedon angustiradia*, probably of this same species. It consisted of two hollow swellings separated by a groove; the stalk was solid. The whole length, including the stalk, was rather more than 5 mm. There was at the distal extremity a circular orifice with sharp edges. The structure of the wall was precisely as described in the other cysts, and only that side of the swelling which corresponded to the position of the opening was thinner and sufficiently transparent to allow of the large brown female being distinguished from the outside (fig. 5). It could also be seen through the aperture of the cyst. Its position within the cyst is shown diagrammatically in fig. 7; its form and structure, as far as I was able to judge, by help of the small fragments which I succeeded in getting out of the cyst, agreed with that of the female from *Antedon radiosпина*, but the animal was hardly so large, its diameter being at the most 3.5 mm. In the same position as in *Antedon radiosпина*, I found a dwarf male of the same form, but differing in the stronger curvature of the tips of the hooks.

Hosts.—(a) *Antedon angustiradia*, P. H. C., Station 192 (south-west of Papua) of the Challenger Expedition.

(b) *Antedon radiosпина*, P. H. C., Station 170 (Kermadec Islands) of the Challenger Expedition.

(c) *Antedon duplex*, P. H. C., Station 269 (St. Vincent) of the "Blake" Expedition.