

has a straight, tray-like back, vaulted towards the sides and from before backward, bearing the mouth at the end turned towards the ventral side (fig. 8, female seen from ventral side), whereas the obtuse cloacal papilla is to be seen at the hinder extremity exactly terminal. The ventral side forms an obtuse longitudinal keel, vaulted down to the marginal borders, and bearing on each side, arranged in a semicircle, a series of small, wart-like parapodia, measuring at the most .1 mm. in length. The great thickness of the body is seen by the ideal cross section (fig. 9), and longitudinal section (fig. 10); both are in the natural position, with the dorsal side uppermost. The marginal borders are like those in the male (fig. 7), but not quite so conspicuous; they are curved like them, and provided with seven cirri on each side. The length of the female taken out of the cyst (fig. 6) was 2.5 mm., the breadth 2 mm. The male (fig. 7) belonging to it is quite flat and transparent; the transverse and longitudinal diameters of the disk are equal, measuring 1.2 mm. The mouth and anal aperture are terminal, the pharynx is half as long as the body; the middle intestine or stomach gives off on each side three main intestinal branches, the middle one of which is again divided into three smaller ones. The intestinal ramifications do not reach the margin of the body, but leave a considerable area unoccupied. The testes (*t.*) are round, compact glands; the male genital apertures (♂) are marginal, and situated just in front of the fourth cirrus. The unequal distances at which the cirri are placed from each other are more striking in the male than in the female; this fact, and the characteristic contour of the body, mark out the species. The parapodia (*p.*) are blunt and conical in form; their hooks are extremely delicate and nearly straight; they measure at most .14 mm. Suckers are absent in both sexes.

Another individual of *Antedon inæqualis*, from the same locality, had two small cysts, one of which is represented in fig. 13, and the three arm-swellings represented in figs. 11, 12, 14. All the figures are magnified two and a half times, and figs. 11, 14 very closely resemble the cyst (fig. 6), from which indeed fig. 14 only differs by the remarkable cross arrangement on the arm (*A* from the side, *B* from the back). But fig. 12 is remarkable in that the cyst is not ovoid and vaulted, but flat on the upper side. The female taken out of the cyst (fig. 13) was 1.8 mm. long, the male .8 mm.

From the same locality I have some more fragments of the arms of the same species, bearing cysts formed in the same manner.

Myzostoma tenuispinum is also found upon *Antedon angusticalyx*, P. H. C. (Station 214, south-east of the Philippine Isles, Challenger Expedition), of which species I had (1) a specimen with three large cysts of the same form, and arranged similarly to the cyst shown in fig. 6, all having but one aperture; (2) two arm-fragments, each bearing a cyst of similar appearance, but smaller; (3) two arms with cysts at the axillar-joints. The size and form of one of the latter may be seen by referring to fig. 15 *A-C*, where it is represented as magnified seven times; the other is quite similar in form, but somewhat smaller; both stand off from the arm, and the free end bearing the main aperture (*x.*) is