

lateral margins are more than 1 mm. long, a total breadth of 4.5 mm. will be rather too little than too much, and in any case greater than the length, which, since the animal is turned up at both ends, will be at the most 4 mm. The body is thickest in that region that bears the parapodia (figs. 7, 8), the middle of the body being somewhat thinner and measuring .5 mm. in cross section in an individual somewhat smaller than that represented in fig. 1. The alimentary canal is provided with a terminal mouth and cloaca, the stomach is very straight (*st.*), with rather slightly developed intestinal cæca (*i.*), nearly as in *Myzostoma glabrum*, but more richly branched terminally.

The dorso-ventral muscles (*dvm.*) are extraordinarily developed, but the hook muscles are very feeble, and since the muscoli centrales (*mc.*) are but slightly developed, a ventral muscular mass is entirely absent. Testicular follicles (fig. 8, *t.*) are to be found only upon one side, where they exist in great numbers, but pressed into a compact mass. The corresponding region of the opposite side is occupied by ovarian follicles, which in this species do not occupy the whole body but only the central portion, so that a cross section, in the region of the first and last pair of parapodia for instance, shows but few ova (fig. 7, *ov.*), while in the middle of the body all the space unoccupied by the other organs is taken up by the ovaries (fig. 8, *ov.*). The highly vacuolated character of the ova (fig. 9, *b*) is remarkable. This is, I believe, caused by the alcohol having dissolved many of the yolk globules, thus leaving cavities in the protoplasm of the egg. These cavities increase in size and number as the eggs become more and more mature. In small unripe eggs (*a.*) they are but small and inconspicuous, and in the very youngest ova (fig. 7, *ov.*) absolutely no trace of any vacuolation is to be observed. Both the individuals inhabiting a single cyst are equally formed in reference to sex, and, as already mentioned, ova are to be found in both specimens accumulated on the back. Also there are numerous eggs to be found loose in the cyst, which find their way through the aperture to the exterior, either as eggs or as ciliated embryos, the females themselves probably never leaving the cyst.

*Host.*—*Pentacrinus alternicirrus*, P. H. C., from Station 214 (south-east of the Philippine Isles) of the Challenger Expedition. Five out of the fourteen gathered at this Station had cysts.

63. *Myzostoma cysticolum*, n. sp. (Pl. XIII. figs. 1-5).

Mr. Carpenter sent me four specimens of a variety of *Actinometra meridionalis*, A. Ag., sp., dredged during the "Hassler" Expedition, the arms of all of which showed peculiar swellings. There was only one cyst to be found on each arm (two specimens had two, one three, and one five cysts), situated from the base to the middle of its length. The cysts were all of the same colour as the skin of the ambulacral furrow, but rough and hard from the deposition of calcareous matter in their walls. Each cyst opened by a small orifice at one end, which, however, is irregularly situated with respect