

The suckers (*s.*) are visible with the lens as small elevations, sharply marked off from the body, and are nearer to the margin of the body than to the parapodia.

The female, sketched from v. Willemoes Suhm's preparation, has a diameter of 2.2 mm., and the cirri, which are only preserved in part, measure .27 mm. The preparation shows clearly the cup-like form of the suckers ( $S_1-S_4$ ), the great breadth of the cloaca (*cl.*) and the mouth, and the extraordinarily developed pharynx. The bulbus musculosus of the pharynx (*ph.*) is 1.36 mm. long, and the free margin of the pharynx is covered by papillæ.

The male taken out of the same cyst (fig. 6) is shown in fig. 5. The interior organs, which are sketched in, were only to be seen on compressing the animal. The body is 1 mm. in length and rather stouter than in closely allied species, being thick and vaulted on the back, as in a specimen of *Myzostoma glabrum* of the same size, becoming, however, slightly transparent towards the border. The mouth (*m.*) and anal aperture (*a.*) are terminal; the pharynx (*ph.*) is not large; the twenty cirri are not longer than .12 mm.; of these cirri the first and last pair are at a greater distance from those next to them, whereas the fifth and sixth are quite near together, enclosing the male genital aperture ( $\text{♂}$ ). All that I saw of the testis appeared to show that instead of the compact organ of allied cysticolous forms, the organ retained the more primitive ramified character of the free-living Myzostomida.

The parapodia are stout and vigorous, and the hooks are correspondingly strong (.25 mm. in length). The suckers (*s.*) have the same form, arrangement, and relative size as those of the females. The male in v. Willemoes Suhm's preparation (fig. 2) is .86 mm. long, and its cirri .09 mm. long. The pharynx has a conspicuous circlet of papillæ.

It is an interesting fact that the malformations of the pinnules caused by this species sometimes combine with the arm-cysts of *Myzostoma tenuispinum*. I examined one compound cyst of this kind on *Antedon inæqualis*, P. H. C., and it may be seen from fig. 8, where it is displayed enlarged seven times, that the malformation of the pinnule is more striking than it is in the above-mentioned simple cysts of *Myzostoma willemoesii*. The basal portion alone, which represents nothing more than a lateral cavity of this portion of the arm, is inhabited by a pair of *Myzostoma tenuispinum*; it communicates by an aperture (fig. 8*B*) with the exterior, and is usually lined internally by a brownish membrane; it is separated from the part *b*, which is the malformed pinnule, by a calcareous partition passing in the direction of the arrow near *B*. In spite of its size, this part of the cyst contained only one pair of *Myzostoma willemoesii*. The ambulacral furrow is continued through the basal chamber *a* (fig. 8, *C*) into the chamber *b*; this last differs from the normal cysts of *Myzostoma willemoesii* (fig. 6), not only in the size of the pinnule joints, but also in that the interior slope of the joints (fig. 8, *C*) was much longer than the exterior; the margin also was prolonged into digitiform processes, covered with tubercles.