

obtusely-pointed elevations, remarkable for the size of their hooks (.17 mm.) and manubria (.1 mm.), as well as for the powerful development of the hook muscles.

This same species was also taken during the "Blake" Expedition at Station 249 (Grenada). The cyst was quite similar in form and position to that shown in fig. 1, but smaller in size (only 1 mm. long and .7 mm. broad), and of a more solid consistency. The parasites, though isolated and in a fragmentary condition, were evidently *Myzostoma cysticolum*.

*Host.*—*Actinometra meridionalis*, var. *carinata*, P. H. C., dredged by the "Hassler," January 22, 1872, off Cape Frio, and by the "Blake," at Station 249 (Grenada).

64. *Myzostoma tenuispinum*, n. sp. (Pl. XIII. figs. 6–16).

This species forms swellings on the arm-joints on the dorsal side, of ovoid or irregular shape; the ambulacral furrow and the pinnules are therefore left intact. There are cysts occupying only one arm-joint (fig. 13), whereas all the larger cysts occupy two joints; sometimes in this latter case the boundary line between the two swollen joints remains distinct, sometimes less visible on account of intercalated plates (figs. 12, 14, 16). This is especially the case with the extraordinarily large cysts formed at the axillary plates, just before the bifurcation of an arm, where a great number of intercalated plates form the wall of the cyst (fig. 15). The smaller cysts always have only one round or fissure-like aperture, whereas the larger cysts have two or three apertures, one of which is always larger, and may be called the main aperture (fig. 15, *x*), while the others are irregular, and seem, when present, to be owing to the spaces left between two adjacent plates (fig. 15, *y, z*). Each cyst contains a large female and a small dwarf male, the latter always near the main aperture, towards which also the pharynx of the female is turned. The interior of the cysts is always covered by a brownish membrane, which cannot easily be removed. The plates of the cyst are hard and calcareous; they are of considerable thickness, and adhere very closely to each other. Since the size of the cyst corresponds to the size of the individual within it, one may conclude that the large cysts are gradually formed from the small ones (fig. 13), by the growth of the parasite, the cavity becoming continued on to neighbouring arm-joints. The arm cysts of *Myzostoma tenuispinum* are sometimes found combined with the pinnule malformations produced by *Myzostoma willemoesii*, and cause a very peculiar and remarkable appearance. These will be more exactly described when I come to treat of *Myzostoma willemoesii*.

There were several cysts upon each of the hosts, partly near the distal, partly near the proximal end of the arm, but mostly in the middle portion. A specimen of *Antedon inæqualis*, P. H. C. (Station 170, Kermadec Islands, Challenger Expedition), had also a pinnule that contained *Myzostoma willemoesii*, and two small and two large cysts, one of which is shown on fig. 6, magnified seven times and viewed from both sides. At C there is this cyst opened containing a female (♀, seen from behind) and male (♂). The first