

Challenger at Station 186, and in at least six of the seven from Samboangan. The usual rule is that the tentaculiferous anterior arms have about twice as many joints as the ungrooved hinder arms, which terminate definitely in a miniature axillary joint, bearing a couple of pinnules; while the anterior arms always seem to end in a growing point as is the case with all the arms of *Antedon*.

The problematical ovoid bodies, which occasionally appear as brown spots in the centre of the dorsal surface of some of the segments of the pinnules on the ungrooved arms, occur in single individuals of this species from Station 186, Banda, and Samboangan, and also in five out of the eleven examples obtained by Semper in the Philippines. I am at present quite unable to throw any light upon their character, though I hope that the researches of Dr. O. Hamann, in whose skilled hands I have placed several of the pinnules containing them, may add considerably to our knowledge of their nature and structure. They are not peculiar to *Actinometra parvicirra*, as they also present themselves in *Actinometra elongata* from Banda, and in the Brazilian *Actinometra meridionalis*.

The number of cirri which occur in *Actinometra parvicirra* seems to vary considerably, though the number of joints remains fairly constant at ten to sixteen. In three of the Philippine specimens the centro-dorsal is reduced to a thin disk bearing three or four moderately developed cirri, with indications of other sockets which have been more or less completely obliterated (Pl. LXI. figs. 1, 5); while in the individual from Station 174 the centro-dorsal is very irregularly shaped, and bears quite rudimentary cirri with imperfect sockets for others (Pl. LXI. fig. 3). Another Samboangan specimen has a larger number of cirri, but they are all small and rudimentary on a very thin centro-dorsal (Pl. LXI. fig. 4). As a general rule there are ten or a dozen cirri which are not unfrequently disposed in pairs, two at each angle, with a few others in intermediate positions (Pl. LXI. figs. 2, 6; Pl. LXVII. fig. 3). But I have seen individuals, both from the Philippines and from the Cape of Good Hope, with as many as twenty-five sockets on the centro-dorsal, which almost entirely conceals the first radials, though of course they may not all have borne cirri simultaneously. There is also a good deal of variation in the development of the spines on the later cirrus-joints, and in the characters of the terminal comb on the lower pinnules. Three modifications of this comb in different individuals from Samboangan are shown in figs. 8-10 on Pl. LXI. In the original of fig. 8, the comb is so small that it might easily escape notice; but the other two pinnules are more normal in character. The number of pinnules which bear a comb is also very variable. I have seen specimens both from Africa and from the Philippines, in which there is no comb after the third brachial; while in others from both localities it may be found on the pinnule of the fifteenth brachial, and in some of the Philippine specimens the later pinnules of the arms may have small combs. In like manner I have seen individuals from the Cape and from the Philippines in which the basal joints of the genital pinnules