

*lusitanica*, either that the twelve-armed condition is a monstrosity, or that *Antedon multispina* is a dimorphic species. In the latter case it is rather a curious one. For in all the four arms which are borne on the two distichal axillaries (Pl. LXIX. figs. 1, 2) the first pair of brachials are united by syzygy just as in *Antedon angusticalyx*, *Antedon distincta*, and *Antedon inæqualis* (Pl. L. fig. 1; Pl. LI. figs. 1, 2), which do not conform to the ordinary rule of a syzygy in the third brachial.

*Antedon multispina* differs from the species already described in the preceding pages in the small number of its cirrus-joints, which does not seem to exceed thirty. It resembles most of them, however, in having a relatively small pinnule on the third brachial, which is more like its successors (Pl. XIII. fig. 3) than its predecessor. The two outer radials, especially the second which are very short, can hardly be described as wall-sided; but this feature is very marked on the outer side of the first brachials and on the inner side of the second and the hypozygals of the third brachials (Pl. LXX. figs. 1-3), while the first pinnules of adjacent rays are flattened laterally against one another and their inner sides are slightly cut away at the base, so as to recall the condition of *Antedon incerta* and allied species (Pl. XVIII. fig. 5).

From about the twelfth brachial onwards the third and next following pinnule-joints are expanded for the protection of the genital glands, having a broadly V-shaped section, though this is less marked than in *Antedon gracilis* (Pl. XV. fig. 4).

Besides the three young individuals of *Antedon multispina*, one of which is figured on Pl. XIII. fig. 1, the Challenger also dredged three Pentacrinoid larvæ, which presumably belong to this species, as it is the only ten-armed form met with at this station. They are relatively much larger and more robust than the corresponding larval stages of any other species which I have seen, with the exception of *Antedon eschrichti*. Figs. 3-7 on Pl. XIV. represent five larvæ, all equally magnified, which belong respectively to *Antedon hystrix?* (fig. 3), *Antedon tenella* (fig. 4), and *Antedon multispina* (figs. 5-7). Figs. 3-5 illustrate almost the same developmental stage in the three different species, that namely when the first cirri make their appearance and a fair number of arm-joints have been formed. Of the three larvæ, that of *Antedon tenella* is the oldest, having pinnules on the outer parts of the young arms, but it is altogether less robust than that belonging either to *Antedon hystrix?* or to *Antedon multispina*. The latter is remarkable for the shortness of its stem, which has only thirteen joints below the centro-dorsal, the two lowest being quite short and resting on a large and expanded dorsocentral plate (Pl. XIV. fig. 5). The centro-dorsal is a thin plate, but little larger than the joints below it, and the rudiments of three cirri have appeared upon it, the positions of the other two being indicated by imperfect sockets. In the next stage (Pl. XIV. fig. 6) the first pinnules have appeared on the arms, not at their bases, but about the eleventh or twelfth brachial, and the five radial cirri which were first formed are well developed so far as can be judged from their basal joints, which is all