

Bell's first formula for *Antedon elegans*<sup>1</sup> indicated that it had three distichals and sometimes three palmars, with syzygies in the axillaries; and I classified it accordingly.<sup>2</sup> His subsequent description<sup>3</sup> of the palmars says, however, that "if the arms divide again there are generally two joints, when the axillary is not a syzygy; but there may be three joints, and then the axillary is a syzygy." His figured specimen has four palmar series of two joints and one of three joints, and he gives the specific formula as including both varieties  $(A.3.\frac{(2)}{(3)}.\frac{b}{c})$ . This is all very well in cases where two palmars occur on the outer, and three on the inner arms of the ray, as in *Actinometra nobilis* (Pl. LXV. fig. 1), but if it is done in every case where the arm-divisions are not quite regular, the formulæ would become so complex that we should do better without them. It is extremely rare for any tridistichate *Comatula* to have its secondary and subsequent arm-divisions all exactly uniform; and sometimes, as in *Actinometra parvicirra* (Pl. LXI. figs. 1, 5), there is the same variation in the distichal series. Hence all that we can do is to go by the majority of the distichal or palmar series respectively; and as Bell recognised this fact by omitting any mention of the two-jointed palmar series in *Antedon microdiscus*, I wonder that he thought it necessary to refer to the abnormal three-jointed series in *Antedon elegans*. His formula also omits any reference to the post-palmar series which occur on one of his specimens.

The corrected formula for *Antedon elegans* thus becomes  $A.R.3.2.(2).\frac{b}{c}$ , which is exactly the same as that given above for *Antedon fluctuans*; and the two species are in fact identical. Under these circumstances the type must be known for the future as *Antedon elegans*, Bell, although its most important distinctive character was omitted in his diagnosis. It is noteworthy that of the three examples obtained by the "Alert" at Port Molle, one is very considerably different from the other two, both in colour and in the amount of serration of the arms; while the Challenger's dredgings at Station 190 yielded four examples of the same type, three alike and one different.

The "Alert" found an intermediate form in Torres Strait; Semper's Philippine collection contains representatives of the type; and I have lately found a most valuable series of varying forms of this species among the *Comatulæ* dredged by Dr. Anderson in the Mergui Archipelago. In these last, as in the examples obtained by the "Alert" and Challenger, the ambulacra of the disk are very strongly plated, and also the inter-palmar areas at their sides, though this is less marked in the Philippine variety. I find the same extensive plating on the disk of another species from Mergui which has a syzygy between the two outer radials and a formula  $A.R.2.2.2.\frac{b}{c}$ . It thus differs altogether from *Antedon elegans*, *Antedon multiradiata*, and *Antedon microdiscus* in having but two articulated distichals, instead of three, with a syzygy in the axillary.

<sup>1</sup> *Proc. Zool. Soc. Lond.*, 1882, p. 534.

<sup>2</sup> *Ibid.*, pp. 746, 747.

<sup>3</sup> "Alert" Report, p. 162, pl. xiii. fig. B.