

of the pinnules vary greatly. In the outer arm of each distichal pair the largest pinnules are generally those of the fourth and fifth brachials; but in the inner arm they are on the fifth and sixth, while in arms which are borne directly on the radial axillaries the third pair of pinnules (on sixth and seventh brachials) are usually the longest. All but the lowest of these large pinnules have strong and blunt lateral processes at their distal ends. The next pair of pinnules are generally considerably smaller, with relatively shorter joints, which gradually become more elongated in the slender distal pinnules, but lose the lateral processes at their ends.

Disk naked and much incised. Sacculi small, but abundant.

Colour in spirit,—ashy-grey, white, or pale flesh colour, with frequent bands or patches of purple or yellowish-brown; sometimes purple with whitish bands.

Disk 10 mm.; spread 20 cm.

Localities.—Station 186, September 8, 1874, Prince of Wales Channel; lat. $10^{\circ} 30' N.$, long. $142^{\circ} 18' E.$; 8 fathoms; coral mud. Two specimens.

Arrou Islands. Two specimens.

Other Localities.—Canton; Borneo. H.M.S. "Alert" 1881,—Torres Strait; Prince of Wales Channel; Dundas Strait (17 fathoms); Arafura Sea (Station 160, 32 to 36 fathoms).

Remarks.—This is in some respects the most remarkable species of *Antedon* that I have yet seen. For it has a very considerable range of variation and has been described under four different names. The first of these, by which it must henceforth be known, was given by myself in 1882¹ to a tridistichate and bipalmar *Antedon* from Canton in the Hamburg Museum, with sharply spinous cirrus-joints, serrate arms, and a tolerably regular inequality in the relative sizes of the pinnules at the bases of the inner and outer arms of each ray, these lower pinnules having projections at the distal ends of their component joints. At the same time I described another new species, *Antedon crenulata*,² from Borneo, as having some of these peculiarities, but remarked that "it is altogether a larger species than *Antedon variipinna*, from which it is readily distinguished by its crenulated first radials, tubercular arm-bases, and smoother arms, while the inequality in the sizes of the lower pinnules is not of the same character in the two species." The Challenger collection contains two individuals from the entrance to Prince of Wales Channel in Torres Strait which agree with the two just mentioned in several points, but have no palmar series at all, while one of them has spines on the cirri, though those of the other are only carinate. At first sight, however, it did not seem advisable to unite these two forms in one specific type, the one having palmar series and the other not, though I now know that I was wrong. The same course was taken two years later

¹ *Journ. Linn. Soc. Lond. (Zool.)*, 1882, vol. xvi, p. 506.

² *Ibid.*, p. 507.