

joints of the first pinnules is less marked than in *Antedon acutiradia*, which in this respect rather resembles *Antedon breviradia*.¹

The state of preservation of the pinnules in the two individuals under consideration is unfortunately such that it is impossible to speak positively respecting the presence or absence of sacculi. But there is no trace of them in any of the few pinnules that I have been able to examine.

9. *Antedon bispinosa*, n. sp. (Pl. XX. figs. 3, 4).

Specific formula— $A. \frac{b}{c}$.

Description of an Individual.—Centro-dorsal almost columnar, bearing about twenty-five cirri on its sides. These have thirty to thirty-five joints, the three lowest of which are almost saucer-shaped, and the next ones much longer than wide. The remainder are shorter and acquire a marked keel which becomes reduced to a spine in the terminal joints.

Three radials visible, the distal edges of the first fringed with blunt spines. Axillaries pentagonal, with a curved base, overlapping the short second radials laterally. Each joint has a rounded and spinous centre raised above the lateral portions, which meet those of adjacent radials by flattened sides.

Ten arms; the margins of the lowest brachials fringed with blunt spines. First brachials rounded and short in the middle line, but with depressed lateral portions which meet one another by flattened surfaces all round the calyx. Second brachials more square and scarcely projecting backwards into the first. The eighth and following brachials become quadrate and slightly overlapping, with two or three large curved spines near the distal edge, which become very prominent in the outer portions of the arms.

Syzygies in the third and eleventh to fourteenth brachials, with others at intervals of three or more joints.

The lower pinnules all very spiny; the first much larger than its immediate successors, with the three or four basal joints somewhat flattened on the outer side, and the second to fifth with the inner edges slightly keeled and folded upwards. The pinnule on the third brachial but little larger than that on the fourth, and the following ones become gradually longer, with overlapping spinous joints.

Disk strongly plated, and the brachial ambulacra irregularly so. Pinnule-ambulacra with large covering plates and ill-defined side plates. Sacculi rare.

Colour in spirit,—white, with dark brown patches on the calyx.

Disk 6 mm.; spread probably 10 cm.

Locality.—Station 147, December 30, 1873; lat. 46° 16' S., long. 48° 27' E.; 1600 fathoms; Diatom ooze; bottom temperature, 34°·2 F. One specimen.

¹ This character is hardly visible in the view of the calyx which is represented in Pl. XI. fig. 3.