Disk about 15 mm.; spread probably about 12 cm.

Colour in spirit,—a deep reddish purple with patches of whiter tint. Sacculi deeply coloured, and abundant along the sides of the pinnule-ambulacra.

Locality.—Station 187, September 9, 1874; off Booby Island, Torres Strait; lat. 10° 36′ S., long. 141° 55′ E.; 6 fathoms; coral mud. Two imperfect individuals.

Remarks.—This species differs from Antedon fluctuans in the composition of the later arm-divisions, which resemble the distichal series in consisting of three joints with a syzygy in the axillary, in the sensible decrease in the length of the pinnules after that on the second brachial, and in the greater number of the cirrus-joints. The grouping of the arm-divisions is the same as that of Antedon microdiscus, in which, however, there is a fourth post-radial axillary (Pl. XXXVII. fig. 4). This is absent in Antedon multiradiata, which has fewer cirri and smaller basal pinnules than Antedon microdiscus. Several isolated disks of Antedon multiradiata were obtained by the Challenger in Torres Strait, and two of them were figured in Part I. (pl. lv. figs. 3, 4). Owing to the freedom of the rays, which are not bound together by perisome, the disks are very deeply incised and have a markedly stellate appearance. The so-called recent Cystidean Hyponome sarsii of Lovén is nothing but one of these Antedon-disks covered with a well-developed calcareous plating, both at the sides of the ambulacra and in the interambulacral regions. It is not unlikely to have been the disk of Antedon multiradiata which was found in this condition at Booby Island by the Challenger, as it has a more extensive plating than Antedon microdiscus, while Antedon bidentata, the other species dredged at that locality, has a quite naked disk.

## 3. Antedon microdiscus, Bell (Pl. XXXVII. figs. 4-6).

Specific formula—A.R.3.3.3.3. $\frac{c}{c}$ .

1884. Antedon microdiscus, Bell, Rep. Zool. Coll. H.M.S. "Alert," London, 1884, p. 163, pl. xv.

Description of an Individual.—Centro-dorsal relatively large, with about three rows of cirri on its sides, but the dorsal surface slightly convex and free from them. Forty to forty-five joints in the cirri, few or none of them being longer than wide; the distal ones quite short, with tolerably well-marked spines, that on the penultimate being sharp and distinct.

First radials barely visible; the next two united by syzygy. The rays divide four and sometimes five times, each series of three joints with the axillary a syzygy.

Arms of smooth joints, the lower ones short and nearly triangular, but becoming more oblong after about the sixtieth. A syzygy in the third and again in about the thirtieth brachial, with others at intervals of twelve to fourteen joints.

<sup>&</sup>lt;sup>1</sup> On Hyponome sarsii, a recent Cystidean, Canadian Naturalist, N.S., 1869, vol. iv. pp. 265-268.