arms, both along the ambulacra and at their sides. A pavement of anambulacral plates covers the genital glands. The pinnule-ambulacra have well-defined side plates, alternating with and partly concealing the sacculi, which are mostly small.

Colour in spirit,—light whitish-brown.

Disk 10 mm.; spread 20 cm.

Localities.—Station 170A, July 14, 1874, near the Kermadec Islands; lat. 29° 45′ S., long. 178° 11′ W., 630 fathoms; volcanic mud; bottom temperature, 39° 5 F. Twelve specimens; two of them with cysts of Myzostoma tenuispinum and Myzostoma willemoesii.

Station 174 (B, C, or D), August 3, 1874, near Kandavu, Fiji; lat. (about) 19° 6′ S., long. (about) 178° 18′ E.; 255, 610, or 210 fathoms; coral mud; bottom temperature (at 610 fathoms), 39° F. Five specimens, one with *Myzostoma*-cysts, and some free individuals.

Doubtful.—Station 175, August 12, 1874, near Kandavu, Fiji; lat. 19° 2′ S., long. 177° 10′ E.; 1350 fathoms; Globigerina ooze; bottom temperature, 36° F. One broken specimen.

Remarks.—This species is rather closely allied to Antedon angusticalyx, but reaches a considerably larger size. The cirri are often slightly carinate, with a tolerably distinct opposing spine on the penultimate.<sup>2</sup> The radial pentagon is relatively larger than in Antedon angusticalyx, so that it completely covers the centro-dorsal (Pl. II. figs. 4a, 4d, 5a, 5d), and the whole of the second radials, together with more or less continuous portions of the first, are thus visible on the exterior of the calyx. The axillaries are relatively short, and have no such large tubercular projections into the second radials as are visible in Antedon angusticalyx (Pl. L. fig. 1; Pl. LI. fig. 2).

The difference between the calyces of the two types, which are so closely similar in other respects, comes out very clearly if a young individual of the larger Antedon inequalis be compared with a mature Antedon angusticalyx of equal size. The first radials of the former are completely visible, forming a narrow but continuous band between the centro-dorsal and the second radials, which plates are not incised by the short axillaries; whereas in Antedon angusticalyx the first radials are entirely concealed, and the second are rather deeply incised by the tubercular backward projections of the axillaries.

The characters of the distichal pinnules afford another good distinction between the two types. Those of Antedon angusticalyx have somewhat carinate joints, the lowest of which are rather wider than the rest, though not markedly so (fig. 5, B), but in Antedon inequalis the lower joints are generally more rounded and less carinate, while the first,

<sup>&</sup>lt;sup>1</sup> The exact station, and consequently the exact depth, are not recorded.

<sup>&</sup>lt;sup>2</sup> The two cirri which remain on the figured specimen are rather more smooth than is usually the case.