

Locality.—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. One specimen.

Remarks.—This is a smaller species than *Antedon valida* (Pl. XV. figs. 5, 6), the cirri, though containing the same number of joints, not reaching more than 50 mm. in length, as compared with 80 mm. in that species. The flattening of the outer side of the basal pinnules is not so evident, and the lower joints of the distal pinnules show but little trace of the expanded trapezoidal form which is so characteristic of *Antedon valida* (Pl. XV. fig. 8). The sacculi too are much more abundant than in the latter species, the side plates being notched for their reception, as described on pp. 83, 127 of Part I. and shown in pl. liv. figs. 6, 7 (*ibid.*).

The ambulacra extend on to the genital pinnules as is also the case in *Antedon valida*. But the plates covering the glands are much less developed than in the species like *Antedon acæla*, which have no ambulacra on these pinnules. See Part I., pl. liv. figs. 1-3.

One of the rays in the single specimen of *Antedon incerta* is remarkable for having the second radial axillary (Pl. XVIII. fig. 4). It is smaller and more triangular than the normal axillary seen in fig. 5, so that the pair of first brachials which it bears are in close lateral contact with the axillaries of the two adjacent rays.

4. *Antedon gracilis*, n. sp. (Pl. XII. figs. 3-5; Pl. XV. figs. 1-4).

Specific formula— $A. \frac{b}{a}$.

Centro-dorsal a low hemisphere with a roughened dorsal pole. About twenty cirri which reach 30 mm. in length, and consist of fifty to fifty-five joints, a few of which are longer than wide. The remainder are shorter and begin to overlap dorsally so as gradually to develop a sharp spinous keel.

First radials scarcely visible; the second short and sharply convex and the axillaries widely hexagonal. Both joints and also the first two brachials are slightly carinate and more or less fringed with small spines. They are also somewhat wall-sided, with straight lateral edges which extend on to the hypozygals of the third brachials.

Ten arms, of elongately quadrate joints, the outer ones overlapping a little. Syzygies in the third and about the thirteenth brachials, and then at very irregular intervals.

The second brachial bears a relatively large pinnule of some twenty joints, the lowest of which are broad, with strong dorsal keels and flattened outer sides. A similar but rather smaller pinnule on the third brachial; the next pair much smaller and but slightly carinate. The following pinnules increase slowly in length, and about the twentieth