

joints. First radials just visible; the second nearly oblong, not very convex, and barely united laterally. Axillaries about twice their length, broadly pentagonal, with slight backward projections. First two brachials nearly oblong. All these pieces have sharp, straight edges fringed with spines, and very slightly flattened sides.

Ten arms, of smooth, obliquely quadrate joints, as long or longer than wide.

Syzygies in the third and about the thirteenth brachials, with others at intervals of two to four joints.

First pinnule not much larger than that on the third brachial, and consisting of about twelve joints, of which the first five are rather expanded, with the inner edges a little cut away, and all have tufts of small spines along the dorsal border. The next two pairs of pinnules decrease slowly in length and become less spinous. The later ones are long, slender, and tolerably smooth.

Disk much incised and well plated; brachial ambulacra but slightly so. The pinnule-ambulacra have fairly definite side plates, and large sacculi are occasionally present.

Colour in spirit,—light brownish-white.

Disk 3 mm.; spread probably 60 or 70 mm.

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 little form clearly belongs to the group of species with spiny cirri and relatively large first pinnules; but it is distinguished from its allies by a few well-marked characters. The number of the cirrus-joints does not seem to exceed twenty-five; while the bases of the rays have but slightly flattened sides, and the accompanying peculiarities of the lower joints of the first pinnules are barely recognisable (Pl. XXI. fig. 5). It approaches *Antedon multispina* in the abundance of the spines on the radials, lower brachials and their pinnules; but it differs altogether from that species in the smoothness of the distal arm-joints as well as in the appearance of the first radials externally, and in the relatively larger size of the pinnule on the third brachial. Some of the later pinnules have a few sacculi of unusually large size, but others are entirely without them.

13. *Antedon basicurva*, n. sp. (Pl. II. figs. 2, *a-d*; Pl. XXI. fig. 3; Pl. XXII. figs. 3, 4; woodcut, fig. 3; also Part I., pl. liv. fig. 9; pl. lv. fig. 7).

Specific formula— $A. \frac{b}{ab}$.

Centro-dorsal hemispherical, with a very rough dorsal pole and small interradial processes. About twenty cirri, of eighteen to twenty very stout joints, most of which