

individual obtained. This shows much more of the first radials externally than is visible in the adult (Pl. XII. fig. 4; Pl. XV. fig. 1); while the pinnule on the third brachial shows hardly any trace of the enlarged and carinate basal joints which appear in the adult, but is more like its successor as in the group of species next to be described.

5. *Antedon lusitanica*, n. sp. (Pl. XXXIX figs. 1-3).

Specific formula— $A.(2).\frac{ab}{c}$.

1884. *Antedon lusitanica*, P. H. Carpenter, Proc. Roy. Soc. Edin., 1884, vol. xii. p. 368.

Centro-dorsal hemispherical, roughened at the dorsal pole, and bearing twelve or fifteen slender cirri. These reach nearly 30 mm. and consist of about fifty joints, of which the fifth to the fifteenth are longer than wide. The following ones have a sharp dorsal spine which is smaller again in the terminal joints.

First radials scarcely visible; the second relatively short and trapezoidal, with traces of a median ridge which is continued on to the axillaries. These are short, wide, and pentagonal, with a slight backward projection in the middle of the proximal edge. The axillaries and the first two brachials have sharp straight edges and flattened sides.

The second and the hypozygals are also sometimes flattened on their inner sides. First brachials not much incised, and the outer portions of their dorsal surface are usually much less convex than the remainder.

Ten arms, of smooth elongated joints; but in one individual there are two series of two distichals each, the axillaries not syzygies. The third and the fourteenth or fifteenth brachials are syzygial joints.

First pinnule considerably larger than the second; its lower joints stout and wide, with the outer sides somewhat flattened. The second and the three or four next joints have their inner edges produced into strong keels which are slightly folded upwards. The following pinnules are quite small and increase but slowly in length.

Disk 5 mm. in diameter, thickly covered with numerous small plates, those at the sides of the ambulacra being rather more regularly arranged than the rest.

Pinnule-ambulacra not well defined, but the sacculi moderately developed.

Colour in spirit,—brownish-white or greenish-white.

Disk 5 mm.; spread probably about 12 cm.

Locality.—H.M.S. "Porcupine," 1870, Station 17A; lat. 39° 39' N., long. 9° 39' W.; 730 fathoms: bottom temperature, 49°·3 F. Ten mutilated specimens.

Remarks.—This is a peculiar species in many ways, and it is very unfortunate that the ten individuals obtained by the "Porcupine" should have all been so mutilated, the arms, except in two specimens, having broken away at the syzygy in the third brachials. These two individuals are shown in Pl. XXXIX. figs. 1, 3. One is a ten-armed form