

The second brachials bear greatly elongated pinnules of thirty or more cylindrical joints. A similar one on the third brachial, sometimes with rather stouter joints. The next pair are considerably shorter and stouter, and bear more or less developed genital glands. The following pinnules all have relatively stout joints, with the basal pair but little modified.

Disk and ambulacra naked; sacculi abundant.

Colour in spirit,—light reddish-brown, the skeleton somewhat whiter.

Disk 6 mm.; spread probably 17 cm.

*Localities*.—Off Marion Island; 50 to 75 fathoms. Two specimens.

Station 145, December 27, 1873; off Marion Island; lat. 46° 43' 0" S., long. 38° 4' 30" E.; 140 fathoms; volcanic sand. One specimen.

*Remarks*.—This species, which represents *Antedon tenella* in the Southern Sea, differs from it in the shortness of the later cirrus-joints (Pl. XXXII. fig. 3) and in the characters of the lower pinnules. The second pair are relatively large and stout, with more or less developed genital glands, which do not appear in *Antedon tenella* until the fourth or even the fifth pair. They are especially large and well developed in the two examples from the smaller depth, and the pinnule-joints are proportionately stout (Pl. XXXII. fig. 2). Another point of difference from *Antedon tenella* is the greater backward extension of the axillaries, so that the second radials are almost entirely concealed in the middle line of the ray, while there is but little modification of the basal joints in the distal pinnules.

5. *Antedon alternata*, n. sp. (Pl. XVIII. figs. 1-3; Pl. XXXII. figs. 5-9).

*Specific formula*— $A. \frac{bc}{a}$ .

Centro-dorsal more or less hemispherical, bearing some twenty-five to thirty-five cirri of about fifteen smooth joints, most of which are longer than wide.

First radials just visible; the second short and somewhat incised by the rhombic axillaries, which are usually wider than long, with incurved distal edges. Ten arms; the first brachials barely meeting above the sharp angles of the axillaries and somewhat incised by the quadrate second brachials. The next joints square or oblong till the second syzygy, and the following ones elongately quadrate with very oblique ends. Syzygies in the third, eighth, and twelfth brachials, and then at intervals of one or sometimes two joints, the latter being the more common at first.

The second brachial has a slender pinnule about 7 mm. long, and consisting of twenty elongated joints; the third has a similar but shorter one. The next pair are still shorter but have stouter joints, one or both of them having well-developed genital glands, and the following ones gradually increase in length, becoming slender and delicate, with the two basal joints more or less flattened.