The first pair of pinnules in *Antedon basicurva* are considerably different from their successors. That on the second brachial is rather the larger of the two; but their general characters are identical (Pl. XXII. fig. 4). All the joints are quite short, but the first five or six are broad, carinate and trihedral, with their outer sides flattened, somewhat as in *Antedon valida* and allied species (Pl. XV. fig. 6). This is well seen in the woodcut (fig. 3). Traces of this lateral flattening are apparent in the pinnule on the fourth brachial, but those on the fifth and following brachials have the third and fourth joints very broad and expanded (Pl. XXII. fig. 3), though the fifth joint is smaller again and its successors very much so. These lower joints, which are so broad and almost flat on their outer side, afford support and protection to the genital glands which are situated on their inner faces. The ventral surface of the glands is covered by a pavement of anambulacral plates, often with large sacculi imbedded in them here and there as shown in *Antedon incisa* (Pl. XXI. fig. 2, *a*). But there are no side plates and covering plates as in the distal pinnules.

This expansion of the third and fourth pinnule-joints is best developed about the tenth or twelfth brachial, after which it gradually becomes less and less marked and the later joints more and more elongated. But the third and fourth joints are often distinctly broader and flatter than their successors as far out as the thirtieth brachial, after which they assume a more elongated form.

In one quite young specimen, only about one-third the size of that figured on Pl. XXII., there is comparatively little trace of this expansion of the third and fourth joints, even on the lower pinnules (Pl. XXI. fig. 3). The arms too are much smoother than in the adult, the edges of the lower brachials being but slightly raised, and showing no trace of the crenulation which is so marked in the more mature forms (Pl. XXII. fig. 3). The first radials are just visible as narrow curved bands immediately above the centro-dorsal, which are not smooth and continuous as usual, but broken here and there by pits. In a slightly older individual they are only represented by a row of irregular processes between the centro-dorsal and the second radials; while in the mature form they are altogether invisible, though traces of these processes appear after the removal of the second radials (Pl. II. fig. 2*a*).

The upper surface of the centro-dorsal is so much larger than the base of the radial pentagon (Pl. II. figs. 2, *a*, *c*, *d*) that the second radials partly rest upon it and so completely conceal the first, as in some forms of *Antedon rosacea*.

The cirrus-sockets are peculiar for having a very large articular facet in the centre, from which radiating processes extend all round to the margin of the socket, as seen in Pl. II. fig. 2*a*. The dorsal surface of the radial pentagon is marked by a well-defined basal star, the angles of which do not, however, appear externally (Pl. II. fig. 2*c*). The central funnel of the calyx (Pl. II. fig. 2*d*) is smaller than in *Antedon breviradia* (Pl. III. fig. 4*a*), as the ventral ends of the muscle-plates are less everted than in that