

Disk 7 mm.; spread about 20 cm.

Locality.—Station 192, September 26, 1874; near the Ki Islands; lat. $5^{\circ} 49' 15''$ S., long. $132^{\circ} 14' 15''$ E.; 140 fathoms; blue mud. Eight specimens and two fragments.

Remarks.—This remarkable species is very readily distinguished from every other bidistichate *Antedon*, with the exception of *Antedon spinifera* from the Caribbean Sea. Both types alike have long and spiny cirri; but those of *Antedon quinquecostata* are both more numerous and reach a greater length than in the Caribbean species. The latter also has a shortly columnar centro-dorsal, with double rows of cirrus-sockets, though there are frequently only two sockets in each row and not four, as is so often the case in *Antedon quinquecostata* (Pl. III. fig. 6d).

In *Antedon spinifera* too, the radials, distichals and lower brachials are by no means so sharply carinate as in *Antedon quinquecostata*, and there is an alternating double row of strong curved spines on the base of each arm. Generally also there are thirty arms, owing to the presence of two palmar axillaries on each ray, while the number in *Antedon quinquecostata* is typically twenty, though I have found a single palmar series to be present in two separate individuals (Pl. XXXVIII. fig. 1). Another point of difference between the two species is that *Antedon spinifera* has very large and abundant sacculi, while, if present at all, they are most scantily developed in *Antedon quinquecostata*, as is also the case in some other species from the same station.

The lateral flattening of the radial axillaries and of the next following joints is less marked in this species than in the *Basicurva*-group. The first distichal and the first brachial, especially the two on the outer arms of each ray, are the joints which show it most distinctly; but it is sometimes to be traced as far as the fourth brachials of the outer arms. The pinnules of adjacent second brachials, however, have their lower joints flattened against one another, very much as in *Antedon valida* (Pl. XV. figs. 5, 6), though not quite to the same extent. The two lower joints of the next few pinnules are somewhat wider and more expanded than their fellows, but this feature disappears in those further out on the arm (Pl. XXXVIII. figs. 2, 3).

The radial pentagon of this type differs somewhat in character from that of most other species of *Antedon* (Pl. III. figs. 6, *a-d*). Its angles are produced outwards to correspond with the interradian ridges of the centro-dorsal, each of which fits into a notch between the everted lateral angles of two adjacent radials; and under ordinary circumstances these angles are the only parts of the first radials which are visible externally. The dorsal surface of the radial pentagon is remarkable for showing no signs of any basal star, as there is a very well developed one in *Antedon spinifera*. The central opening is relatively large, and the rosette within it rather ill-defined, an unusual condition in a tropical species of *Antedon*.