

First radials just visible; the second radials and axillaries sharply convex and almost carinate. The second are partly free laterally and but little incised by the hexagonal axillaries, which are much wider than long, with a more rounded dorsal surface, but only slightly overlapping the distal angles of the second radials. Both joints, and also the first brachials, have straight edges and flattened sides. The inner sides of the second and the hypozygals of the third brachials are likewise slightly flattened.

Ten arms; the second brachials relatively short and oblong, not projecting much backwards into the first, but both joints are sharply convex at their line of junction. The next few joints are nearly square and the following ones obliquely quadrate, longer than wide. The later joints overlap slightly and become somewhat sharply carinate. Syzygies in the third and about the thirteenth brachials; others at intervals of two or three joints.

The first pinnule larger than the second. Its lower joints relatively stout, with somewhat flattened outer sides, and the inner edges of the third to the fifth joints slightly carinate. The pinnules of the third and following brachials small and increasing slowly in length, the later ones sometimes showing a faint expansion of the two basal joints.

Disk much incised and well plated, and the brachial ambulacra slightly so. Pinnule-ambulacra tolerably well defined, the side plates with intervening sacculi.

Colour in spirit,—light brownish-white.

Disk 4 mm.; spread probably about 9 cm.

Locality.—Station 164, June 12, 1874; near Port Jackson; lat. 34° 8' S., long. 152° 0' E.; 950 fathoms; green mud; bottom temperature, 36°·5 F. Five specimens, two much mutilated.

Remarks.—There are several points of resemblance between this species and the younger forms of *Antedon breviradia*, which show a tendency to carination of the two outer radials (Pl. XI. fig. 5; Pl. XX. fig. 1). But the radials differ considerably in their other characters, while *Antedon spinicirra* has fewer cirrus-joints than the larger *Antedon breviradia*, with the basal ones relatively shorter and more spinous than in the latter type. Another point of difference is afforded by the first pinnules, the lower joints of which are much less expanded and carinate in *Antedon spinicirra* than in equally developed forms of either *Antedon breviradia* or *Antedon acutiradia*. This last is distinguished from both the preceding species by the great relative length of the radial axillaries (Pl. XI. fig. 3).

8. *Antedon acutiradia*, n. sp. (Pl. XI. figs. 3, 4).

Specific formula—A. $\left(\frac{b}{c}?\right)$.

Centro-dorsal hemispherical, bearing about fifteen cirri, which have the fourth and some of the following joints much longer than wide, with traces of dorsal spines.