

laterally, developing a bluntly pointed keel, which passes into the dorsal spine of the penultimate.

The angles of the first radials just visible; the second short and partly united laterally; axillaries wide, more than twice their length, and almost triangular. The rays may divide three times, each division of two joints, the axillary without a syzygy. The first few joints above the radial axillary on the outer side of the ray have their outer edges curved and folded; while the lower brachials, both of the inner and of the outer arms, have their apposed sides flattened against one another. Twenty-seven long and tapering arms, of about one hundred and eighty joints, the lower ones discoidal and their successors shortly triangular, becoming more quadrate in the middle, and in the terminal third more nearly square, elongating slightly towards the end. A syzygy in the third brachial; the next between the fifteenth and eighteenth, with others at intervals of eight to eighteen joints.

The first pinnule on the outer side of the ray may reach 8 mm., with twenty-seven joints, but on the inner arms it is generally somewhat smaller. That of the third brachial is about equal to it. The second pinnule is also rather larger on the outer than on the inner arms, reaching 15 mm., with about thirty joints, of which the first third are moderately stout, and the remainder more slender and somewhat elongated. The pinnules of the next three brachials (fifth to seventh) are of nearly equal size, but the fourth pair are only about half their length, with fifteen joints, and the next pair are still smaller.

Disk naked and much incised; sacculi abundant at the sides of the pinnule-ambulacra. Colour in spirit,—dark purple, with greenish-white spots on the disk.

Disk 20 mm.; spread about 30 cm.

*Locality*.—Tongatabu reefs. One specimen.

*Remarks*.—This fine specimen is not unlike *Antedon articulata*, Müller, but has a smaller number of cirrus-joints, with less well defined spines than occur in that species. In fact the spines are hardly anything more than a small pointed process in the middle of the sharp dorsal keel. The fourth pinnule is relatively smaller and the second syzygy nearer the disk than in the type of *Antedon articulata*; and there are less than thirty arms, instead of nearly forty, or even more, as palmar axillaries are not always developed, and there are no post-palmars at all.

#### *Antedon*, Series IV.

Three distichals, the first two articulated, and the third axillary with a syzygy.

*Remarks*.—The tridistichate species of *Antedon* are less numerous than those in which only two distichals are present, but the two series have many points of resemblance, both in their distribution and in their modifications of structure.