

We have seen that, alike in the ten-armed and in the bidistichate series, two very distinct morphological types are to be found, the one with the rays flattened laterally and a complete ambulacral skeleton, and the other without these characters. The first of these, represented by the *Basicurva*- and *Spinifera*-groups, is restricted almost entirely to the continental and abyssal regions, and is especially characteristic of the Pacific Ocean and Eastern Archipelago. One abnormal form occurs in the littoral fauna of the Southern Australian Seas; a few typical but isolated species have been found at considerable depths in the Atlantic and Southern Sea; while three more range from 80 to 270 fathoms in the Caribbean Sea. Among the tridistichate species of *Antedon* there are seven which have wall-sided rays and an ambulacral skeleton. Two of them occur in the Philippine Archipelago; a third was obtained at two (or perhaps three) stations in the South Pacific; the Challenger dredged two more at a station near Ascension (Station 344), one of which was also found off Tristan da Cunha (Station 135G); and yet two more appear in several of the "Blake" dredgings in the Caribbean Sea at depths of 80 to 270 fathoms. These seven forms may be spoken of collectively as the *Granulifera*-group, after the name of a Caribbean species which was described by Pourtalès in 1878; and they have essentially the same distribution, both bathymetrical and geographical, as the *Basicurva*- and *Spinifera*-groups, which are also distinguished by wall-sided rays and an ambulacral skeleton.

On the other hand, the tridistichate species of *Antedon*, which have unprotected ambulacra and no flattening of the lower ray-joints (*Savignyi*-group), belong for the most part to the littoral fauna of Northern Australia and the great Eastern Archipelago, ranging northwards to Hong Kong and Japan. Individual species occur here and there on the western shores of the Indian Ocean; but I am not aware that there is any tridistichate *Antedon* in the Atlantic or in the Caribbean Sea which has simple rays and unprotected ambulacra.

8. The *Granulifera*-group.

Tridistichate species with plated ambulacra and the lower parts of the rays flattened laterally.

Remarks.—Four of the five members of the *Granulifera*-group which are considered in this Report are constructed upon the same type as *Antedon granulifera* itself.

Neither the lateral flattening of the rays, nor the plated disk and ambulacral skeleton of this species, seem to have attracted the attention of Count Pourtalès when he examined it, though they have since turned out to be characters of primary systematic value. He described the type¹ as having "three brachials between primary and

¹ *Bull. Mus. Comp. Zool.*, 1878, vol. v. No. 9, p. 215.