## 8. The Parvicirra-group.

Tridistichate species, with a pinnule on the second brachial and a syzygy in the third.

Remarks.—The tridistichate species of Actinometra which have the first arm-syzygy in the third brachial, make up nearly half the whole number of the species of this genus which are considered in this Report; and so far as I can judge from the undescribed material which I have examined, this proportion is not likely to be greatly affected by future work. In the genus Antedon, on the other hand, the number of tridistichate forms is quite small, both the ten-armed and the bidistichate groups containing a large number of species.

The Parvicirra-group is more widely distributed than any other in the genus Actinometra; though it does not occur in the Caribbean Sea, as the Fimbriata- and Echinoptera-groups do. It is represented on the Peruvian coast and at Tahiti, is abundant at Samoa, Tonga, and Fiji, and extends throughout the Eastern Archipelago to Japan on the north and the Nicobar Islands on the west, being also represented by one species on the southern coast of Australia. Actinometra parvicirra itself occurs at Natal and Simon's Bay; but I do not know for certain of any Atlantic representative of the group, though there is possibly one on the Brazilian coast.

A striking feature in some members of this group is the tendency to the development of two-jointed palmar series, either generally, as in Actinometra divaricata (Pl. LXIII. fig. 6), or on the outer parts of each ray only, as in Actinometra belli, Actinometra duplex, and Actinometra nobilis (Pl. LXIV. figs. 1, 3; Pl. LXV. fig. 1). In Actinometra multifida and Actinometra variabilis the palmar and all subsequent divisions are two-jointed; but in Actinometra alternans and Actinometra divaricata there are three-jointed post-palmars, followed in the former case by two joints again, and in the latter by a three-jointed series (Pl. LXIII. fig. 6). On the other hand in Actinometra regalis (Pl. LXVIII. fig. 2), Actinometra bennetti, &c., there are three, or even four, three-jointed series above the radial axillary, which is a very rare condition in Antedon.

These large multibrachiate species are all confined to the littoral fauna; but an example of Actinometra parvicirra with about thirty arms was obtained, together with the multibrachiate Actinometra typica, from a depth of at least 210 fathoms at Station 174.

The species of the Parvicirra-group may be classified as follows:—