distichals (Pl. LII. fig. 1; Pl. LVIII. fig. 1), and I have seen a Philippine specimen with two other divisions of the same character. On the other hand *Actinometra rotalaria* and *Actinometra valida* have the palmar and subsequent series of three joints, the axillary with a syzygy (Pl. LIX. figs. 2, 3). In these two species, and also in *Actinometra simplex* (Pl. LIX. fig. 1), the first syzygy in the free arm is that in the third brachial; but in *Actinometra pulchella*, *Actinometra maculata*, and *Actinometra stelligera* the first two brachials above the last axillary are normally united by syzygy (Pl. LII. figs. 1, 2; Pl. LV. fig. 2; Pl. LVIII. fig. 1). This is also the case in *Actinometra solaris*, *Actinometra paucicirra*, and *Actinometra typica* (Pl. LIII. fig. 2; Pl. LIV. fig. 1; Pl. LVII. fig. 1); but all these forms have a syzygial union between the two outer radials, which is not the case in those belonging to Series III.

This series thus falls into two very well defined groups according as there is a syzygial union or a bifascial articulation between the first two brachials of the free arm. The first of these is altogether unrepresented in *Antedon*, having a general formula—a.2.(2.2.2.).$\frac{br}{2}$.—and may be called the *Stelligera*-group, after a comparatively large and well-defined species from Fiji and Samoa (Pl. LVIII. fig. 1). It also includes the widely distributed *Actinometra pulchella;* but as this is a dimorphic type which also occurs in the ten-armed *Echinoptera*-group, the use of its name to denote a multibrachiate group might lead to confusion.

The more normal type of bidistichate species which have the first syzygy in the third brachial of the free arm is but poorly represented in *Actinometra*, though it includes a considerable number of *Antedon*-species. It is confined entirely to the Eastern Archipelago, not occurring at all in the Caribbean Sea, where every bidistichate *Actinometra* belongs to the protean type of *Actinometra pulchella*. There may be no palmars at all, as in *Actinometra elongata* and *Actinometra simplex* (Pl. LVII. fig. 2; Pl. LIX. fig. 1), or there are three with the axillary a syzygy, as in *Actinometra valida*, which has a further division of the same character (Pl. LIX. fig. 3). This being the best-developed species of the four members of the group which were obtained by the Challenger, it may be conveniently called the *Valida*-group.

5. The *Stelligera*-group.

Two articulated distichals. The palmars and subsequent series, when present, are of the same character; but the first two brachials are united by syzygy.

Remarks.—This is a very well defined group, although its type of structure is extremely anomalous and does not occur at all in *Antedon*, all the bidistichate species of which have the first two brachials articulated, whereas they are united by syzygy in *Actinometra stelligera* and its allies (Pl. LVIII. fig. 1).