

and all subsequent axillaries are articulated, and not united by syzygy as in *Actinometra typica* and its allies. Furthermore, the first syzygy in the free arms is not between the first two brachials, as in *Actinometra typica* and *Antedon inæqualis*, but in the second brachial as in *Actinometra fimbriata* and *Actinometra multiradiata* (Pl. LXII. fig. 3; Pl. LXVI. fig. 1), or in the third as in *Actinometra parvicirra* and *Actinometra divaricata* (Pl. LXI. figs. 1, 5; Pl. LXIII. fig. 6).

The numerous species of this series thus fall into two very well defined groups, each of which contains forms with no axillary beyond the distichal, and others with two or sometimes with three.

The first arm-syzygy in the second brachial,	6. <i>fimbriata</i> .
The first arm-syzygy in the third brachial,	7. <i>parvicirra</i> .

7. The *Fimbriata*-group.

Tridistichate species with a pinnule on the first brachial and a syzygy in the second. The palmar and post-palmar series, when present, consist of two joints, the first bearing a pinnule, and the second axillary with a syzygy.

Remarks.—The position of the first brachial syzygy in this group is altogether an anomalous one. In ordinary Comatulæ the third and fourth joints of the primitive arm become closely united by suture, eventually forming a syzygy, while the pinnule of the former remains undeveloped, like that of the first brachial. But in the *Fimbriata*-group the first joint above the distichal and every subsequent axillary, whether it be a palmar or a free brachial, bears a pinnule; and the syzygial union occurs between the primitive second and third brachials, instead of between the third and fourth (Pl. LX. fig. 1; Pl. LXII. fig. 3), *i.e.*, there is a syzygy in the second instead of in the third brachial of the mature arm. When, however, there are no distichals, so that the arms spring directly from the radial axillary, we usually find a reversion to the more primitive type, with a syzygy in the third brachial, *i.e.*, the epizygal of this syzygy bears a single arm, instead of being an axillary (Pl. LX. fig. 2; Pl. LXVI. fig. 1). I have very rarely met with any instance of a pinnule on the first and a syzygy in the second brachial above a primary radial axillary. As a general rule this arrangement only occurs after a secondary or tertiary axillary (*i.e.*, distichal or palmar).

The *Fimbriata*-group is only represented in the genus *Antedon* by a single species, *Antedon porrecta*. It includes a considerable variety of specific forms, all of which, with two exceptions, are limited to the Indian Ocean, the Eastern Archipelago, and the North-west Pacific. *Actinometra lineata* and *Actinometra discoidea* were dredged by the "Blake" in the Caribbean Sea, while the former was likewise found by the Challenger at Bahia. It possibly ranges down to 88 fathoms, while *Actinometra*