The distribution of the two leading *Comatula* genera, *Antedon* and *Actinometra*, cannot yet be fully worked out, owing to the large number of species which are still undescribed; but that of the other generic types is easily stated.

The archaic *Thaumatocrinus* has only been found at 1800 fathoms at Station 158 in the Southern Ocean, where it was associated with *Promachocrinus abyssorum*, which also occurred at Station 147 (1600 fathoms), together with three species of *Antedon*. Another species of *Promachocrinus* is common at Kerguelen, and a third was obtained at 500 fathoms off the Meangis Islands. Three species of *Atelecrinus* are known, two from the Atlantic and one from the Pacific. The unique specimen of the latter was found at Station 174c in the South Pacific, at 610 fathoms; while one of the Atlantic species is only known from Pourtalès' dredgings in the Gulf Stream off Havana (450 fathoms). The other, found by the Challenger in 350 fathoms at Station 122 off Pernambuco, was subsequently met with by the "Blake" off Nevis, St. Lucia, and Granada, at depths of 291 to 422 fathoms.

Eudiocrinus, first obtained in quite shallow water among the Philippines by Semper, was dredged by the Challenger both in the North and in the South Pacific, at depths varying from 565 to 1050 fathoms; while the "Travailleur" found *Eudiocrinus atlanticus* at 896 metres in the Bay of Biscay.

In discussing the distribution of *Antedon* and *Actinometra*, the two principal genera of Comatulæ, it must be remembered that each of them, but especially *Antedon*, contains a very large number of species, and they should be considered for this purpose to represent subfamilies rather than genera. Thus, for example, the name *Antedon* is now given to all recent endocyclic Comatulæ with the basals metamorphosed into a rosette, and five rays bearing ten or more arms, just in the same way as the name *Echinus* was originally used for a variety of regular Urchins, which have now received different generic names. The difference between the tiny ten-armed *Antedon abyssicola* inhabiting depths of three miles and upwards in the Pacific (Pl. XXXIII. figs. 1, 2), and the littoral *Antedon elegans*, *Antedon multiradiata*, or *Antedon regalis* (Pls. VIII., IX., XLVI.), is no doubt very considerable at first sight; but there are so many intermediate links between the simple and the complex forms, that no hard and fast generic lines can be drawn. At the same time, a glance at the tabular keys to the species which are given in the following pages will show that they fall into certain very well defined groups; and the range of each of these groups, both in depth and in space, may be profitably studied.

In the first place, all the species of *Antedon* which have the two outer radials united by syzygy are limited to quite shallow water in the Eastern Archipelago. They are comparatively few in number, and have perhaps the most restricted geographical range of any of the specific groups. On the other hand, the *Antedon* species of the simple ten-armed type like *Antedon rosacea*, are most remarkably abundant, and also extremely varied in their character,—*Antedon abyssicola* and *Antedon tuberosa*, or *Antedon*