

“ Nearly all the Challenger species of *Actinometra* were obtained at depths of less than 20 fathoms; but several of those dredged by the U.S.C.S. steamer ‘Blake’ were found at from 100 to 300 fathoms. Below the latter depth, however, there are but few records of the occurrence of any *Actinometra*, none being known below 533 fathoms.

“ The Cape York Comatulæ of both genera are remarkable for the loose way in which the disk or visceral mass is attached to the calyx, a feature which is also noticeable in the common rosy Feather-star of the British seas. Several specimens of the isolated disk were obtained, and Sir Wyville Thomson watched them performing slow creeping movements on their own account. On the other hand, the disk-less cup with the arms attached will continue to swim about just as readily as an entire animal does. The discovery of one of these isolated disks caused much interest some fifteen years ago, for the specimen was described as a recent Cystidean. Although the Challenger dredgings have rendered this idea no longer tenable, there is much to be said for the view which was held by Sir Wyville Thomson respecting the possible interpretation of the fossil Agelacrinitidæ as the isolated disks of Palæocrinoids, and not as independent organisms to be classed with the Cystidea.

“ Three new genera of Comatulæ were discovered by the Challenger, in addition to several new species of the three previously known, *Antedon*, *Actinometra*, and *Eudioerinus*. All of them present characters of considerable morphological importance.

“ One of these types, for which the name *Atelecrinus*<sup>1</sup> has been proposed, was obtained at Station 122, together with *Pentacrinus maclearanus* and *Rhizocrinus lofotensis*. It seems to retain throughout life certain characters which mark transitional stages in the development of ordinary Comatulæ, and it is thus best described as a permanent larval form. *Atelecrinus balanoides*, the species dredged at Station 122, has since been found in the Caribbean Sea, by the officers of the U.S. Coast Survey and Count Pourtalès obtained a fragment of another off Cuba in 1868, while a third was met with by the Challenger in the South Pacific.

“ Another very interesting new genus, for which the name *Promachocrinus*<sup>2</sup> has been proposed, was dredged at Station 147, in the Southern Ocean, from a depth of 1600 fathoms. It is distinguished from all other recent Crinoids by having ten primary radials instead of five only. Three species were obtained during the cruise, two of them in the Southern Ocean, together with *Bathycrinus* and *Hyoerinus*, and one at 500 fathoms, among the Philippine Islands (Station 214). That dredged at Station 147 (*Promachocrinus abyssorum*) seems to be confined to great depths, as it was also found at 1800 fathoms (Station 158), and like the abyssal species of *Antedon* is of small size. But a comparatively large species was found to be abundant in the shallow water round Kerguelen. Its calyx is represented in fig. 123. In the side view (A) are shown some of the ten first radials, five of which rest directly upon the centro-dorsal and correspond to

<sup>1</sup> ἀτελελῆς, incomplete.

<sup>2</sup> πρὸμαχος, “Challenger.”