

the radial axillary originates a simple arm only from one or both of its sides, thus reducing the total number of the arms; and sometimes one of the four arms given off from the brachial axillaries again divides, in which case the total number of arms is increased. The structure of the disk is much the same as in the species of the genus previously known.

Two other fixed crinoids were dredged from the 'Porcupine,' and these must be referred to the Apiocrinidæ, which differ from all other sections of the order in the structure of the upper part of the stem. At a certain point, considerably below the crown of arms, the joints of the stem widen by the greater development of the calcareous ring, the central tube only increasing very slightly in width. The widening of the stem joints increases upwards until a pear-shaped body is produced, usually very elegant in form, which, looking from the outside, one would take for the calyx. It is, however, nothing more than a symmetrical thickening of the stem, and the body-cavity occupies a shallow depression in the top of it included within the plates of the cup—the basals and radials—which are thicker and more solid than in other crinoids, but otherwise normally arranged. The stem is usually long and simple until near the base, where it forms some means of attachment, either as in the celebrated pear-encrinites of the forest marble, a complicated arrangement of concentric layers of calcareous cement which fix it firmly to some foreign body, or, as in the chalk *Bourguetticrinus* and in the recent *Rhizocrinus*, an irregular series of jointed branching cirri.

The Apiocrinidæ attained their maximum during