

exceedingly regular, as it almost invariably has six arms above each distichal axillary arranged in the following order 2, 1; 1, 2. There are only two instances of an axillary occurring on one of the inner pair of the four tertiary arms; while it is never absent on one of the outer pair. This regular arrangement recalls that already noticed in some species of *Pentacrinus*. But it is much less constant than in the more normal example with the regular calyx, and it is in this individual that the solitary instance of a fifth axillary occurs; while the peculiar development of spines on the lower arm-divisions is much more marked in the one without a base.

The pinnule-ambulacra vary considerably in their appearance according to their position, as will be seen by a comparison of Pl. XLVII. fig. 13 and Pl. XLIX. figs. 6, 7; and it is only on the later pinnules of the arm that the side and covering plates come to be distinctly differentiated. The peculiar mode of development of the side plates on some of the larger pinnules has been already described (*ante*, p. 82). The same character is also visible in *Metacrinus wyvillii* and *Metacrinus nodosus* (Pl. LI. fig. 12), though to a less extent.

The occasional enlargement of some of the arm-joints appears to indicate that an encysting *Myzostoma* had commenced operations. This is probably the *Myzostoma pentacrini* of von Graff.¹ It "does not produce real cysts upon the arms of its host, but only swellings of several (three to six) joints, which gradually disappear." It was found in abundance on *Pentacrinus alternicirrus* from the same Station (214) as *Metacrinus costatus*; whereas the free *Myzostoma wyville-thomsoni* which was attached to the disk of the latter species occupied a similar position on the disk of *Metacrinus angulatus* from Station 192, off the Ki Islands.

9. *Metacrinus nodosus*, n. sp. (Pls. L., LI.).

Dimensions.

Length of stem to seventeenth node,	. . . . .	14.00 cm.
Diameter of stem,	. . . . .	3.00 mm.
Longest cirrus (forty-five joints),	. . . . .	35.00 "
Diameter of calyx,	. . . . .	6.00 "
Diameter of disk,	. . . . .	12.50 "
Length of pinnule on fourth radial (fourteen joints),	. . . . .	13.00 "
Length of pinnule on first joint after palmar axillary (thirteen joints),	. . . . .	9.00 "

Stem slender and sharply pentagonal. Eight or nine internodal joints with distinctly crenulated edges and a faint tubercle in the middle of each side. Nodals, especially in the young stem, produced outwards at the angles between the wide cirrus-facets which do not reach either edge. Supra- and infra-nodal joints both somewhat modified. Cirri

¹ Zool. Chall. Exp., part xxvii. p. 63, 1884.