

at the twenty-fourth node; (3) 22.5 cm. long, closed at the twenty-fifth node. The individuals of this species present various forms of monstrosity, some of which have already been mentioned:—(1) The presence of six joints in one ray, of which the second and the axillary are syzygies, thus approaching the other group of *Metacrinus* species. (2) The presence of eleven radials on one ray, which recalls the irregularities of the Palæocrinoids. (3) The eighth joint of one of the primary arms is not a distichal axillary as usual, but it is swollen and bears a slightly larger pinnule than the preceding joint, so that it resembles an axillary with unequal faces. Fourteen joints further on there is an axillary which corresponds to that on the secondary arms of other rays. (4) The presence of a second smaller anal tube at the side of the ordinary one (Pl. XXXIX. fig. 2), an individual of *Myzostoma wyville-thomsoni*, von Graff, having attached itself between the two. (5) The two arm-trunks borne by one of the palmar axillaries each have a syzygy in the third brachial, and then unite again into a single trunk. The fourth joint of the right-hand arm has the shape of an axillary reversed, *i.e.*, it has two proximal faces, one of which meets the epizygal of the third brachial, and the other the fourth brachial of the left-hand arm. It bears a pinnule on its left side, and as it is the fourth joint of one arm-trunk, and the fifth of the other, the ordinary sequence of the pinnules is uninterrupted, and continues normal throughout the rest of the arm which is borne by this reversed axillary.

2. *Metacrinus cingulatus*, n. sp. (Pl. XL., Pl. XLI. figs. 1-4).

Dimensions.

Length of stem to thirty-third node,	. . . . .	35.00 cm.
Diameter of stem,	. . . . .	5.50 mm.
Longest cirrus (fifty joints),	. . . . .	51.00 „
Diameter of calyx,	. . . . .	8.00 „
Diameter of disk,	. . . . .	18.00 „
Length of arm (one hundred joints),	. . . . .	135.00 „
Length of large distichal pinnule (twenty-five joints),	. . . . .	28.00 „
Length of first pinnule after tertiary axillary (fifteen joints),	. . . . .	10.00 „

Stem robust, with a sharply pentagonal outline. Six to fifteen (usually eight to twelve) internodal joints, with moderately crenulated edges. Their faces are bluntly stellate, with shallow re-entering angles; while their sides bear strong horizontal ridges which are slightly more prominent at the angles of the stem, and are often marked by irregular indentations. The nodal joints are more distinctly stellate, and have no ridges except at the angles and where the cirrus-facets are absent. These reach closer to the lower than to the upper edges of the nodal joints, but the incision of the supra-nodals is fairly distinct. The cirri have about forty to fifty tolerably uniform joints, and are