

longest between the eleventh and twelfth nodes. The interarticular pores end between the eighth and tenth nodes.

Basals prominent, more or less extended downwards. Radials four, the second a syzygy. Rarely more than four divisions of the rays, giving forty or fifty arms, which consist of about one hundred joints beyond the last axillary, the basal ones slightly overlapping. Primary arms of six to eight, or sometimes ten distichals, of which the second or third is a syzygy. Secondaries of ten to fifteen (usually twelve to fourteen) palmars, the third generally a syzygy. Tertiary arms rare, consisting of fourteen to twenty-six (usually eighteen to twenty) joints, the third of which is a syzygy. In rare cases there is another axillary after twenty joints more. There is generally a syzygy in the third brachial of the free arm, another between the seventh and twenty-sixth, and others at intervals of six to eighteen joints. The distichal pinnules have large outer joints, and are therefore larger on the whole than those on the radials, though the basal joints are generally less massive than in the radial pinnules. All the pinnules, and especially the lower ones, have a serrate dorsal edge. The disk bears numerous small plates, which are not very closely set, except in the anal interradius. The ambulacra of the disk and arm-bases are supported by irregular elongated plates, the latter being distinctly above the arm-groove, with a few ambulacral plates at their sides. The brachial ambulacra protected by smaller bifid plates, which become differentiated on the pinnules into covering and side plates.

Colour when fresh—the stems almost white, and the crowns light yellow or light reddish-orange (Moseley); in spirit, white.

Locality.—Station 192, September 26, 1874; in the Arafura Sea, off the Ki Islands; lat. $5^{\circ} 49' S.$, long. $132^{\circ} 14' E.$; 140 fathoms; blue mud. Two specimens.

Remarks.—This species is at first sight not unlike *Metacrinus angulatus* (Pl. XXXVIII.), having about the same number of internodal joints in the stem, and a nearly identical arrangement of the arm-divisions. The stem-joints, however, are very different in the two types. The horizontal ridges, which are interrupted at the angles of the stem in *Metacrinus angulatus* (Pl. XXXIX. figs. 3, 11), are usually continued right round the joints in *Metacrinus cingulatus* (Pl. XLI. figs. 1, 3); and they appear also as enlargements of the angles of the nodal joints (Pl. XLI. fig. 2), which are much less sharp than in *Metacrinus angulatus* (Pl. XXXIX. fig. 4). As a rule too there are generally slightly fewer joints between the successive axillaries of the dividing rays than in the latter species, but the character of the arms and of the pinnules which they bear is very much the same in both.

The two specimens of *Metacrinus cingulatus* which were obtained by the Challenger differ somewhat in their characters, and each exhibits a certain amount of variation. In the smaller individual there is an irregularity in one of the rays. The fourth or axillary radial is not articulated to the preceding joint, as is usually the case, but the two