

wide sockets which take up their whole height and encroach considerably both on infra-nodal and on supra-nodal joints. The cirri have about forty-five tolerably uniform joints, and are longest between the twelfth and fourteenth nodes. The interarticular pores end at the tenth node.

Basals prominent, with slight downward extensions. Radials four, rather strongly convex, the second a syzygy. Generally four, and sometimes five divisions of the rays, giving seventy arms or more. These have from one hundred to one hundred and twenty joints beyond the last axillary, and are smooth at the base; but their middle and outer portions are markedly serrate in the medio-dorsal line. Primary arms usually of five distichal joints, one or sometimes two of which are syzygial. Eight or nine palmars in the secondary arms, the second or third of which is a syzygy. Tertiaries of twelve to twenty joints (usually about fifteen), with the third a syzygy. In a few cases there is another division after about twenty joints more. There is generally a syzygy in the third brachial of the free arm; another between the twelfth and thirty-seventh brachials, and others at intervals of four to thirteen joints.

The pinnules on the radials and lower distichals are all very long and much compressed above the enlarged basal joints, while their terminal portions have a serrate dorsal edge. The following pinnules, as far as the tertiary axillaries, have wide and somewhat prismatic basal joints like those lower down on the rays, but with more curved sides, and consisting of more uniform joints, the dorsal edges of which project forwards.

Disk rather closely plated, especially in the anal interradius and along the ambulacra. Brachial ambulacra partially withdrawn into the arm-groove, and supported by irregularly shaped plates. Side plates not differentiated till near the ends of the pinnules.

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

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 large specimens, one of which has lost all its arms, and one smaller varietal form.

Remarks.—This fine species is readily distinguished from *Metacrinus murrayi* by its flat ungrooved stem (Pl. XLI. fig. 5), with shorter internodes and more markedly incised infra-nodal joints (Pl. XLIII. fig. 1). The primary arms are generally longer than in that type, and the extremities of the arms and pinnules more serrate. *Metacrinus varians*, which resembles *Metacrinus nobilis* in having a flat ungrooved stem (Pl. XLVII. figs. 6, 8), is altogether a smaller type with shorter internodes and no axillaries after the palmars, so that the number of arms does not exceed forty; while the large *Metacrinus superbus* has many more cirrus-joints and its arm-bases uneven, owing to the thickness of the proximal and distal edges of the joints.