are united by syzygy. The third radial therefore, being a hypozygal, bears no pinnule. But the normal number of pinnules, one on each side of the ray, is still maintained; for the second radial, itself a syzygial joint, bears a pinnule on each side.

The stem of this specimen, which is broken at the bottom, tapers slightly downwards, and has tolerably regular internodes, with five cirri at each node in the usual way. The stem of the other individual, however, does not decrease in size at its lower end, which terminates in a nodal joint with a freshly exposed under surface. The internodes of this stem are very irregular in length, and generally consist of one or two joints more than in the smaller specimen, while the development of cirri at the nodes is extremely irregular. No less than ten of the thirty-three remaining nodes have one or more cirri deficient, as shown in the following Table:—

Node.	Missing Cirri.	Node.	Missing Cirri.			
5th	2	20th	2			
8th	1	$24 \mathrm{th}$	2			
9th	3	27th	4			
10th	1	30th	4			
13th	. 1	33rd	2			

In the lower part of the stem there is no trace of the absent sockets, which are replaced by ridges like those on the internodal joints; but in the middle and upper parts the socket is present, though imperfectly developed, especially at the fifth node. At the thirteenth, the place of the socket is entirely taken up by a group of sessile Cirripedes (Verruca).

## 3. Metacrinus murrayi, n. sp. (Pl. XLI. figs. 12-17; Pl. XLII.).

## Dimensions.

Length of stem to eighteenth node,			•				184.00	mm.
Diameter of stem,				٠.	•		6.75	"
Longest cirrus (forty-eight joints),					•		43.00	,,
Diameter of calyx,		•	•	•	•	•	11.00	,,
Diameter of disk,	•		•				21.00	"
Length of arm (one hundred and fit	teen ;	joints abov	ve ter	tiary axil	lary),	•	100.00	,,
Length of pinnule on second radial (fifteen joints),							18.00	"
Length of first palmar pinnule (seventeen joints),							23.00	,,
Length of first pinnule after tertiary axillary (eighteen joints), .							14.00	,,

Description of an Individual.—Stem robust and of a rounded pentagonal form, with very shallow re-entering angles. Internodes composed of thirteen joints, with smooth sides and faintly crenulated edges. The supra-nodal joints are slightly incised, but the