- 1878. Pentacrinus Mülleri, Agassiz, Bull. Mus. Comp. Zoöl., vol. v., No. 6, p. 56.
- 1879. Pentacrinus Mülleri, Pourtales, Bull. Mus. Comp. Zool., vol. v., No. 9, p. 214.
- 1879. Pentacrinus Mülleri, Agassiz, Bull. Mus. Comp. Zoöl., vol. v., No. 14, p. 296.
- 1882. Pentacrinus decorus, P. H. Carpenter, Bull. Mus. Comp. Zoöl., vol. x., No. 4, p. 171.

Dimensions.

Greatest length of stem, to fiftieth nod	le, .			•	•	80.00 cm.
Diameter of stem,	•		8.00		٠	4.75 mm.
Longest cirrus (thirty-two joints), .	i.e		•			27.00 "
Diameter of calyx,	•	•	•	•	•	8.00 "
Diameter of disk,	••	•	•	•	•	12.30 "
Length of arm (one hundred joints),	•	•	•	190	•	80.00 "
Length of distichal pinnule (thirteen j	oints),		()		•	13.00 "
Length of pinnule from lower third of	arm (twenty	joints),	•	•	•	16.00 ,,

Stem moderately slender and usually smooth, with a rounded pentagonal outline. Seven to sixteen (usually eleven or twelve) internodal joints, with much crenulated edges. Nodal joints somewhat enlarged, expanding from above downwards to the top of the cirrus-sockets. These are deeply hollowed, and have a pear-shaped form, being continued downwards as well marked grooves on to the infra-nodals. Cirri small and slender, rarely composed of more than thirty joints, the first six of which are quite short and the remainder squarish or slightly elongated, with a moderately smooth dorsal edge. Terminal claw small, with no opposing spine. Lowest limit of the interarticular pores between the ninth and eleventh nodes.

Basals very variable, sometimes quite small, inconspicuous, and isolated; but presenting all gradations from this condition up to that of large triangular knobs standing out prominently from the general plane of the calyx, and meeting one another by their extended lateral angles.

The two outer radials united by bifascial articulation. The rays and their subdivisions sometimes separated by plated perisome, and sometimes in close apposition; but the sides of the lower arm-joints are scarcely flattened at all. Ten to twenty-five Primaries of two to seven distichal joints. When three or more distichals are present the first two are united by bifascial articulation, the second bearing a pinnule, while the third or sometimes the axillary is a syzygy. But if there be only two distichals, and the axillary be a syzygy, the first bears a pinnule and is united to the second by muscles. Lastly, if the axillary be not a syzygy, there is a bifascial articula-Secondary arms (when present) of one to nine tion between it and the first distichal. palmar joints, which vary in character as in the primary arms, though to an even greater extent. If the arms become free at the radial axillary the first syzygy is usually on the third brachial; but if the primary arms divide there is generally a syzygy in the second free brachial, though not unfrequently it occurs between the first and second.