

Pentacrinus decorus (Pl. XXXIV. fig. 2), is far less complete than in *Pentacrinus asterius*. There is no trace of the large polygonal plates on the perisome between the rays which we find in the latter species (Pl. XIII. fig. 1), and those on the ventral surface of the disk are small and scattered, often being mere granules. The ambulacral skeleton too is imperfectly developed. The covering plates of the pinnules do not rest upon distinct side plates, but only upon an almost undifferentiated limestone band (Pl. XV. figs. 8, 9; Pl. XVII. fig. 9).

3. *Pentacrinus maclearanus*, Wyville Thomson, 1877 (Pl. XVI.; Pl. XVII. fig. 1).

1877. *Pentacrinus maclearanus*, Wyville Thomson, *The Atlantic*, vol. ii. pp. 123-126.

Dimensions.

Total length (<i>fide</i> C. W. T.),	13.00 cm.
Length of stem, rounded off at twelfth node,	34.00 mm.
Diameter of stem,	5.25 "
Longest cirrus (twenty-five joints),	28.00 "
Diameter of calyx,	9.00 "
Length of arm (sixty-eight joints),	80.00 "
Length of pinnule on first free brachial (ten joints),	7.00 "
Length of pinnule from middle of arm (fifteen joints),	14.00 "

Description of an Individual.—Stem short and pentagonal, with rounded angles, terminating below at the twelfth node. The internodes consist of only one or two comparatively thin joints. Nodal joints thicker, with enlarged and prominent angles; the cirrus-sockets, occupying almost their whole height, are circular or slightly oval in form, with a well-defined rim which extends downwards on to the infra-nodal for a variable distance. The cirri consist of twenty to twenty-five stout joints of tolerably equal size, with a small terminal claw and no opposing spine. Interarticular pores scarcely visible.

Basals rhomboidal, just in contact laterally, and extending slightly downwards over the uppermost stem-joints. Rays and their subdivisions in close lateral contact, the joints as far as the tenth or twelfth brachial having flattened sides. The two outer radials united by syzygy. Primary and secondary arms each of two joints also united by syzygy. Total number of arms thirty-one, *i.e.*, usually six to each ray in the following order—2, 1; 1, 2; palmar axillaries being generally developed only on the two outermost of the four secondary arms. A tertiary axillary in one ray. The two lower brachials united by syzygy, the epizygal bearing a pinnule. No other syzygies on the arms, which consist of about seventy short and wide, oblong joints, overlapping very slightly at the base.

The lowest pinnules are much shorter than their successors, and have only ten or twelve joints, the basal ones being trihedral and the outer ones flattened. The middle pinnules much longer, with about fifteen more rounded joints.