

The disk is only partially visible, but seems to have a tolerably regular pavement of small plates. Arm-groove exceedingly narrow, the ambulacral plates being limited to the pinnule-bases. The pinnules have well defined covering plates with occasional faint indications of side plates.

Colour in spirit, brownish-white.

*Locality*.—Station 122, August 10, 1873; lat. 9° 5' N., long. 34° 50' W.; 350 fathoms; red mud. One specimen.

*Remarks*.—The leading characters of this elegant species were well described by Sir Wyville Thomson in *The Atlantic*. Its nearest allies are *Pentacrinus mülleri* (Pl. XIV.), *Pentacrinus wyville-thomsoni* (Pl. XVIII. fig. 1), and *Pentacrinus alternicirrus* (Pl. XXV.), all of which it resembles very closely in the regularity and grouping of the arm-divisions. The stem, however, is totally different from that of *Pentacrinus wyville-thomsoni* with its long internodes, and the number of arms is also greater than is usually the case in this species. *Pentacrinus mülleri* and *Pentacrinus alternicirrus* approach it most closely, having relatively short internodes; but the arrangement of the cirri on the stem of the latter species distinguishes it at once. *Pentacrinus maclearanus* closely resembles some specimens of *Pentacrinus mülleri* in the shape of the nodal joints; but, apart from the characters of the internodes, it is readily identified by the unusual shortness of its lowest pinnules and the more rounded form of the joints in the later ones.

The close approximation of the nodal joints, and the downward curvature of the cirri, together with the slight downward extension of the basals and the grouping of the arms, are of interest as recalling the Liassic *Extracrinus briareus*.

Only four cirri are present at one of the nodes, the fifth socket being totally absent. This indicates a variation in the direction of *Pentacrinus alternicirrus*, which has only two or three cirri at each node (Pl. XXVI. figs. 1–3).

4. *Pentacrinus wyville-thomsoni*; Jeffreys (Pl. XVII. figs. 2–6; Pls. XVIII.–XXIV.; Pl. LVII. fig. 1).

1870. *Pentacrinus Wyville-Thomsoni*, Jeffreys, Proc. Roy. Soc., 1870, vol. xix. p. 157.

1872. *Pentacrinus wyville-thomsoni*, Wyville Thomson, Proc. Roy. Soc. Edin., vol. vii. p. 767; and *The Depths of the Sea*, p. 444.

#### *Dimensions.*

Total length, . . . . .	24·00 cm.
Longest stem, rounded off at seventh node, . . . . .	155·00 mm.
Shortest stem, rounded off at fifth node, . . . . .	80·00 "
Diameter of stem, . . . . .	3·50 "
Longest cirrus (nineteen joints), . . . . .	24·00 "
Diameter of calyx, . . . . .	7·20 "
Diameter of disk, . . . . .	9·75 "
Length of arm (seventy joints), . . . . .	100·00 "
Length of pinnule on first free brachial (ten joints), . . . . .	10·00 "
Length of pinnule from middle of arm (twenty-one joints), . . . . .	24·00 "