

obtained at Station 210, where four individuals of two species of *Pentacrinus* were dredged (see p. 128); but, as in the case of *Pentacrinus alternicirrus*, I can only infer this from the fact that these two species, together with the single specimen of *Metacrinus murrayi*, were the only ones which came into my hands without any record of locality; while there were none with the label of Station 210.

*Remarks.*—*Pentacrinus naresianus* is remarkable as being the only recent species of the genus in which there are not more than ten arms; while the shape of the arm-joints, especially the lower ones (Pl. XXVIII. fig. 1; Pl. XXIX; Pl. XXX. fig. 1), is also more oblique than is usually the case in the Pentacrinidæ, so that in both respects it approaches the Comatulæ. Apart from these characters and the well plated ambulacra (Pl. XXVII. fig. 13), the arms are readily distinguished by the peculiar form of the syzygial unions. When seen from the dorsal side (Pl. XXIX. fig. 1; Pl. XXX. fig. 1), the distal edge of the hypozygal appears to be very convex and to project strongly forwards into the epizygal; while in a side view (Pl. XXX. fig. 23) the epizygal shows a sharp backward projection into the hypozygal. When the syzygial faces are exposed (Pl. XXX. figs. 20, 21), a sharp angle appears across the middle of the proximal face of the epizygal; and the distal face of the hypozygal has a corresponding re-entering angle, so that the two joints interlock very closely. Essentially the same form of syzygy recurs in *Pentacrinus blakei* of the Caribbean Sea (Pl. XXXII. figs. 5, 7, 12, 14); but the other characters of this species are entirely different from those of *Pentacrinus naresianus*, as it has twenty to thirty arms and a more slender stem with shorter internodes (Pl. XXXI.).

These two species, together with *Pentacrinus decorus*, are the only three recent Pentacrinidæ in which the two outer radials and the two first joints beyond them are united by bifascial articulation. The articular faces of these joints in *Pentacrinus naresianus* are shown in Pl. XXX. figs. 11, 12, 16, 17. It further resembles *Pentacrinus decorus* in the pyriform downward prolongation of the cirrus-sockets over the infra-nodal joints, the upper faces of which are markedly stellate in consequence (Pl. XXX. fig. 29). The nodal joints, however, are not produced outwards at the angles between the cirrus-sockets, nor do they slope outwards from their upper edge to the top of the sockets; so that the general outline of the stem is very even (Pl. XXVIII. fig. 2). But in *Pentacrinus decorus* this enlargement of the nodal joints is very perceptible in mature individuals (Pl. XXXVI.; Pl. XXXVII. figs. 1, 2), though not in the youngest (Pl. XXXV.). On the other hand, it appears in the youngest specimens of *Pentacrinus naresianus* (Pl. XXXa. fig. 5), though disappearing some time before maturity is reached.

*Pentacrinus naresianus* also presents a considerable variation in the size and shape of the basals, which is so very remarkable a character of *Pentacrinus decorus*. In all the four figures of the calyx which were drawn for Sir Wyville Thomson (Pls. XXVIII.—XXX.), the basals are represented as separated by small downward extensions of the