

*Remarks.*—There is a most remarkable general resemblance between this species and the two allied forms *Antedon eschrichti* and *Antedon antarctica*, which last was found associated with it off Heard Island. The characters of the cirri, arm-joints, pinnules, and even of the genital glands are very closely similar in the two types; so that if nothing were known of *Promachocrinus kerguelensis* but some fragments of its arms, one would unhesitatingly refer them to an *Antedon* of the *Eschrichti*-group.

Three of the seven specimens obtained at Kerguelen appear to be fully developed, while two are premature, and two more, those from Christmas Harbour, are quite young (Pl. LXX. fig. 2). The cirri of these last exhibit a very striking dimorphism. Most of them belong to the "small mature" type, while there are others with a much larger number of immature joints. The latter type is the one which chiefly presents itself in the adult.

The first radials of these young individuals are much more distinctly visible than is the case in the adult; while the second radials and first brachials are more deeply incised, and the arm-joints relatively longer with a more distinct overlap. The Heard Island specimen is considerably older than those from Christmas Harbour, but also has a large number of the "small mature" cirri.

The anal tube of this species, in the five examples of which I have examined the disk, is near the margin and not close up to the central mouth, as is usually the case in *Antedon*.

2. *Promachocrinus abyssorum*, n. sp. (Pl. I. figs. 4, 5; Pl. LXIX. figs. 5-7).

1879. *Promachocrinus abyssorum*, P. H. Carpenter, Proc. Roy. Soc., 1879, vol. xxviii. p. 385.

Centro-dorsal small and rounded, nearly covered by the sockets of about twenty cirri, which seem to have had very long lower joints.

Radials partially visible; the first brachial of moderate length, and somewhat incised by the second, which bears a pinnule. The next few joints are nearly oblong, and their successors quadrate, gradually becoming much elongated. There is a syzygy in the fourth or fifth brachial, and others at intervals of one to five joints.

The first few pinnules on each side are tolerably equal, slender, and flagellate, reaching 8 mm. in length. The lowest pinnules have the smallest joints, those of their successors becoming both longer and stouter.

Mouth central; disk naked. Genital glands short and stout. Sacculi fairly abundant on the pinnules.

Colour in spirit,—white.

Disk 6 mm.; spread perhaps 10 cm.

*Localities.*—Station 147, December 30, 1873; lat. 46° 16' S., long. 48° 27' E.; 1600 fathoms; Diatom ooze; bottom temperature, 34°·2 F. Three specimens.