primary radial; but there seems to be no constancy as to the side on which it appears, some arms having it on the right, and others on the left side.

The three species of the genus may be classified as follows:-

- - A. Centro-dorsal small, with but few cirri; elongated arm-joints, . . 2. abyssorum, n. sp.
  - B. Centro-dorsal large, bearing numerous cirri; arm-joints not specially long, . 3. naresi, n. sp.
  - 1. Promachocrinus kerguelensis, n. sp. (Pl. I. figs. 1, a-d; Pl. LXX.).

Promachocrinus kerguelensis, P. H. Carpenter, Proc. Roy. Soc., 1879, vol. xxviii. p. 385.
Promachocrinus kerguelensis, P. H. Carpenter, Journ. Linn. Soc. Lond. (Zool.), 1880, vol. xv. pl. xii. fig. 28.

Centro-dorsal conical and thickly covered almost to the apex with eighty or more cirri. These may reach to 40 mm. in length, and consist of thirty-five to forty tolerably uniform joints, which are mostly rather longer than wide. The later joints may overlap slightly, but the penultimate is small, with little or no trace of an opposing spine.

First radials barely visible; the second short, nearly oblong, and but slightly joined laterally; axillaries widely rhombic. The first brachial is scarcely incised by the second, which is irregularly quadrate. The next few joints are quadrate, and their successors triangular, wider than long, and slightly overlapping. A syzygy in the third brachial; the next in the seventh or eighth, with others at intervals of two to four joints. The first two pinnules on each side are tolerably equal, slender, and flagellate, and reach over 20 mm. in length.

The lowest pinnules have the most slender joints, those of their successors increasing in stoutness, but diminishing in number. The two lowest joints of the middle and later pinnules are somewhat flattened, with their apposed edges incurved.

Mouth central and anus marginal; disk naked; genital glands long and slender; sacculi abundant on the pinnules.

Colour in spirit,—light yellowish-brown, or greyish-white with dark red spots.

Disk 16 mm.; spread 18 cm.

Localities.—Kerguelen Island; 10 to 100 fathoms. One specimen.

Station 149c, January 19, 1874; Balfour Bay; 20 to 60 fathoms. Two specimens.

Station 149D, January 20, 1874; Royal Sound; lat. 49° 28' S., long. 70° 13' E.; 28 fathoms. One specimen.

Station 149E, January 21, 1874; off Greenland Harbour; 30 fathoms. One specimen. Station 149H, January 29, 1874; off Cumberland Bay; 127 fathoms. Two young specimens.

The bottom deposit at all these stations is volcanic mud.

Station 151, February 7, 1874; off Heard Island; lat. 52° 59′ 30″ S., long. 73° 33′ 30″ E.; 75 fathoms; volcanic mud. One young specimen.