

Habitat.—Station 147, South Sea, east of Kerguelen Island, lat. 46° 16' S., long. 48° 97' E. Depth, 1600 fathoms. Bottom temperature, 0°·8 C. Globigerina ooze. December 30, 1873.

A fragment of an *Umbellula* in two pieces, dredged at Station 146—lat. 46° 46' S., long. 45° 31' E.; depth, 1375 fathoms; bottom temperature, 1°·5 C.; globigerina ooze—seems to belong to *Umbellula magniflora*. The principal argument in favour of this supposition, besides the habitat, is that the lower swelling of the stalk shows zooids as in that species, which are so well developed that I thought it right to show them in fig. 12. The upper part of the stalk is in so bad a condition that not a single polyp is preserved, so that nothing can be said of these parts. The length of both fragments, 251 mm.; breadth of the lower swelling of the stalk, 0·83 mm.; of the thinner part of the stalk, 0·42 mm.; diameter of zooids, 0·17 to 0·19 mm.

Family 3. PROTOCAULIDÆ.

Protocaulon, n. gen.

Sea-pens of the group of the Protocaulæ. Polyps sessile, without cells, disposed alternately on each side of the rachis in one single row. No calcareous corpuscles.

1. *Protocaulon molle*, n. sp. (Pl. VII. fig. 23).

The whole pen 26 mm. long. Stalk, 15 mm. long, 8·28 mm. thick, with the exception of the lower half, which has a maximum thickness of 0·57 mm. Rachis, 0·26 mm. Polyps, fourteen in number, four of which are rudimentary, with the partially retracted polyps not much longer than 0·58. Zooids (?). I think I have seen one zooid below each polyp, but as I could not destroy the only specimen of this sea-pen, this point was not ascertained. Axis round, 0·11 mm. thick, with shorter stout radiating fibres. Generative organs in the more developed polyps.

Habitat.—Station 169, north-east of New Zealand, lat. 37° 34' S., long. 179° 22' E. Depth, 700 fathoms. Bottom temperature, 4°·2 C. Grey ooze. July 10, 1874.

Family 4. PROTOPTILIDÆ.

Microptilum, n. gen.

Sea-pens of the family of the Protoptilidæ. Polyps with cells, sessile, disposed alternately on each side of the rachis in one single row. Cells triangular, with one strong spine on their ventral side. Zooids small, one single individual at the base of each cell on its ventral side. Axis round. Calcareous corpuscles in the rachis, the stalk, the cells, and the tentacles of the polyps.