specimen from Station V., seem to be more thinly scattered, especially on the ventral surface; their central process is not smooth, but usually provided with some spines and its top is generally bipartite. Only once have I found a minute wheel resembling those in *Lætmogone*, but this has probably been torn off from another animal, and has accidentally stuck to the rough integument of the individual under examination. The cloaca is far from being as large as in the individual from Station V. The reproductive organ is very large, attains a length of 125 mm., and resembles exactly in form the one above described; each of its posterior sacciform portions measures 55 to 60 mm. in length and 16 mm. in breadth, and is furnished with round tuberculose protuberances, thus having almost the shape of a spike of maize. The walls of the reproductive organ are strengthened, as is the case with the individual from Station V., by three- or four-armed deposits, with the arms spinose and slightly curved.

Psychropotes,1 n. gen.

Body gradually decreasing in height forwards, its foremost part being rather thin and depressed; the brim rather broad anteriorly. Mouth and anus ventral, situated at greater or smaller distances from the extremities of the body. Tentacles ten to eighteen. Pedicels arranged in a single row round the brim of the body and in a double one along the odd ambulacrum. The dorsal surface with a smaller number of more or less minute processes, and with a large, broad and flat appendage, crossing the odd interambulacrum posteriorly.

Psychropotes longicauda, n. sp. (Pl. XXVII. fig. 1, and Pl. XXVIII.).

Body elongated, from four to five times as long as broad; its height decreasing gradually forwards and its breadth slightly narrowing backwards. Tentacles eighteen, almost equally large; their large discoidal terminal part with about sixteen small retractile processes round its edge. The dorsal surface with about five pairs of minute processes anteriorly; its very large, flat appendage situated near the posterior extremity of the body. Integument rather thick and soft, with four-armed, cruciform calcareous deposits, the arms of which are partly almost straight, slender, and provided with long spines, partly more or less curved, stronger and giving off shorter spines.

Colour in alcohol greyish violet, the ventral surface brownish. Length, about 140 to 150 mm. Breadth, about 55 mm.

Habitat.—Station 156. February 26, 1874. Lat. 62° 26' S., long. 95° 44' E. Depth, 1975 fathoms; diatom ooze. One specimen. Station 157. March 3, 1874. Lat. 53° 55' S., long. 108° 35' E. Depth, 1950 fathoms; diatom ooze. Two specimens. Station