

Psychropotes loveni, n. sp. (Pl. XXVII. figs. 2-4).

Body depressed, decreasing in height towards each extremity, of almost equal breadth throughout, from twice to twice and a half as long as broad. Tentacles ten, almost equally large; their terminal part contracted and destitute of visible processes. The dorsal surface with a pair of minute conical processes placed a little in front of its middle; its hindmost part prolonged into the large flat transverse appendage, the broad truncated top of which is provided with two short processes. Integument thin and transparent, with numerous cruciform calcareous deposits resembling those of the preceding species.

Colour in alcohol light violet; pedicels, especially those of the odd ambulacrum, tentacles, and the oral disk darker, almost blackish violet. Length, about 45 to 50 mm. Breadth, about 15 to 20 mm.

Habitat.—Station 146. December 29, 1873. Lat. $46^{\circ} 46'$ S., long. $45^{\circ} 31'$ E. Depth, 1375 fathoms; bottom temperature, 1.5° C.; globigerina ooze. One individual.

The ventral surface is flat and the dorsal one slightly convex, so that the body is very depressed; the height decreases backwards but especially forwards. The terminal part of the tentacles is contracted, so that no processes are distinguishable. The mouth and anus are situated on the ventral surface, the former 8 to 10 mm. behind its anterior extremity and the latter immediately in front of its posterior end. The pedicels are minute, and their arrangement resembles that of the preceding species. The two small conical processes in the middle of the back attain a length of only 1 to 2 mm. The large, thin dorsal appendage is at its base of the same breadth as the body itself, and its broad truncated end gives off on each side a short conical process.

The rather thin and transparent integument is supported by numerous calcareous deposits (Pl. XXXV. fig. 2), of about the same shape as those of *Psychropotes longicauda*; the arms of those deposits are usually provided with only one very long process and a few minute ones, and their length varies greatly, from 0.26 mm. to much less. The four-armed deposits of the inner layer of the perisoma (Pl. XXXV. fig. 3) are partly very slender and furnished with long spines, and partly almost smooth, and only supplied with a single central process. The deposits of the ventral surface (Pl. XXXV. fig. 1) give off a small central process, and their more or less curved arms carry some minute spines at their ends. The pedicels are almost destitute of spicula or possess only a few, while the tentacles are strengthened by many larger and smaller ones which are unbranched.

Psychropotes semperiana, n. sp.

Body elongated, about four times longer than broad. Tentacles sixteen, of nearly equal size, their large discoidal terminal part with small retractile processes especially round its edge. The dorsal surface with three pairs of small processes; its large broad and thin