

## Subfamily MASTIGOTEUTHIDÆ, Verrill.

*Mastigoteuthis*, Verrill.

*Mastigoteuthis agassizii*, Verrill (Pl. XXIX. figs. 8-10).

1881. *Mastigoteuthis Agassizii*, VII., "Blake" Rep., p. 100, pls. i, ii. figs. 2, 3.

1881. " " VII., Ceph. N. E. Amer., p. 297, pls. xlvi, xlvii. figs. 2, 3.

1884. " " VII., Second Catal., p. 243.

*Habitat*.—Station 2, south-west of Tenerife, February 17, 1873; lat. 25° 52' N., long. 19° 22' W.; 1945 fathoms; Globigerina ooze. Fragments of a tentacle, found adhering to the dredge rope.

Off North Carolina, U.S.A; lat. 33½° to 34½° N., long. 75½° to 76° W., and 647 to 1632 fathoms (Verrill).

When these fragments were obtained Dr. von Willemoes-Suhm mounted several of the suckers as microscopic objects, and his diary has the following mention of the occurrence: "The arms of a cuttle-fish were brought up having suckers which show a horny denticulation of the finest arrangement. See preparations."

From these preparations the drawings on Pl. XXIX. have been made, which show the tentacular suckers to be hood-shaped, with a rather small aperture and a horny ring bearing from six to eight strong, pointed teeth, and surrounded by a broad papillary area, with two rows of spinous papillæ.

A thickened band of the horny material extends round the posterior and proximal part of the sucker, where it is visible through the integuments (fig. 9).

The fragments picked up by the Challenger have a combined length of 42 cm. or about one-third longer than the tentacle measured by Verrill.

The sucker-bearing portion is about 18.5 cm. long, and the greatest diameter (4 mm.) is about 7 cm. from the extremity; at the proximal part of the sucker-bearing portion the diameter has diminished to 3.5 mm. and a fragment which was apparently still nearer the base measures only 2.75 mm. From these dimensions it may be concluded that the specimen was of considerably greater magnitude than the larger of the two measured by Verrill, its total length from the posterior extremity to the end of the sessile arms having presumably been about 30 cm.

No portion of the present tentacle (of which the extreme tip has fortunately been preserved) is entirely surrounded by suckers, as Verrill indicates to have been the case with his examples, although his figure (*op. cit.*, pl. xlvi.) hardly agrees with this; and at the widest portion of the tentacle almost exactly half its circumference is covered by suckers.

This difference, and also the fact that the tentacle instead of tapering gradually