

Bathyteuthis abyssicola, Hoyle (Pl. XXIX. figs. 1-7).

1885. *Bathyteuthis abyssicola*, Hoyle, Narr. Chall. Exp., vol. i. p. 272, fig. 108.

1885. „ „ Hoyle, Prelim. Rep. II., p. 309, fig. 2.

Habitat.—Station 147, Southern Ocean, between Marion Island and the Crozets, December 30, 1873; lat. $46^{\circ} 16' S.$, long $48^{\circ} 27' E.$; 1600 fathoms; Diatom ooze. One specimen.

The Body is subcylindrical, somewhat narrowing towards and bluntly rounded at the posterior extremity. The *fins* are small, separate; each is somewhat rectangular in shape, with rounded angles, and attached to the body by one angle. The *mantle-margin* is almost transverse, but projects slightly in the dorsal median line, and forms a shallow sinus behind each eye and the siphon. The *mantle-connective* (fig. 2) consists of a long linear ridge, extending quite to the margin, and fitting into a corresponding, but somewhat shorter and broader, groove on the base of the *siphon*, which is short, tapering, and bluntly pointed, and fits into a shallow depression below the head, but has no dorsal bridles.

The Head is much broader than the body, being distended laterally by the enormous eyes, which look outwards and forwards, and have bright, prominent, glistening lenses.

The Arms (fig. 3) are unequal, the order of length being 4, 3, 2, 1, and about one-fourth the length of the body: they are all conical, and taper to slender points; each has a distinct angle along the outer side, which expands to a distinct web in the fourth pair; there is also a very narrow delicate web along each side of the sucker-bearing face. The *suckers* (fig. 4) are very minute, pedunculate, and are arranged in two irregular rows, almost embedded in the arm; they are spheroidal, the horny ring has five or six blunt-pointed teeth and is surrounded by two or three rows of conical papillæ. No *hectocotylisation* was observed in the specimen. The *buccal membrane* (fig. 3) is very large, has the usual seven points, connected by ligaments with the arms; each point bears one or two suckers.

The Tentacles are almost equal in length to the head and body together; the *stem* is very slender, cylindrical, and grooved along the inner aspect (fig. 5); they taper away rapidly towards the extremity, no *club* being formed: the *suckers* cover only the distal eighth of the tentacle in its inner aspect; they are smaller than those of the sessile arms, and almost imperceptible to the naked eye; they are urn-shaped, and have a smooth horny ring, surrounded by about two rows of very small papillæ (fig. 6).

The Surface is covered with minute wrinkles, probably due to the action of the spirit.

The Colour is a very deep purplish-brown.

The Gladius (fig. 7) was unfortunately somewhat damaged; for the anterior two-thirds it resembles that of an *Ommastrephes*, but posteriorly it expands into a broad blade resembling that of *Loligo*; although somewhat damaged during the extraction it was still