

Moseley<sup>1</sup> in 1876. It is apparently a deep-sea representative of the pelagic Salpidæ, and may possibly be fixed to the bottom. Our knowledge of its structure is still very limited, and the embryology and life-history are totally unknown.

Although in some respects this form does not agree with the definition of the sub-order Hemimyaria given above, still on account of its probable relationship to the Salpidæ—and considering the imperfection of our knowledge of *Octacnemus*—I have thought it best to place it in this sub-order, at least until we know more about it, rather than to form an additional group for its reception.

### *Octacnemus*, Moseley.

*Octacnemus*, Moseley, Trans. Linn. Soc. Lond., ser. 2 (Zool.), vol. i. p. 287, 1876.

*Body* flattened antero-posteriorly (?), probably attached by the posterior end.

Margins prolonged to form eight conical processes.

*Test* gelatinous, thin, transparent.

*Mantle* slight. Musculature in the form of narrow muscle bands, which are mainly confined to the conical processes.

*Branchial Sac* with its length directed dorso-ventrally, and having merely imperforate pits in its walls, and no direct connection with the peribranchial cavity.

*Dorsal Lamina* unrepresented.

*Alimentary Canal* coiled up along with the reproductive organs to form a visceral mass, placed at the dorsal edge of the posterior end of the body.

*Reproductive Organs* hermaphrodite.

Further characteristics and remarks upon the structure and affinities of the genus will be found under the species described below.

Whether the two specimens in the collection represent distinct species or not, I cannot determine. They differ in some respects, but are so imperfect, that I do not feel justified in founding a second species.

### *Octacnemus bythius*, Moseley (Pl. X. figs. 1-18).

*Octacnemus bythius*, Moseley, Trans. Linn. Soc. Lond., ser. 2 (Zool.), vol. i. p. 287, 1876.

This species was formed by Professor Moseley in 1876 for the reception of a specimen obtained on March 1, 1875; Station 218; South Pacific; lat. 2° 33' 0" S.,

<sup>1</sup> On two new Forms of Deep-sea Ascidiæ, obtained during the Voyage of H.M.S. "Challenger," Trans. Linn. Soc. Lond., ser. 2 (Zool.), vol. i. p. 287, 1876.