

Genus 1. *Lophogaster*, M. Sars, 1856.

*Lophogaster*, M. Sars, Forhandl. Skand. Naturf., Möde i Christiania, 1856, p. 160.

*Ctenomysis*, Norman, Rep. Brit. Assoc., 1861, p. 151.

*Generic Characters*.—Carapace distinctly sculptured, forming anteriorly a broad tridentate frontal plate, posterior margin deeply emarginate in the middle, leaving last segment of trunk wholly exposed above, lateral wings produced, pointed. Caudal segments with well-defined lamellar epimera, last segment subdivided by a transverse suture. Eyes globular, partly covered by the frontal plate. Antennular peduncle very short and thick, inner flagellum small, outer remarkably strong and elongate. Antennal scale cordiform, outer edge serrate, inner setose. First pair of maxillæ without any palp, second pair with only two masticatory lobes; palp comparatively small. First pair of legs (gnathopoda) with terminal joint obtusely rounded and densely hirsute. The remaining legs rather robust, with strongly developed dactylus. Branchiæ tripartite, the branches regularly bipinnate, and each pinnula exhibiting a double series of small leaflets. Telson produced, with apex entire, and armed with strong terminal spines. Outer plate of uropoda not subdivided at extremity, outer edge straight, and terminating in a small dentiform projection.

*Remarks*.—In the above diagnosis I have made an attempt to arrange together several characters, that in my opinion should be regarded as peculiar to the present genus, when compared along with the three new genera brought to light by the Challenger Expedition. The genus which, as that first established, may be taken to be the type of the family, is as yet represented only by a single species, *Lophogaster typicus*, formerly regarded exclusively as a northern form, but now having also been met with during the Challenger Expedition, proved to exhibit a very wide geographical distribution.

1. *Lophogaster typicus*, M. Sars (Pl. I. figs. 1-7).

*Lophogaster typicus*, M. Sars, Forhandl. Skand. Naturf., Möde i Christiania, 1856, p. 160.

*Ctenomysis alata*, Norman, Rep. Brit. Assoc., 1861, p. 151.

*Lophogaster typicus*, M. Sars, Univ. Progr., 1862.

Of this interesting Schizopod, fully described by the late Professor M. Sars, there are three more or less complete specimens in the Challenger collection, from two Stations, at no great distance apart, both south of the Cape of Good Hope. One of the specimens is a full-grown male, the other two (one of which is defective) are females.

I have most carefully compared these specimens with the form occurring on the Norwegian coast, without, however, having detected any distinctive character warranting the assignment of specific difference, and hence I am obliged to regard them as belonging to the typical species, notwithstanding the remarkable fact of their occurrence in a locality so widely distant from the Norwegian Sea.