

Second pair of maxillæ with terminal joint very broad, exognath comparatively small. First pair of legs nearly similar in structure to maxillipeds and succeeding legs, save that the terminal joint is somewhat expanded and armed with a fascicle of short spines. The two last pairs of legs quite rudimentary, being present only as minute, setiferous processes. The four anterior pairs of gills forming single, curved stems, fringed with a row of narrow gill-sacs; the three posterior pairs much more complex, sending off a branch interiorly; exterior branch in last pair to a greater or less degree abundantly arborescent. The usual number of luminous globules present.

*Remarks.*—This genus was established by Dana, who distinguished it from the genus *Thysanopoda*, M.-Edw., chiefly by the rudimentary character of the two posterior pairs of legs. This, indeed, would seem to be one of the most striking features by which the present genus may be distinguished from other genera of Euphausiidae. Moreover, the structure of the gills is somewhat different from that in other forms of this family.

The genus at present comprises no less than eleven different species, all of which are represented in the Challenger collection. Of these, four only have been previously recorded, the other seven being new. The Arctic species established by Krøyer under the names of *Thysanopoda inermis*, *Thysanopoda neglecta*, and *Thysanopoda longicaudata*, which I previously referred to the present genus, ought to be comprised within a distinct genus, *Boreophausia*, G. O. Sars, not represented in the Challenger collection.

Since the genus *Euphausia* may be regarded as the type of the family, I have deemed it advisable, before passing on to the special description of the species, to give a general account of its organisation, as gathered from a careful dissection of several specimens belonging to one of the species, *Euphausia pellucida*, Dana.

*General Description of the Genus.*—The form of the body (see Pl. XI. figs. 1, 2; Pls. XIII.–XVI.) is generally rather slender, and somewhat compressed, with the tail powerfully developed and always much longer than, sometimes even exceeding twice the length of, the anterior division.

All the integuments are very thin and translucent, admitting of the muscles of the body, and also certain of the viscera, being more or less distinctly traceable through them.

The carapace, as in other Euphausiidae, is comparatively small, leaving the bases of the legs, with their gills, bare, and posteriorly it does not completely cover the last segment of the trunk, a portion of which always appears exposed above. Differing from all other families of Schizopoda, it is, moreover, connate with the trunk along the whole of the median line, in such a manner that none of the segments, excepting the last, appear completely defined dorsally. Regarding its structure, it is very thin and pellucid, without any kind of sculpture, save a slight transverse depression on its anterior part, representing the cervical sulcus. Posteriorly it exhibits in the middle a conspicuous emargination, encompassing the exposed dorsal part of the last segment of the trunk. The lateral wings of the carapace are evenly rounded, and project a little over the sides