

The uropoda (fig. 31) are still rather small, but have their basal part and terminal plates well defined, the latter exhibiting a few slender marginal bristles. The outer plates are highly distinguished by the remarkable length of the spine jutting out from the outer corner; moreover, this spine is finely denticulate along the inner edge.

Habitat.—The larva described above was taken December 24, 1873, in the Southern Ocean, off Prince Edward Island.

Family 4. MYSIDÆ.

This family, the lowest in rank among the Schizopoda, comprises both littoral and pelagic forms, as also true deep-sea animals. In none of them is the slightest trace of true gills to be observed, and they are thereby very sharply defined from the three preceding families of Schizopoda, in which the gills are invariably well developed. In some forms, however, a peculiar folding of the integument, covered by the free parts of the carapace, can be discerned, and this structure may possibly stand in some relation to the respiratory function, though scarcely corresponding morphologically to the true gills in other Podophthalmia. I first called attention to this peculiar structure as early as the year 1867, when describing the fresh-water variety of *Mysis oculata*, Fabr. (*Mysis relicta*, Lovén),¹ and shall in the present Report describe a similar structure in the large deep-sea Mysidan, *Boreomysis scyphops*, G. O. Sars. Another appendage, peculiar to the males only, and issuing from the base of the inner branch of the pleopoda, may perhaps be also regarded as subservient to respiration. More especially in the males of the genus *Siriella*, Dana (*Cynthia*, Thompson), do these appendages present an appearance that strongly recalls that of true gills.

As a character common alike to all Mysidans, and sharply distinguishing them from other Schizopoda, may be mentioned the rudimentary state of the caudal limbs in the females, forming, as they do, very small setiferous lamellæ that have no relation whatever to locomotion, and thus have little or no claim to the term "pleopoda." This, in some genera, as *Mysis*, *Heteromysis*, *Mysidella*, also applies to the males. But in most of the genera the caudal limbs in the males are modified so as to assume the character of true natatory organs, being constructed in a manner similar to the pleopoda in the Lophogastridæ and Eucopiidæ.

The Mysidæ comprise numerous genera, most of which are met with in the Northern Ocean, and some of the species, as *Mysis oculata*, Fabr., are at times found crowded together in enormous shoals, thus serving as food for whales and other large vertebrates.

The Challenger collection comprises fifteen species of Mysidæ, belonging to eight genera, one of which is new.

¹ Histoire naturelle des Crustacés d'eau douce de Norvège, pt. i.