

surface of the animals and facilitate their floating, while in northern waters the species are devoid of such appendages. It is thus interesting to compare the widespread species *Calanus finmarchicus* (Fig. 416), which occurs in greatest abundance in boreal areas, with the tropical *Augaptilus filigerus* (Fig. 417), which has elaborate appendages, reminding one of peacocks' feathers. We find the same difference between *Oithona plumifera* and *Oithona similis*, and between *Euchæta marina* and *Euchæta norvegica* (Fig. 418). We find in these cases a perfect analogy with what Gran has described among the peridineæ in Chapter VI.; for instance, *Ceratium platycorne* (see Fig. 228, p. 324) in warm water en-

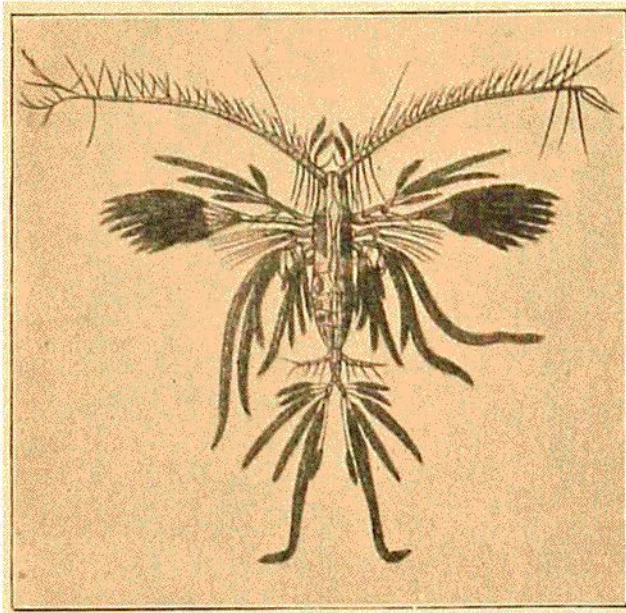


FIG. 417.  
*Augaptilus filigerus*, Claus.  
(After Zacharias, from Steuer.)



FIG. 418.  
*Euchæta norvegica*, Boeck,  
(From Sars.)

larges its surface, while in cold water the horns are much more slender, the lower specific gravity caused by the higher temperature rendering floating appliances necessary for both animals and plants (see also Chapter X.).

The Copepoda occur in all depths, and some authors have attempted to define certain bathymetrical regions, each with its own characteristic forms, but the observations available are insufficient to enable us to form definite ideas on the subject; much new light will doubtless be thrown on the matter when the reports of the "Valdivia" and "Michael Sars" Expeditions come to be published. The discussion as to whether the surface forms of cold regions are found in the deep water of warm regions is interesting.

The "Valdivia" Expedition captured *Euchirella venusta* and *Calanus finmarchicus* in a haul with a closing net between 1600 and 1850 metres