

the Challenger gatherings, fifty-eight belong to the Calanidæ. On the other hand, there can be little doubt that had it formed part of the plan of the expedition to investigate fully the littoral fauna of the countries visited, we should have found the proportionate number of species reversed for that zone in favour of the Harpacticidæ. The Calanidæ, indeed, by virtue of their enormously-developed anterior antennæ (often equalling, or more than equalling, in length the entire body of the animal), are specially adapted for an entirely natatory life, those organs when spread out at right angles to the body acting like the wings of a hovering bird, and so suspending the animal at almost perfect rest in the water. In the Harpacticidæ, on the contrary, we find antennæ usually so short that they can be of very little use as swimming organs,—this function probably devolving almost entirely on the feet. And as a result of this structure, the members of the family haunt chiefly either the muddy sand of the sea-bed, or littoral situations, where there is abundance of weed, on the fronds of which they rest and find their food, swimming only fitfully and by short jerks.

Following the classification adopted in my Monograph of the British Copepoda,¹ I unite with the Calanidæ the species referred by Dr Claus to a separate family, Pontellidæ,—distributing the Calanidæ under two sub-families,—Calaninæ and Pontellinæ.

The fifty-eight species of Calanidæ taken by the Challenger belong to the following genera:—*Calanus*, *Eucalanus*, *Rhincalanus*, *Hemicalanus*, *Pleuromma*, *Heterochæta*, *Leuckartia*, *Undina*, *Scolecithrix*, *Euchæta*, *Calanoides*, *Ætidius*, *Drepanopus*, *Phyllopus*, *Temora*, *Centropages*, *Candace*, *Acartia*, *Corynura*, *Calanopia*, *Pontellopsis*, and *Pontella*.

Sub-family I. CALANINÆ, Dana.

This sub-family is characterised by the presence of only one eye, which is sessile and made up of several lenses.

Calanus, Leach.

Calanus, Leach, Dict. Sci. Nat. XIV., Art. Entomostraca (1819); Dana, in part, Crust. U.S. Expl. Exped. (1852), Boeck, Oversigt Norges Copepoder (1864); Lubbock passim; Brady, Monog. Brit. Copep. (1878).

Cetochilus, Roussel de Vauzème, Claus, Baird, Goodsir.

Monoculus, Günner, Act. Hafn. (1765).

Cephalothorax elongated, slender, composed of five or six segments; head usually separate from the thorax, and often more or less distinctly divided near the middle by a transverse "cervical suture"; rostrum attenuated and bifid. Eyes small, situated at the back of the head, near the middle line, each composed of two lenses. Anterior antennæ long, composed of twenty-five joints, alike on the right and left sides in both

¹ Ray Society, 1878.