

sexes, and possessing no hinge joint : those of the male are provided with thickened, club-shaped appendages, and the joints are often slightly narrowed at the base. Posterior antennæ two-branched, the secondary branch having three or four small intercalated median joints. Maxilla composed of a broad masticating portion, which bears a series of stout, short setæ, and a foliaceous, multifid palp made up of several digitiform segments, all of which bear numerous long and finely ciliated setæ. Mandibles large and strong, dilated and strongly toothed at the apex ; basal joint of the palp large and widened towards the apex, from which spring two nearly equal branches, composed (usually) of two, and three or four, joints respectively. Anterior foot-jaws broad and strong, provided with several marginal processes which bear strong curved setæ ; posterior foot-jaws elongated, composed of two large basal and five smaller apical joints, all of which bear long setæ. Five pairs of two-branched feet adapted for swimming, each branch composed of three joints ; in the male, however, the outer branches of the fifth pair on one or both sides are somewhat modified. Abdomen of the male five, of the female four-jointed.

The genus *Calanus* was established by Leach for the reception of the species called by Müller, in his *Entomostraca*, *Cyclops longicornis*, and in the *Zool. Dan. Prodr.* *Cyclops finmarchicus*, and identified by that author with Günner's *Monoculus finmarchicus*. It is impossible to say certainly what is the species referred to in Müller's figure. The caudal part has, I think, undoubtedly been drawn from *Temora finmarchica*, Baird, while the antennæ are much too long for that species, and are probably taken from *Cetochilus septentrionalis*, Goodsir, which species seems also to be meant in the description :—"Antennæ,—corpore longiores." But Günner's figures, from the general contour of the animal, the length of the antennæ, and the characteristic long subapical setæ, certainly belong to *Cetochilus septentrionalis*. I therefore follow Boeck in assigning the generic term *Calanus* to the form originally described by Günner, discarding the later name *Cetochilus*. Baird's *Temora finmarchica* will in this case stand as the type of the genus *Temora*. In accordance with this view it is impossible to accept Dr. Baird's identification of his *Temora finmarchica* with Günner's species. And though the generic name *Temora* holds good, it seems best, considering the doubt which must rest upon the meaning of Müller's figure, to discard the name *longicornis* (adopted by Boeck and by myself in the *Monograph of the British Copepoda*—from Müller) and to accept that of *longicaudata* proposed in 1857 by Sir John Lubbock. I have thought it best to give in detail my reasons for this nomenclature, inasmuch as a different course is advocated by Dr. Claus, and, I think, by Giesbrecht.

As understood by Dana, this genus includes a great number of species properly referable to several distinct genera, notably to *Calanus* (proper), *Hemicalanus*, *Eucalanus*, and *Temora*, but it is not possible in many cases to assign Dana's species to their true position, the published details being insufficient for that purpose. The presence of five pairs of well-developed swimming feet in both sexes, and the peculiar modification of the fifth pair