

Hemicalanus, Claus.

Hemicalanus, Claus, Die frei lebenden Copepoden, 1863 (not *Hemicalanus* of Dana).

Body pellucid, somewhat depressed, eyes entirely wanting (?). Anterior antennæ twenty-five jointed, that of the left side in the male slightly geniculated. Posterior antennæ elongated, secondary branch five or six-jointed, the median joints minute and sometimes not distinctly separate. Mandibles almost styliform, two-toothed. Anterior pair of foot-jaws elongated, posterior still longer, robust. Fifth pair of feet two-branched, those of the female like the preceding pairs, as also those of the male,¹ except that the outer branch is uncinatè. Abdomen short, composed in the male of five, in the female of four segments.

Of this remarkable genus I have seen but few examples, most of which were very imperfect. The foregoing definition is therefore copied almost verbatim from Dr. Claus, though in some points it does not quite agree with my own observation, to which, however, I cannot in this case allow much weight. In the best of the Challenger specimens (figured in Pl. IX. fig. 1) there were two small closely-approximated spots on the front of the head, which I took to be eyes, and I was unable, except in one specimen, to make out more than two joints in the secondary branch of the posterior antenna. The joints of the anterior antennæ were also very indistinctly visible, and those organs, as shown in fig. 1, are evidently imperfect.

The genus as originally constituted by Dana contains species probably belonging to two or more genera, and is certainly in that form untenable. It is impossible, indeed, from the insufficiency of the published characters, to say with certainty where the species assigned to it should properly be placed. None of them can be referred to *Hemicalanus* as understood by Claus, and upon which he makes the following remarks :²—"This genus, of which five species are known to me—on account of its delicate structure, the transparency of its body, and its several peculiarities of organisation—ranks amongst the most beautiful and interesting of all the Calanidæ. The entire body is extremely slender, like that of *Calanella* (*Eucalanus*), but broader and flatter; the abdomen is smaller and more slender but completely segmented, composed in the female of four, or rarely three, and in the male of five segments; the last segment, bearing the furca, is broad, and often produced, fan-like at the sides. In the species known to me, the cephalothorax is composed of four segments only, the head and first thoracic, as well as the two hindmost segments of the body, being coalescent. . . . The male antenna is hinged between the nineteenth and twentieth joints, but there is no marked swelling of the foregoing joints. The posterior antennæ are largely developed, the main branch of great length, and

¹ I cannot reconcile this statement of Dr. Claus with my observation of the fifth pair of feet in the Challenger specimen, which were as represented in fig. 1.

² Die frei lebenden Copepoden, p. 177. The translation here given is an abstract only of the more important parts.