

of the species in some other respects; considering also that I have met with no gathering of the adult form in which the *gracile* form does not also occur, and that Dr. Claus likewise found both forms in the Mediterranean,—I yet adhere to the belief that a thorough study of the development and morphology of the animal will show these two debateable forms to be but varieties of one and the same species. It is perhaps worth noting that the only *females* which I have seen with attached spermatophores occurred in one or two gatherings containing *males* which had the distorted abdomen.

*Habitat*.—Lat. 47° 25' S., long. 130° 12' E.; off Port Jackson; off Cape Howe, Australia; off Kandavu, Fiji; off the Ki Islands; between Api and Cape York; Pacific, north of the Sandwich Islands; South Pacific, lat. 40° 3' S., long. 132° 58' W.; and off the west of Patagonia; lat. 36° 44' S., long. 46° 16' W.; lat. 37° 45' S., long. 33° 0' W.; Atlantic from lat. 5° N. to 2° N.; and about lat. 26° N., near Station 353; in lat. 36° 32' S., long. 132° 52' W. (Station 287); in lat. 64° 37' S., long. 85° 49' E. (Station 154); in lat. 37° 17' S., long. 53° 52' W. (Station 320).

### *Heterochæta*, Claus.

*Heterochæta*, Claus, Die frei lebenden Copepoden, 1863.

Body attenuated behind, abdomen of the male five-, of the female four-jointed. Anterior antennæ twenty-five-jointed; that of the left side in the male feebly geniculated. Colouring matter of the eye entirely wanting. Posterior antennæ as in *Calanus*. Anterior branch of the maxilla obsolete. Anterior pair of foot-jaws very stout, armed with strong curved and partly pectinated setæ; posterior foot-jaws slender, nearly as in *Calanus*. Fifth pair of feet two-branched, those of the female like the preceding pairs, except that the outer branch bears a very long divaricate spine at the apex of its second joint; in the male the outer branches are prehensile and slightly different on the two sides. The left caudal stylet bears one excessively long seta.

*Heterochæta*, though abundantly distinct from any other described genus, presents some interesting points of resemblance, especially to *Candace*, *Leuckartia* and *Pleuromma*:—to *Candace* in the powerfully formed posterior foot-jaw, to *Leuckartia* and *Pleuromma* in the general build of the swimming feet and of the anterior antennæ. But the remarkably long seta of the left caudal segment, the absence of the internal branch of the maxilla, the characters of the fifth pair of feet in both sexes (which come nearer to *Centropages* than to any other genus), together with the very slightly deformed left anterior antenna of the male, constitute a sufficiently distinctive series of generic characters.