twice as long as broad-as long as the two preceding abdominal segments of the femaleand bear five setæ, which are shorter than the abdomen, except the fourth (counting from the outside) of the left stylet, which is about twice as long as the whole body of the animal. The spermatophores (fig. 12) are very large, and are attached singly; the contained spermatozoids (fig. 13) are also of unusual magnitude.

Habitat.-Torres Straits (Station 185); lat. $40^{\circ} 3^{\prime} \mathrm{S}$., long. $132^{\circ} 58^{\prime} \mathrm{W}$. (Station 288); lat. $36^{\circ} 44^{\prime}$ S., long. $46^{\circ} 16^{\prime}$ W., 2650 fathoms (Station 325); lat. $37^{\circ} 45^{\prime}$ S., long. $33^{\circ}$ $0^{\prime}$ W. (Station 330); lat. $7^{\circ} 33^{\prime}$ N., long. $15^{\circ} 16^{\prime} \mathrm{W}$. (Station 350); lat. $26^{\circ} 21^{\prime}$ N., long. $33^{\circ} 37 \mathrm{~W}^{\prime}$. (Station 353); lat. $46^{\circ} 46^{\prime}$ S., long. $45^{\circ} 31^{\prime}$ E. (Station 146); lat. $37^{\circ} 17^{\prime}$ S., long. $53^{\circ} 52^{\prime} \mathrm{W}$., 600 fathoms (Station 320).

Though occurring in several very widely separated localities, this species seems to be nowhere abundant, not more than three or four specimens having been detected in any one gathering. All these are, as I think, referable to the same species, but I am not quite certain that they can be identified absolutely with either of the two forms described by Dr. Claus. As to Heterochocta spinifrons, that author lays especial stress upon the length of the anterior antennæ:-"die vordern Antennen beträchtlich länger als der Körper,"-whereas in our specimens the antennæ are very little, if at all, longer than the body. Again, in Heterocheta papilligera the posterior foot-jaws are stated to have only one spine:-"am Basalgliede des untern Maxillarfusses fehlt der obere Dorn,"-which is conclusive against its agreement with the Challenger specimens. On the whole, though with some doubt, it seems best to accept for the present the specific name spinifrons. None of the specimens which I have examined present the peculiarities ascribed to Heterochata papilligera.

> Leuckartia, Claus.
> Leuckartia, Claus, Die frei lebenden Copepoden, 1863.

In general form like Heterochceta. Anterior antennæ serrated, twenty-five-jointed; that of the left side in the male geniculated, the five joints preceding the hinge slightly swollen. Posterior antennæ and mouth organs similar to those of Calanus. Fifth pair of feet two-branched, that of the right side having the outer branch strongly clawed. Both branches of the first four pairs of feet three-jointed. Each caudal stylet provided with one excessively long and several short setæ. Eye altogether wanting.

I cannot speak from my own knowledge as to the existence or non-existence of an eye. The passage in the foregoing definition which refers to this matter is taken from Claus.

## 1. (?) Leuckartia flavicornis, Claus (Pl. XV. figs. 1-9, 16).

Leuckartia flavicornis, Claus, Die frei lebenden Copepoden, p. 183, pl. xxxii. figs. 1-7.
Length, $1-4$ th of an inch ( 6.2 mm .). Body elongated; anterior antenna slender, about as long as the body, moderately setiferous; those of the male plentifully provided

