

that compresses and holds down the posterior margin of the carapace; the short fur on the post-orbital regions, extending on each side of the gastric region of the carapace, and repeated on the third and fourth somites of the pleon; and the strength, and more particularly the form of the several parts of the rhipidura or tail-fan, which is formed by the sixth pair of pleopoda and the telson.

The sixth pair of pleopoda is implanted on the ventral surface within the margin of the coxal plate and is directed anteriorly, and the outer plate is very much longer than the inner, and possesses a diæresis near its distal extremity. Although the outer or anterior plate is very much longer than the posterior, yet the latter equals the length of the posterior margin of the former, and their distal margins form a continuous line. The telson is quadrate, and the terminal or distal margin when depressed a little forwards is continuous with the posterior margin of the rami of the sixth pair of pleopoda, and this is capable of resting through its entire length against the floor on which the animal lies, and so enables it to creep backwards with considerable persistence and power.

The large chelate pereopoda differ on each side; each is furnished with long delicate spine-like teeth, but that on the left shows most probably the character and appearance of the normal chela, while that on the right exhibits an extensive deviation. The propodos has increased in size as a consequence of the powerful muscles necessary to sustain and carry the enormously long dactylos and pollex, which nearly equal the entire length of the animal; the form of the chela is that of two combs meeting, and it appears probable that when partially closed it has the power of raking the neighbourhood to a considerable distance, and so entrapping small animals and other material from which the blind creature has the power of selecting its food, which it carries to its mouth by means of its smaller chelate pereopoda, the larger ones from their length being incapable of that office. The mouth is furnished with a pair of powerful denticulated mandibles, that are evidently capable of crushing tolerably hard substances. The anterior lip is calcified, firm, and denticulate on the antero-external margin (Pl. VI. fig. c). The epistoma is horizontal or nearly so, and occupies a considerable space between the antennæ and the mouth, separating the phymacerite to a considerable distance from it. The phymacerite is very large, and is situated on the first or coxal joint of the second or outer pair of antennæ, which is short, broad, and separated from the body by a distinct suture.

This animal is intermediate in character between *Thalassina* and the Astacidæ, to which latter family Willemoes-Suhm first referred it under the name of *Astacus zaleucus*. Its nearest congener appears to be *Calocaris*, Bell, of the British seas, from which it differs in the third pair of pereopoda being minutely chelate instead of monodactyle, and in having no apparent organs of vision, instead of, as in *Calocaris*, having the "eyes rudimentary, sub-globose, without any pigment or cornea," which, when Bell described it in 1853, was a feature "unique in the whole of the higher forms of Crustacea." *Calocaris*