

and propodos are short and form a rigid curve, and terminate in a short flat spatuliform dactylos that is distally fringed with stiff spines. The coxa supports an imperfect or rudimentary forked mastigobranchia, tipped with long hairs, and a podobranchial plume made up of trichobranchial filaments and phyllobranchial plates longitudinally implanted on the stem. The basis carries an ecephysis that is as long as the gnathopod.

The second pair of gnathopoda has seven joints, the meros and ischium being distinct and continuous; both, but more especially the ischium, are longitudinally grooved or excavated, forming a hollow in which lies closely impacted, when at rest, the first long joint of the basecephysis; the carpos is long and curved, the propodos straight, and the dactylos long and straight, fringed on both the upper and under margins with long hairs, as also on the under or inner side of the propodos, ischium, and meros. The basecephysis is about two-thirds the length of the gnathopod, and is fringed with long hairs. The coxa supports a short, slightly curved, rigid mastigobranchia, fringed on the lower margin with short hairs and tipped with long ones at the extremity; from the base of the mastigobranchia arises a well-developed podobranchial plume; the lower and basal portion of the posterior or inferior side consists of a series of trichobranchiate filaments, and on the anterior portion, near the distal extremity of the same side, are several phyllobranchial plates. On the coxa near the podobranchial articulation is a single bunch or fasciculus of long hairs.

The first pair of pereopoda consists of six articulated joints, the basis and ischium being fused together, leaving a distinct line of union defining the unused articulation between the two joints. The right is much larger than the left, and the coxa supports a short, curved, stiff, almost rudimentary, mastigobranchial process, thickly fringed with a fur of short hairs along the lower margin, and tipped with long hairs that are serrate along the sides; from the base of the mastigobranchia arises a well-developed podobranchial plume, consisting of trichobranchial filaments attached to the stem from the base to the extremity on the under side, and three phyllobranchiate plates at the distal extremity on the upper side, not far from the articulation of which, on the coxa, stand two well-formed fasciculi of long hairs, fringed with minute, sharp, short cilia, similar to those pointed out by Professor Huxley as existing in the genus *Astacus*. These two fasciculi are distinct from each other, well defined, and the hairs are as long as the podobranchial plume. The left differs from the right in size but resembles it in form, and is imperfectly chelate. The dactylos is long, arched, diagonally compressed, and reaches considerably beyond the extremity of the short, sharp pollex of the propodos: it is fringed with hairs upon the outer margin and with short blunt truncated denticulations on the inner, and only at the base impinges against the anterior serrated margin of the pollex: the propodos is quadrate, nearly as broad as long, compressed and slightly rounded both on the inner and outer surfaces, flattened on the upper, and fringed with strong hairs on the upper and lower margin; the carpos is short and triangular in