The first pair of antennæ (Pl. XCII. $b$ な $b$ ) has the peduncle extending to the extremity of the rostrum in the male, and a little beyond it in the female. The first joint reaches beyond the anterior margin of the cye, and is excavate in its entire length to receive that organ ; near its base it is lobed on the inner side, where the acoustic organ is situated, the opening of which is on the lower external surface, beneath a squamiform process or plate ( $b^{\prime \prime} q$ ). The second joint is about half the length of the first and subcylindrical. The third is shorter than the second and terminates obliquely, the inuer angle, which is the more advanced, supports the inner, shorter, and less important flagellum, the outer angle, which is broad and oblique, supports the primary or more important flagellum, which in the male is thicker than in the female. It is formed by a large number of short articuli that are broad at the base and for about half the length of the appendage, and then rapidly diminish as the flagellum gradually narrows to a slender lash. The upper side of the thicker portion is flattened, while the lower is rounded and supplied with numerous fine membranous cilia which are more numerous in the male than in the female.

The second pair of antennæ ( $c$ ㅇ) has a peduncle that does not reach beyond the extremity of the second joint of the peduncle of the upper. The coxa or first joint is very short and supports a prominent phymacerite on the inner side, the second is broad and at its outer angle supports a large oval scaphocerite, which thins out on each side from the central line, and is fringed all round with long cilia. The outer margin is rigid, and the tooth which is so universally prominent in the Macrura is reduced to a rudimentary condition, so as to be invisible to the unassisted eye, but a rigid margin is traceable for some way from the base. The third and fourth joints are oblique to each other and both articulate with the second at the antero-internal margin; the fifth joint is narrow, cylindrical, and as long as the four preceding.

The mandibles ( $d$ ) are small and consist of a molar process only, and are enclosed deeply within the oral cavity so that they are entirely covered over by the cheiloglossa and metastoma.

The first pair of siagnopoda ( $e$ ) is small, lying closely pressed against the posterior surface of the metastoma; it consists of three branches, the central of which is fringed with stiff hairs.

The second pair of siagnopoda $(f)$ consists of a rudimentary one-jointed appendage, supplemented by a broad, thick, fleshy plate, which bears a thick fringe of hairs, centrifugally planted on its margin.

The third pair of siagnopoda ( $g$ ) consists of two foliaceous plates, the outer of which supports a lash-like appendage, and a thick, fleshy, smooth margined plate that tapers and projects anteriorly as well as posteriorly.

The first pair of gnathopoda ( $h$ ) is short, subpediform, and consists of seven joints. The coxa and basis are subequally short and wide; from the latter a long, slender, lash-

