

against the carpos; the dactylos is broad, short, and continuous with the distal extremity of the propodos; the coxa supports a short mastigobranchial plate and a branchial plume; the basis carries at its distal outer extremity a short ephysis; each joint is thickly fringed with hairs.

The second pair of gnathopoda (*i*) is six-jointed and pediform; the coxa carries a rudimentary mastigobranchia and a tuft of long hairs, and the basis a rudimentary ephysis reduced to a tubercle; the ischium is long, and the meros longer and more slender; the carpos is a little shorter than the meros, and fringed with short stiff hairs; the propodos is terminal, shorter than the carpos, cylindrical, tapering, and fringed with short hairs.

The first pair of pereopoda (*k*) closely resembles the second pair of gnathopoda, but is more slender. The second pair (*l*) has the right and left appendages unequal in length, owing to the carpos on the left side being nearly as long again as that upon the right, both are minutely chelate, the chela on the left side being smaller than that on the right. The posterior three pairs correspond in length, form and character, and are peculiar from the great length of the meros as compared with the ischium (*m*); the posterior margin is furnished with a series of strong and conspicuous spine-like teeth, and the dactylos is laterally compressed. The posterior pair is a little shorter than the preceding.

The pleopoda in the female have an elongated, flattened, longitudinally bent peduncle, supporting two long, foliaceous branches fringed with long hairs, and subequal in length in all excepting the first pair, which has the inner and anterior branch shorter for the purpose of supporting the ova, whereas in all the others it is free.

The sixth or terminal pair (*v*), which forms the lateral plates of the rhipidura, is strengthened down the median line of the outer branch as well as on the outer margin, and possesses a diæresis, the portion beyond which is narrower than that anterior to it.

*Heterocarpus alphonsi*, n. sp. (Pl. CXII. fig. 1).

Carapace furnished with five carinæ, of which the median is produced to a rostrum that is one and three-fourths longer than the carapace; it is armed dorsally with some large teeth, of which the posterior two stand near together upon the gastric region, and the most anterior a little distant from the apex of the rostrum; the under side is armed with eleven teeth, of which the anterior is subapical and the posterior in advance of the ophthalmopoda. The outer canthus of the orbit is armed with a strong tooth, which is not confluent with the upper lateral carina, and the infero-lateral angle is also armed with a short tooth, that is confluent with the lower lateral carina.

The first two somites of the pleon are smooth, but a distinct dorsal carina commences