

The first pair of pereopoda is short, not half the length of the preceding pair of appendages, appears to be only four-jointed, and exhibits no sign of having any prehensile power at the ultimate articulation. The second pair is longer than the first and not chelate, but terminates in a feeble joint, tipped with one or two hairs. The third pair is longer than the second, and, like it, not chelate, but terminates in an immature dactylos. The fourth and fifth pairs are in an incipient stage of gemmation.

The pleopoda are in a tolerably advanced stage; the first pair is single-branched, the others biramose. The sixth pair, which helps to form the rhipidura, is well developed; the outer plate is armed near the middle of the outer margin with a sharp tooth, and beyond this it is furnished with long and slender hairs.

Length, 6 mm. (0·24 in.).

*Habitat*.—Taken on March 15, 1875; lat. 1° N., long. 146° E.; in the Pacific Ocean, north-west of the Admiralty Islands.

This form has the branchiæ undergoing development. A two-lobed plume is attached to the membranous articulation between the walls of the pereion and the coxa of the second pair of gnathopoda (*i*).

The first (*k*) and second (*l*) pairs of pereopoda have each a seven-lobed plume similarly situated, while those attached to the third and fourth pairs are smaller, and appear to be fixed to the pereion rather than to the membranous articulation of the leg.

The stomach is visible through the carapace, and contains small masses of undigested food.

On each side of the carapace, posterior to the gastric region, there is a strong tooth, which owing to compression from the mounting of the specimen is represented too high in the figure; from it a fasciculus of muscles appears to spring, and are attached to the apophysis of the mandible.

*Observations*.—The slide on which this specimen is preserved is labelled by v. Willemoes Suhm "Sergestes cr. larva ten., W. Pacific," by which I presume that he considered one specimen to be *Sergestes crassus*, and others to be the young of some species that he proposed to name *Sergestes tenuis*.

### *Mastigopus acetiformis*.

Carapace one-third the length of the animal. Rostrum about two-thirds the length of the carapace, smooth, slender and horizontal; a small tooth situated behind the orbital angle on the dorsal surface; none corresponding with the position of the antennæ but a small cusp on the fronto-lateral angle; a small tooth stands above the mandibular attachment. The anterior five somites of the pleon are subequal in length, and all are