

The first pair of gnathopoda is subpediform and seven-jointed; the coxal joint supports a mastigobranchia and an arthrobranchial plume, and the basis an ecpysis; the two terminal joints are reflexed against the preceding.

The second pair of gnathopoda is pediform and five-jointed, the last two joints articulating with the preceding at the inferior angle of the distal extremity; the coxa carries a small mastigobranchia and an arthrobranchial plume; the basis supports a slender and moderately long ecpysis; the next two joints coalesce and are long and curved, and the terminal two are straight and fringed with long hairs.

The first two pairs of pereiopoda are slender, short, and subequally chelate; the next three pairs are slender and simple.

The pleopoda are biramose, the first pair having the inner branch in the form of a petasma.

The telson is damaged in the typical specimen, but appears to be long, slender, and tapering, having the sides depressed.

Length, entire, . . . . .	55 mm. (2.1 in.).
„ of carapace, . . . . .	20 „
„ of rostrum, . . . . .	2 „
„ of pleon, . . . . .	35 „
„ of third somite of pleon, . . . . .	6 „
„ of sixth somite of pleon, . . . . .	8 „
„ of telson, . . . . .	1 „

*Habitat*.—Station 159, March 10, 1874; lat. 47° 25' S., long. 130° 22' E.; south of Australia; depth, 2150 fathoms; bottom, Globigerina ooze; bottom temperature, 34°·5. One specimen, male. Trawled.

Station 215, February 12, 1875; lat. 4° 19' N., long. 130° 15' E.; south of the Philippines; depth, 2550 fathoms; bottom, red clay; bottom temperature, 35°·4. One specimen, damaged. Trawled.

*Hymenodora mollicutis*, n. sp. (Pl. CXXXVII. fig. 2).

Carapace smooth and slightly compressed anteriorly, a small carina traverses the frontal region in the median line, and projects anteriorly as a rostrum in the form of a small tooth. The dorsal surface of the pleon is smooth, without any sign of a carina or dental projection.

The ophthalmopoda are stout and flat and carry the tubercular protuberance distally on the inner side, near the ophthalmus, which is of a fawn or pale yellow colour.

The first pair of antennæ has the peduncle stout and deeply excavate at the base, and terminates in two flagella, of which the upper is much stouter than the lower.

The second pair of gnathopoda is robust and styliform.