

Phronima sedentaria (Forskål) (Pl. CLXII., B.).

1775. *Cancer sedentarius*, Forskål, Descr. Anim. quæ in itin. orient. observavit, p. 95.
 1776. " " Forskål, Icones rerum nat. quas in itin. orient. depingi curavit, tab. xli. fig. D, d.
 1796. *Cancer (Gammarellus) sedentarius*, Herbst, Naturgesch. der Krabben und Krebse, Bd. ii. p. 136, tab. xxxvi. fig. 8.
 1802. *Gammarus sedentarius*, Schousboe, Skrivter af Naturhist.-Selskabet, Bd. v. Hfte. 2.
 1802. *Phronima sedentarius*,¹ Latreille, Hist. Nat. des Crust. et des Insectes, vol. iii.

A specimen, which seems to agree with this species as well as any in the collection, is figured on the Plate of the natural size. An enlarged figure of the third peræopod is given for comparison with one drawn to the same scale of that peræopod in *Phronima megalodous*. The third peræopod of a young one taken along with the large specimen is also given, drawn to the same scale, and a figure of the terminal portion of the same peræopod much more enlarged.

Length, from the front of the head to the apex of the third pleon-segment, an inch and a quarter; the full length quite an inch and a half.

Locality.—Station 232, May 12, 1875; the *Hyalonema*-ground, Japan; lat. 35° 11' N., long. 139° 28' E.; depth, 345 fathoms; bottom temperature, 41°·1; surface temperature, 64°·2. One specimen, female, with young.

Remarks.—From the very extended distribution of the genus *Phronima* there arises a probability that it may include several species, but to establish clear marks of discrimination between the species is likely to require very extended research. Though it is easy to distinguish the adult males from the adult females, there are stages of growth when the two sexes are closely alike, and it is quite possible that some species when full grown present a close resemblance to the earlier stages in other species. The available marks depend to a great extent on the lengthening and shortening, the sharpening or rounding, of this apex or of that, on the question whether one tooth is more or less distant from another, or whether a margin is denticulate or crenulate. But all these marks are liable to so much variation, whether dependent (as may be the case) on the individual, or (as is certainly the case) on age and sex, that determinations of species are of necessity very problematical. Even if the limits of variation within any one species were definitely known, it is quite possible that in some of the stages it might be practically indistinguishable from some stage of a different species. In the young ones a tenth of an inch long, from the specimen taken south of Australia, March 9 and 10, 1874, the dactyloptera of the gnathopods were found to be very short, and the broad fourth joint of the third peræopods scarcely longer than the distal width, armed only with a minute front tooth;

¹ Most of the references given in the synonymy of the genus *Phronima* have to do with *Phronima sedentaria*, Latreille, so that it is scarcely worth while to repeat the list.