

whereas the character and arrangement of the branchiæ clearly demonstrate its approximation to the Astacidea. Mr. Miers, in his short Memoir published in the Linnaean Society's Journal, has followed the same classification, having been led to this

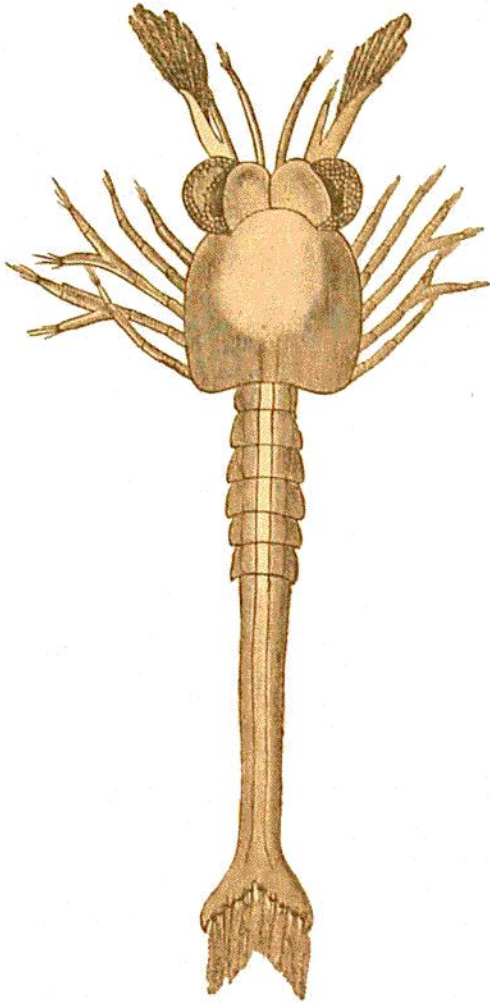


FIG. 42.—Zoea of *Spongicola venusta*, from a drawing by Dr. v. Willemoes-Suhm.

arrangement by the three anterior pairs of pereopoda being chelate, somewhat as they are in *Penæus*.

Among the numerous specimens captured some were carrying ova, and as those of one specimen had the embryo far advanced in development, I am able to give a description and a figure of the brephalos (Pl. XXIX. fig. 2), which may be compared with the annexed woodcut from a drawing of Dr. v. Willemoes-Suhm's, taken from the recently hatched animal.¹

The eyes are large, and in the embryonic condition sessile. The anterior antennæ are uni-branched and terminate in a small joint or lobe. The posterior antennæ are two-branched, standing on a robust base or peduncle, about half the length of the first joint of the first pair; the oral appendages are visible, and the two pairs of gnathopoda are biramose and well advanced in structure. The several somites of the pereion and pleon are defined, the anterior ones being very short, and the posterior long, the last or telson is the longest, and terminates in a bifurcate or fish-tail extremity, having the posterior margin crenated and fringed with five long hairs on each side, and the lateral angles defined by a sharp tooth.

This, so far as I am able to determine, bears some resemblance to the animal which Claus² has figured as the Protozoæa stage of *Penæus*, but which has not yet been fully determined.

Habitat.—Station 209, January 22, 1875; lat. 10° 14' N., long. 123° 54' E.; off Zebu, Philippines; depth, 95 fathoms; bottom, blue mud; bottom temperature, 71°. In a siliceous sponge (*Euplectella*).

¹ In a letter to Professor von Siebold (*Zeitschr. f. wiss. Zool.*, Bd. xxvi. p. lxxiv., 1876), Dr. v. Willemoes-Suhm says, "Palæmon sp., parasite inhabiting *Euplectella*. Very transparent and delicate species. I succeeded to get the Zœas out of the eggs, by keeping the mother in a globe, and found that the young one is an ordinary Zœa in which, however, some appendages are to be seen which, as a rule, come out only in a later stage." None of these have reached me among his numerous specimens of the kind, and Mr. Murray, in writing to me, says, "I cannot find any preparation of these Zœas; in fact it is by no means sure that Suhm made any."

² Carl Claus, *Crustaceen-System*, Taf. ii. fig. 1.