

for which see Note under that date, and compare the account of *Oniscus spinosus*, Fabr., 1775. Some mistakes made in this paper were corrected in an appendix. See the following Note. The specimen was included in a haul made by the Challenger on January 28, 1873, when "the trawl was sent down, in lat. 35° 47', long. 8° 23', to a depth of 1090 fathoms." Among other points of interest Dr. Willemoes Suhm here mentions that the muscles of the thoracic legs are only very weakly developed, from which he infers "that the movements of the animal are not very rapid when it is obliged to walk over the sea-bottom." "The transparency of the body makes it possible likewise to distinguish clearly the cephalic ganglion and the ventral chain, consisting of five thoracic and three abdominal ganglia (Plate XLIX. fig. 1). The cephalic ganglion is situated in the anterior part of the head, more on the dorsal than on the ventral side; it is 3.50 millims. in width, and is horse-shoe-shaped with pointed ends. From the middle of its anterior margin two large nerves run straight to the end of the antennæ, while from the opposite side two commissural cords run backwards, traversing the head and, after having encircled the mouth, uniting with the first thoracic ganglion. The nerves passing from the sides of the cephalic ganglion are all employed as ocular nerves to supply the huge compound eyes. Those of the anterior end are better seen, as they go to the anterior part of the eyes, while those of the posterior end seem to go to the posterior parts.

"The first thoracic ganglion is seated just underneath the ovary in the second segment, and sends out the nerves for the mouth and the genital organs. The two cords then separate till they are united again in the third segment in the second ganglion; thence they run backwards in a single chain and form a ganglion in each of the subsequent segments, sending nerves to the legs. Altogether we find five thoracic ganglia for six segments, and in the abdomen three ganglia for five segments. The last ganglion of the abdomen is more slender than the preceding ones, and seems to send out nerves in different directions, especially to the anus and caudal appendages. In *Phronima* there are ten pairs of ganglia, five of which, as in the present case, are thoracic and five abdominal." Claus, 1879, it will be found, assigns only four ganglia to the abdomen in the Phronimida.

The cæcal appendage of the stomach, described by Claus for *Phronima*, "has, in the present species, assumed so large dimensions as to have replaced the stomach, which does not exist morphologically, but is physiologically represented by the cæcum."

"The heart is an elongated tube extending from the second to the fifth segment (Plate XLIX. fig. 3, *c*). Probably there are three openings in it as in *Phronima*, one in each segment; but of these nothing could be made out.

"The respiratory organs consist of three pairs of small transparent sac-like gills at the bases of the second, third, and fourth pairs of feet (Plate XLIX. fig. 1, *br*). They are in form and number nearly the same as in *Phronima*."

"Genital Organs.—The single specimen taken is a female. There is a large ovary, distinguished by its rose-colour, occupying the middle portion of the first body-segment (Plate XLIX. fig. 3, *ov*). I suspect that it consists of two ovaries lying close together, and having two excretory ducts leading to the genital papilla." "The genital papilla is an elevation in the centre of the ventral surface of the first thoracic segment between the two limbs [the first pair of ambulatory legs], which, as I have already mentioned, are destined to bear the eggs at their base, as in the females of *Nymphon*. The colour of the papilla is rose, with scattered scarlet points produced by small spines on the surface of the carapace. In the centre of the genital papilla there is a large spine (Plate L. fig. 6, *d*) with a groove leading into a depression (*c*), in which I believe are seated the apertures of the ovarian ducts. This pit is protected by two soft appendages (Plate L. fig. 6, *l*), answering to the valves which are to be found in most female Amphipods, and in which they keep their eggs. In the present species, however, they are only rudimentary, and they do not seem to be