

does not exist in those specimens that become fully matured, and escape under natural circumstances.

The carapace is well developed, and is about a third of the length of the animal, reaching as far as the extremity of the developed pereion.

The first pair of antennæ has a two-jointed peduncle that folds back against itself, and terminates in two slender branches, the rudiments of the future flagella, one of which is thick at the base and styliform, and the other slender and thread-like.

The second pair of antennæ consists of a single-jointed base supporting a long and wide plate, the scaphocerite, which is distally fringed with five or six long ciliated hairs, and a slender flagellum that is about half the length of the scaphocerite.

The mandibles have not been determined.

Posterior to the oral aperture there are three pairs of biramose appendages, which from analogy with the brephalos of *Crangon* represent, I believe, the maxillipedes and first and second gnathopoda.

The pleon is six-jointed, well developed, and terminates in a broad and foliaceous plate, fringed on each side of a deeply excavate median cleft with five long hairs and two spines; at the base of each of the former there is a thin crenated plate.

None of the pleopoda are yet apparent even in the most immature condition.

*Observation.*—Whatever changes the form undergoes in the development of the first and second pairs of pereopoda must take place at a stage later than that in which they exist in the condition of the brephalos.

*Geographical Distribution.*—The habitat of the original specimen described and figured by Leach under the name of *Atys scabra*, which he afterwards changed to *Atya scabra*, has not been recorded, but since Leach's specimen has been found to correspond with *Atya mexicana*, Wiegmann, it may be assumed to have been found in the fresh-water rivers or ponds of Mexico or the West Indian Islands.

According to Newport and A. Milne-Edwards there are eight species of *Atya* already known, of which *Atya scabra* and *Atya occidentalis* are from Mexico and the West Indies, *Atya sulcatipes*, of which a figure is given on Pl. CXVIII., is from the Cape Verde Islands, *Atya robusta* and *Atya margaritacea* are from New Caledonia, *Atya*

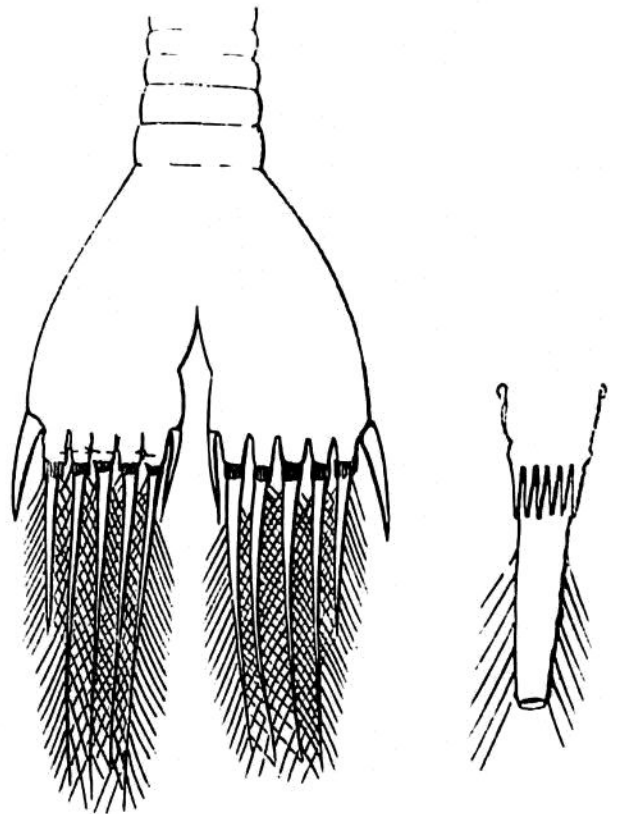


FIG. 71.—*Atya bisulcata*. Telson of Zoea; and one hair from the posterior margin, enlarged to show the serrate plate at its base.