

are only capable of being detected where they are largest and most important, such as at the extremity of the ecephysis of the gnathopoda, and at the posterior margin of the telson.

Comparing the brephalos with that of *Homarus*, we find that it has the antennæ further advanced in development, that there is no ecephysis attached to the first and second pairs of pereopoda, and that all the pleopoda are well advanced in development, whereas in *Homarus* the pleopoda are all wanting. An ecephysis is attached to the basis of the several pairs of pereopoda, and the flagella of both pairs of antennæ are in a rudimentary condition.

The carapace in both is small, covering only the pereion.

We thus perceive that although the resemblance between them is great, particularly in relation to the cephalon and pereion, a difference exists in the more advanced condition of the brephalos of *Eiconaxius* at the period when it quits the ovum, as compared with the young of *Homarus*.

In each of these genera the ova are extremely large, and few in number.

#### Family THAUMASTOCHELIDÆ.

The carapace is ovate and smooth, and projects to an anteriorly-flattened point or rostrum. The first pair of antennæ has two long flagella, and the second has a well-formed scaphocerite. First pair of pereopoda is chelate, large, having a long slender dactylos and pollex; subequal, somewhat unsymmetrical. Second pair chelate, symmetrical, subequal, small. Pleon has the coxal plates well defined. Rhipidura having the outer plates much larger than the inner. Branchial apparatus having a mastigobranchia attached to all the appendages of the pereion, except the first pair of gnathopoda, where it is rudimentary, and the posterior pair of pereopoda; five podobranchiæ, ten arthrobranchiæ, and four pleurobranchiæ on each side.

The genera in this family are *Thaumastocheles* and *Callocaris*.

#### *Thaumastocheles*, Wood-Mason.

*Astacus*, Subm, Trans. Linn. Soc. Lond., ser. 2, vol. i. p. 48.

*Thaumastocheles*, Wood-Mason, Proc. Asiatic Soc. Bengal, p. 181, 1874.

Carapace less than half the length of the animal, dorsally flattened and anteriorly produced to a rostrum, divided by a moderately deep cervical sulcus; near the centre the lateral walls are depressed and the posterior margin is secured in its position by a strong blunt process (pleocleis) attached to the lateral portion of the first joint of the pleon.

The pleon is longer than the carapace, and each somite increases in width posteriorly to the fifth and then decreases.

The ophthalmopoda are absent or obsolete.