

joint, which terminally supports two long flagella, of which the upper and outer sends off a third that is shorter than the others.

The second pair of antennæ is armed with a tooth at the outer and lower distal angle of the first joint of the peduncle, carries a scaphocerite that is about two-thirds the length of the carapace, and terminates in a long flagellum.

The mandible consists of a strong molar process projecting at right angles with the apophysis, and separated from a strongly dentate psalidoma, at the outer side of the base of which stands a three-jointed synnhipod of considerable tenuity.

The second pair of gnathopoda is pediform, having only three joints exposed, of which the terminal is the shortest and ends in an obtuse point, and the basis carries a rather slender ephysis.

The first pair of pereopoda is slender and chelate, the carpos being long, slender, and uniarticulate. The second pair of pereopoda resembles the first in form, but is longer and larger, and has the carpos uniarticulate. The three following pairs resemble each other in form and proportions, and approach in length that of the second pair; the dactylos is uniunguiculate, the propodos long and cylindrical, and the carpos has the anterior distal angle produced beyond the carpal joint of the propodos.

The pleopoda are robust, foliaceous and biramose.

The rhipidura has the outer branch with a diæresis.

The branchiæ consist of seven pairs arranged as in the following table :—

|                  |   |   |   |     |     |     |     |     |     |     |
|------------------|---|---|---|-----|-----|-----|-----|-----|-----|-----|
| Pleurobranchiæ,  | . | . | . | ... | ... | 1   | 1   | 1   | 1   | 1   |
| Arthrobranchiæ,  | . | . | . | ... | 1   | ... | ... | ... | ... | ... |
| Podobranchiæ,    | . | . | . | 1   | ... | ... | ... | ... | ... | ... |
| Mastigobranchiæ, | . | . | . | r   | ... | ... | ... | ... | ... | ... |
|                  |   |   |   | h   | i   | k   | l   | m   | n   | o   |

*Observations.*—This genus was first founded by Fabricius, in 1798, for those species of *Macrura* that had “four, unequal, pedunculated antennæ. The first (superiores) pair the shorter, trifold, setaceous, the middle branch being the shortest (lacinia intermedia brevior). The second (inferiores) antennæ very long, setaceous, and simple.”

In his list the following species and habitats are given :—

|  |  |   |
|--|--|---|
| “ <i>Palæmon carcinus</i> , American Rivers. |  | <i>Palæmon tranquebaricus</i> , East India. |
| <i>Palæmon lar</i> , East India.             |  | <i>Palæmon squilla</i> , European Seas.     |
| <i>Palæmon longimanus</i> , East India.      |  | <i>Palæmon locusta</i> , Ocean.             |
| <i>Palæmon brevimanus</i> , East India.      |  | <i>Palæmon serratus</i> , Norwegian Sea.    |
| <i>Palæmon coromandelianus</i> , East India. |  | <i>Palæmon fucorum</i> , Ocean weed.”       |

Of these *Palæmon carcinus*, *Palæmon squilla*, and *Palæmon locusta* appear in Linnæus’ *Systema Naturæ* under the general carcinological name of “*Carcinus*,”