

while *Palæmon serratus* was described and figured under the name of *Astacus serratus*, in 1770, by Pennant, in his *British Zoology*, vol. iv. pl. xvi. fig. 28.

This well-known European form, *Palæmon serratus*, has ever since been accepted as typical of Fabricius' genus by Cuvier, Leach (1817), Desmarest (1825), Milne-Edwards (1837), and Bell (1853); and Leach, Desmarest, and Bell have, besides their descriptions, given accurate figures of the animal.

Its chief characteristics are as follows :—A laterally compressed rostrum, serrate on the upper and lower margins ; the dorsal surface of the carapace not carinated posterior to the frontal crest ; the frontal margin armed with two teeth, one corresponding with the first pair of antennæ, and the other, close behind the frontal margin, corresponding with the second pair of antennæ ; the rest of the carapace smooth, the lateral margins being strengthened by a longitudinal rib, and the posterior margin laterally inserted beneath the coxal plates of the first somite of the pleon.

This description has been drawn up from a British specimen, and compared with the type in the British Museum, and it corresponds with the figures of Leach, Desmarest, and Bell.

I have endeavoured to be as accurate as possible in the diagnosis of this genus, because Dr. Stimpson¹ describes the *Palæmon* of Fabricius as “*Carapax spina hepatica armata.*” This description corresponds with *Palæmon carcinus*, Fabricius, but not with either *Palæmon serratus* or *Palæmon squilla*. The figures of Leach, Desmarest, and Bell distinctly show the two marginal teeth, and Milne-Edwards, in his description of his first division of *Palæmon*, places the two marine species just mentioned under it because “they are armed on the anterior border of the carapace on each side with two teeth, one above, the other below the insertion of the second (externes) pair of antennæ.”

Surely all this is sufficiently clear in description and priority to settle that the typical forms of the genus are *Palæmon squilla* and *Palæmon serratus*.

By the expression “species omnes fluvicolæ,” it would appear that Stimpson intended to confine the genus to those fresh-water forms that have been found in many of the rivers, lakes, and mountain streams in tropical regions, and which Milne-Edwards has arranged in his second division of the genus, having the frontal margin of the carapace armed with a single tooth, but with a second tooth posterior to it in the same horizontal line.

Dr. Stimpson altogether excludes the typical species, or those on which the earlier carcinologists founded the genus, but transfers them to the genus *Leander*, which was proposed by Eugène Desmarest on features that are not of the slightest specific value, namely, on the dorsal surface of the pleon being strongly curved, or, to quote his own words :—“*L'abdomen est très grand, et se rétrécit graduellement vers le bout ; sa*

¹ *Proc. Acad. Nat. Sci. Philad.*, p. 110, January 1860.