

B. The first antennal somite armed with four teeth.

a. Four conical teeth remote.

a Teeth tolerably large, equidistant, and forming a quadrangle.

* Carapace spinose all over—*Palinurus spinosus*, Edw.; *Palinurus americanus*, Edw.

** Carapace spinose anteriorly, tuberculated posteriorly — *Palinurus interruptus*, Randal.

b Teeth minute, scarcely approximate on the median line, anterior and posterior much more distant—*Palinurus argus*, Latr.

β. Four conical teeth approximated and connected at the base—*Palinurus ehrenbergi*, Heller; *Palinurus penicillatus*, Olivier.

c. First antennal somite armed with eight teeth—*Palinurus dasypus*, Fabr.; *Palinurus burgeri*, De Haan.

In the classification of the several genera which belong to this family the three authors, Edwards, Gray, and Heller have made the two great divisions dependent chiefly upon the one having a central rostrum to the frontal margin of the carapace, and the flagella of the first pair of antennæ short, while in the second there is no central rostrum and the flagella are long.

However, there appears to me to be a great natural distinction between the form known as *Palinurus lalandii*, Lam., in which the frontal rostrum is so far advanced and depressed as to unite it with the upper surface of the somite of the second pair of antennæ, thus enclosing the ophthalmic somite within an orbital chamber, instead of leaving it exposed as in *Palinurus vulgaris*, in which the rostrum is reduced to a short pointed process. This also appears to me to be the case in Heller's species of *Palinurus hügelii*, but since Heller has not mentioned it in his description, nor shown it in his figure, I am precluded from asserting this with confidence.

It appears therefore that *Palinurus lalandii* should form a separate genus (*Palinostus*) gradually leading to *Synaxes*, and so on to the family of Astacidæ, according to the arrangement here followed and indicated on p. 56.