

"*Firstly*, by the absence of a tooth on the chela.

"*Secondly*, by the pointed tooth-like formation of the first joint of the inner antennæ.

"*Thirdly*, by the concavity where we might expect the eye. The spot is covered only by a thin chitinous skin, and not by the granular mass on the carapace.

"*Fourthly*, by the various divisions on the carapace.

"*Fifthly*, by the pointed tooth on each side of the first somite of the pleon; and

"*Finally*, by several details."

This species has a close general resemblance to *Polycheles baccata*, and had I not been able to determine both sexes of this latter species, I should have considered myself justified in believing them to be the two sexual forms of the same species. Our specimens were taken north of the Kermadec Islands, and one about 100 miles south-east of the Fiji group.

Stereomastis,¹ n. gen.

This genus differs in nothing externally from *Pentacheles*, but is established to receive those species in which the mastigobranchial lash does not exist.

Difference of internal structure as a specific character is of more value than any external distinction, which, though more convenient for classification, is of little importance if it does not represent structural variation.

Stereomastis suhmi, Spence Bate (Pl. XV. figs. 3, 4).

Pentacheles suhmi, Sp. B., Ann. and Mag. Nat. Hist., ser. 5, vol. ii. p. 278, 1878.

„ „ on Pl. XV. figs. 3, 4.

Carapace with lateral margins subparallel; anterior division armed with five strong teeth, median with two, and the posterior with eight or nine teeth equally strong, continuing to the posterior margin. Frontal margin with a sharp tooth at the inner angle of the orbit, and two central rostral teeth; posterior to which on the central dorsal ridge are two teeth, one behind the other; then at an equal distance two side by side, and a similar pair behind them, and then one single tooth anterior to the cervical fossa, on the posterior margin of which is a prominent pair, behind which, near together, are two single teeth, and then after a considerable space on the posterior ridge of the carapace is another strong pair, more widely separated from each other.

The armature of the carapace may be expressed as—

Marginal teeth,	5—2—8
Dorsal ridge,	2·1·1·2·2·1—2·1·1·2

¹ The name is derived from *στεινω*, to be deprived of, and *μάστιξ*, a lash (Ionic, *μάστις*).