the parenchyma by minute ones. These two characters are causally related to each other. A thick cortex with a strongly developed spiculation, presenting a solid support for the body of the Sponge, the parenchyma can extend itself on it like a crust, and the spicules of the parenchyma becoming unnecessary, grow small. I think that when, as for instance, in Leucetta clathria, H., the apical rays of the cortical quadriradiate spicules are strongly developed, these apical rays possess rather a defensive than supporting function; projecting from the inner surface their sharp ends present an armament protecting the inner cavity; and when such protection becomes useless, we see either that there are no quadriradiate spicules at all in the cortex (Leucetta corticata, H.), or very few, whose apical rays remain far short of the inner surface (Leucetta hæckeliana, n. sp.).

The genus is represented by five species, namely:—

Leucetta imperfecta, n. sp. | Leucetta hæckeliana, n. sp. vera, n. sp. | corticata, H. Leucetta clathria, H.

Two have been described by Hæckel, three were collected by the Challenger. I retain for the genus the name *Leucetta*, there being no doubt that the species described by Hæckel under the generic name of *Leucetta* prior to his *Leucetta corticata* all belong to the genus *Leuconia*.

Pericharax, n. gen.

Leuconidæ with distinct subdermal cavities.

In vol. i. p. 237 of his Monograph, Prof. Hæckel states that the subdermal cavities (intermarginal cavities of Bowerbank) are of rare occurrence in the Calcarea, and that he met with them only in one case, namely, in his Leucandra cucumis. This is quite true; in most cases the inhalent canals in the same animal sometimes begin with a dermal dilatation, sometimes, on the contrary, they are narrow near the outer surface, and grow larger and broader in their centripetal course. Leucandra cucumis presents, however, an exception. Here, according to Hæckel, one can speak of real, well-marked subdermal cavities; they are all on an average of the same dimensions, of the same form, and even possess their own skeleton. The same I find in two specimens from Station 135 (Tristan da Cunha). In these forms the subdermal cavities, which are nothing but dilated dermal parts of the inhalent canals (intercanals), are not so strongly developed as in Leucandra cucumis, but are still quite distinct and also—at least in one specimen—

¹ From weel, around, and xagat, palisade.