possess their own skeleton, the spicules constituting their support being of quite a different form from all other spicules of the sponge. I think this peculiarity is important enough to be regarded as a generic character, and as there are in the Monograph of Prof. Hæckel nine Leuconidæ described under the name of *Leucandra* prior to our *Leucandra cucumis*, three of them being in addition quite new forms, I think it preferable to unite temporarily the forms with evident subdermal cavities under a new name. I propose the name *Pericharax*, till we receive more detailed information as to the systematic position of *Leucandra caminus*, H., *Leucandra lunulata*, H., and *Leucandra crambessa*, H.

The Family Teichonidæ consists at present of only two genera, of which the first is,—

Teichonella, Carter.[1]

It contains two species, *prolifera* and *labyrinthica*, and Mr. Carter characterises it as follows :—"Vallate or foliate, without cloaca. Vents numerous, confined to the margin or general on one side of the lamina only; naked." This definition, compared with that given by Bowerbank[2] to his genus *Leucogypsia*, renders it evident that the expression "without cloaca" is used by Mr. Carter in a somewhat different sense. The Australian specimen of my *Leucondra dura* (Pl. II. fig. 3) would have been referred by Bowerbank to the genus *Leucogypsia*. Like *Leucogypsia gossei*, Bwk., it possesses no evident cloaca; still it does not belong to the Teichonidæ,[3] the main character of this Family consisting in the differentiation of the outer surface into two planes, one bearing oscula, the other pores exclusively. But whether the oscula in Teichonidæ are homologous with the oscula of Hæckel or the oscula of Bowerbank, it is difficult to say; the question can be decided only by means of embryological observations. Amongst the Challenger Calcarea I have a specimen (*Leuconia typica*, var. *massa*), provided with a low and comparatively broad, calyciform inner cavity. It may be that the oscular plane of our Teichonidæ is homologous with the surface of this calyciform cavity, and is nothing but the gastric surface of a Syconid or Leuconid, modified with respect to its form and position. It may also be that the Teichonidæ are allied to the forms like my *Leuconia dura*, *i.e.*, that a Teichonid is, from a morphological point of view, a colony with dislocated oscula and pores. It must be noticed that, in view of F. E. Schulze's statements as to the ontogeny of *Sycandra raphanus*, this latter supposition is more plausible. At any rate the peculiarity in question is to be considered as a family character, the more so as there is no possibility of putting my *Eilhardia* in the genus *Teichonella* as a species, the differences in the spiculation and exterior form being too considerable. The diagnosis of this genus will be as follows :—

[1] *Ann. and Mag. Nat. Hist.*, ser. 5, vol. ii. p. 39, 1878.

[2] Brit. Spongiad., vol. i. p. 165, 1864.

[3] Mr. Carter (*loc. cit.*, p. 35) calls the Family "Teichonia" and "Teichonellidæ" indifferently. In order to render it uniform with the names Asconidæ, Syconidæ, and Leuconidæ, I propose to call it Teichonidæ.