

It follows, therefore, that whilst the LITUOLIDÆ generally are characterised by the composite nature of their tests, the precise structure differs sufficiently to furnish distinctive characters for the four Sub-families under which they have been arranged,—the rough investment being the salient feature of the LITUOLINÆ, the smoothly-finished test that of the TROCHAMMININÆ, the thick cancellated walls the peculiarity of the LOFTUSINÆ, and the almost exclusively calcareous shell that of the ENDOTHYRINÆ.

In morphological characters the four Sub-families run in parallel rather than consecutive lines, and all the more important forms are, to a greater or less degree, isomorphous with the prominent types of the hyaline and porcellanous series of Foraminifera.

Thus amongst the LITUOLINÆ, the flask-shaped and linear species included in the genus *Reophaæ* correspond in external form with the perforate genera *Lagena* and *Nodosaria*; the partially or completely spiral forms comprised under the term *Haplophragmium* furnish arenaceous parallels, when symmetrical, to *Cristellaria* and *Nonionina*, when inequilateral, to *Rotalia* and *Globigerina*; the outspread, sandy, planospiral type, *Coskinolina*, resembles in like manner certain modifications of the porcellanous genus *Peneroplis*; whilst amongst the varieties of *Placopsilina* may be found isomorphs of the adherent *Truncatulinae*. In *Haplostiche*, *Lituola*, and *Bdelloidina* the same forms are repeated, but with labyrinthic chambers.

The morphological sequence of the TROCHAMMININÆ is very similar. The genus *Hormosina* furnishes smooth arenaceous isomorphs of *Lagena* and *Nodosaria*, of which *Webbina* is the adherent modification. The spiral *Trochamminae* and the aberrant type *Carterina* follow the same plan of growth as *Nonionina* and *Rotalia*; *Thurammina* resembles *Orbulina*; and the porcellanous genera *Cornuspira* and *Miliolina* find collateral representations in the genus *Ammodiscus*. There appears to be no nearer parallel to *Hippocrepina* than the genus *Lagena*; unless indeed the slight transverse constrictions of the test are the remains of abortive septation, marking it as an arrested modification of a polythalamous form.

In the Sub-family ENDOTHYRINÆ, the series is less complete and the relations of the individual types are more obscure. Nevertheless, the genus *Nodosinella*, and in a less degree *Polyphragma*, bear some morphological resemblance to *Nodosaria*; and in *Involutina* there is a near approach to the typical conformation of *Cornuspira* and *Spirillina*. The various species of *Endothyra* and *Bradyina* furnish parallels to *Nonionina* and even to *Rotalia*; and last of all *Stacheia* presents varieties approximating structurally to *Polytrema* and *Gypsina*.

Of the three generic types assigned to the LOFTUSINÆ, *Cyclammia* finds a parallel in the porcellanous *Peneroplis* or in the hyaline *Cristellaria*, *Nonionina*, and *Nummulites*; and *Loftusia* in the porcellanous *Alveolina* or the hyaline *Fusulina*; whilst *Parkeria* has a porcellanous representative in *Keramosphæra*.