

composed of several convex chambers, either connected by short stoloniferous passages or crowded one against the other; margins rounded or lobulate, with simple or forked tubular extensions which form the pseudopodial apertures.

In *Placopsilina vesicularis* the segments are characterised by their inequality of size and shape, and their irregular combination. In these particulars it differs from *Placopsilina cenomana*, in which the chambers are of more even dimensions, and are combined in single linear series. Monothalamous specimens are less convex than *Placopsilina bulla*, and generally have several peripheral orifices, as shown in fig. 19.

With the exception of a single locality in the South Atlantic east of Buenos Ayres, 1900 fathoms, where the ground is extremely rich in arenaceous Rhizopods, *Placopsilina vesicularis* has only been obtained from dredgings taken on the first cruise of the "Porcupine," between the north-west of Ireland and the Rockall Bank. It occurs at three Stations in this region, at depths of 630 fathoms, 1215 fathoms, and 1443 fathoms respectively.

Haplostiche, Reuss.

Nodosaria, pars, d'Orbigny [1826].

Lituola, pars, Jones and Parker [1860], Carpenter, Vanden Broeck, Brady.

Haplostiche, Reuss [1861], Brady, Seguenza, Bütschli.

Test free, coarsely arenaceous; composed of a number of segments joined together in a straight or curved (never spiral) series. Chambers labyrinthic. Aperture terminal; porous or dendritic, rarely simple.

Although in the original description of the genus *Haplostiche* prominence is given to the subdivision of the chambers by secondary septa, and to the variable nature of the aperture, the term was in reality made use of by Reuss for all the Nodosariform *Lituolinæ*; and neither in his essay on classification,¹ nor in his final arrangement of the *Lituolideæ*² did the author provide for the linear forms which have simple chamber-cavities. The oversight is no doubt due to the fact that the arenaceous types were studied chiefly from fossil specimens, and that chambers filled by mineral infiltration were not always in a state in which the characters of the interior could be properly determined. Arenaceous isomorphs of the Nodosariæ are altogether less common in the fossil than in the recent condition, if we may judge by the comparatively small number of species that have hitherto been described; but it is possible that the proportion of labyrinthic to simple types may be relatively larger. It cannot be stated with any certainty whether all Reuss's species of *Haplostiche* accord with the characters

¹ *Sitzungsb. d. k. Ak. Wiss. Wien*, 1861, vol. xlv. p. 381.

² *Das Elbthalgebirge in Sachsen*, 2^{ter} Th., 1874, p. 119.