

family, but whilst in the Lithelida the spiral line lies in one plane (as in *Nautilus*), in the Streblonida it ascends like a screw (as in *Helix*). Therefore the former have the same relation, regarding the spiral structure, to the nautiloid Polythalamia as the latter to the turbinoid Foraminifera. Indeed the single forms of Streblemida repeat in their special structure the characteristic genera of Turbinoida, such as *Globigerina*, *Rosalina*, *Pulvinulina*, *Hastigerina*, &c. As in these calcareous turbinoid Foraminifera, so also in the analogous siliceous Streblonida the distinction of species is very difficult and open to many objections.

The number of species in this family is very small; all are rare and for the most part very opaque and difficult to understand, so that the following distinction of a dozen species can have only a provisional value. To get a complete idea of their peculiar structure, the shell must be turned and observed from different sides, and thus their full study requires yet much time and work. There are to be found evident transitional forms between them and the Lithelida on the one hand and the Soreumida on the other. Besides this, most species of Streblonida seem to have more inclination to individual varieties and abnormalities than the majority of the other Radiolaria.

The general form of the whole shell is in the Streblonida sometimes more egg-shaped or even subspherical, at other times more top-like or conical, sometimes nearly discoidal. The height of the shell (or the vertical axis of the ascending spiral) is occasionally larger, at other times smaller than the breadth (or the greatest horizontal diameter, perpendicular to the height). Some very flat forms seem to approach the Lithelida. With regard to the internal screw-formation, the shell of all Streblonida is asymmetrical.

The number of the aggregated incomplete chambers is commonly between ten and twenty, but ascends sometimes to thirty, forty, or more. Sometimes the size of all the chambers is nearly the same, sometimes they increase gradually, occasionally also very rapidly. The primordial chamber (or the first and oldest) seems to be commonly the smallest, and inversely, the last and youngest chamber, the largest. But sometimes (in *Streblomyx*) also the contrary may be the case. The form of the single chambers is very variable, from the spherical or hemispherical through all transitions leading to irregular roundish or longish forms. The network is commonly irregular, with small roundish pores of different sizes, but sometimes also regular, circular. The surface of the shell is commonly smooth or rough, rarely covered with radial spines. In most species the reticulation and particularly the separation of the chambers is more or less incomplete.

As in the Lithelida, so also in the Streblonida we can distinguish two subfamilies. In the Streblacanthida (*Streblonia*, *Streblacantha*) the primordial chamber is a simple, spherical, subspherical, or lentelliptical latticed shell. In the Streblomyxida (*Streblomyx*) the primordial chamber is trizonal or *Larnacilla*-shaped, as in the greater number of *Larcoidea*, composed of three elliptical latticed girdles of unequal size, perpendicular one to another, and surrounding a simple central chamber. As in the Lithelida, so also