Whilst in all the foregoing five families of Larcoide a the shell-form is regular and their geometrical fundamental form is a lentellipsis (or a triaxial ellipsoid, with three unequal isopolar dimensive axes), in the four remaining families of this suborder the shell becomes bilateral or irregular (with the poles of the axes unequal). In two of these families (Lithelida and Streblemida) the growth of the shell becomes spiral, in the last two families (Soreumida and Phorticida) quite irregular. But as in all four families we encounter the typical trizonal medullary shell (or Larnacilla-shell), we are convinced that they must be derived (wholly or partially) from the Larnacida.

The Lithelida (the sixth family) are Larcoidea with spiral growth and bilateral form (like Nautilus); therefore the spiral line lies in one plane and this spiral plane divides the whole shell into two symmetrical halves (right and left). The axis of the spiral (around which the shell winds) is a straight line, one of the three dimensive axes. In the greater part of Lithelida (in the Larcospirida) the primordial or central chamber of the polythalamous shell is a trizonal medullary shell or Larnacilla-shell, and the growth of the first spiral turning begins as the development of the first (transverse) cortical girdle of Amphipyle; but as one wing (or lateral half) of this girdle grows more rapidly than the other, it overgrows the latter and begins the spiral winding; if the other wing follow and overgrow the first, the spiral becomes double. Each of the three dimensive girdles (of the Pylonida) may begin the spiral winding. There can be no doubt that all these Lithelida (the Larcospirida) must be derived from the Pylonida, by unequal growth of the two halves of one girdle. Perhaps from those may also be derived the other part of this family, the Spiremida (Spirema and Lithelius); in these the primordial chamber of the spiral shell is simple, and may be derived by reduction of the original Larnacilla-shell. But it is also possible that the Spiremida proceed directly from the Larcarida, and that their ancestors did not possess a Larnacilla-shell.

The Streblemida (the seventh family) are Larcoidea with spiral growth and asymmetrical form of the polythalamous shell (like Helix or Turrilites); therefore the spiral line is twisted like a winding stair, and the spiral face is curved and divides the shell into two unequal halves. The Streblemida have the same likeness and relation to the turbinoid Foraminifera (Rotalia, Globigerina, &c.) as the Lithelida to the nautiloid Foraminifera (Polystomella, Nummulina, &c.). As in these calcareous Rhizopods also the peculiar growth of the siliceous Streblemida begins from a primordial chamber to which a variable number of roundish chambers (of increasing size) is apposed. But the building of these chambers and of their septa is by no means so regular and complete as in the greater number of turbinoid Foraminifera. As in a part of this family the primordial chamber is a Larnacilla-shell, these also may be derived from the Larnacida, but the other part (with simple central chamber) is perhaps produced directly from the Larcarida.

The eighth family, Soreumida, is perhaps derived from the Streblemida by loss of the spiral growth. The polythalamous shell is similar to the latter, but the chambers are