The family Larnacida immediately follows the Larcarida as the next simple group of all Larcoidea; some genera of both groups (such as Larnacalpis and Coccolarcus, or Larnacantha and Larcidium) may easily be confounded from their being so much alike. In both the lentelliptical shell is composed of two concentric shells, an inner (medullary) and an outer (cortical) shell. But the connection between these shells and the construction of the inner shell is quite different in the two groups. Whilst in the Larcarida the medullary shell is connected with the cortical shell simply by radial beams, here in the Larnacida this connection is effected by two latticed lamellæ, which are the lateral wings of a transverse girdle. Therefore we encounter here for the first time that peculiar mode of growth which characterises the greater part of the Larcoidea, but particularly the Pylonida. But whilst in the Pylonida between the three crossed lattice-girdles, remain four open gates, here in the Larnacida the gates become closed by lattice-work; the lentelliptical cortical shell becomes perfect.

The most simple genus of Larnacida, and no doubt the common ancestral form of this whole family, is Larnacilla (Pl. 50, figs. 1, 1a, 1b). The most important shell of this typical genus is composed of a simple lentelliptical medullary shell and of three elliptical latticed girdles surrounding it, perpendicular one to another. These three "dimensive girdles" lie in the perimeter of the three dimensive planes, the minor (and first) in the equatorial plane, the second (and major) in the lateral plane, the third (and intermediate) in the sagittal plane. Therefore we have before us the same "trizonal shell" as in the important genus Trizonium among the Pylonida. But whilst in Trizonium, as in all Pylonida, the four gates between the girdles remain open, here in Larnacilla they become perfectly closed by lattice-work.

The formation of the typical "Larnacilla-shell" begins with a simple, spherical or lentelliptical lattice-shell, from both sides of which arise two latticed "lateral wings" opposite on the poles of the transverse axis. These two wings are comparable to the lateral chambers of Tholartus (among the Tholonida), but differ by two large openings. Each wing is a short cylindrical tube with latticed wall, open at both ends; the axis of the tube (going through the centre of the open ends) is parallel to the principal axis of the whole shell (and of the central chamber). Therefore both wings form together a transverse ring, the middle of which encloses the central chamber. The distal parts of both wings grow towards the poles of the principal axis; if they became united here, the second (lateral) girdle would be complete. Between it and the first girdle four open gates remain ("Tetrapyle"); but these become overgrown by the third or sagittal girdle, and at last the gates between this and the two other girdles become closed by lattice-work. This perfect fenestration of the trizonal cortical shell, and the complete closing of the gates between the girdles by network, is the only difference between Trizonium and Larnacilla.

In Larnacilla and in the nearly allied Larnacidium (only differing by radial spines