4. *Staurodoras wandae*, Dunikowski.

> *Staurodoras wandae*, Dunikowski, 1882, Denkschr. d. k. Akad. d. Wiss. Wien, Bd. xlv. p. 28, Taf. v. fig. 58.

Four crossed spines shorter than the radius of the spongy sphere, conical. (May be the young form of the preceding species.)

Dimensions.—Diameter of the sphere 0·14; length of the spines 0·06, basal breadth 0·05.

Habitat.—Fossil in the Alpine Lias (Schafberg near Salzburg).

Family IX. CUBOSPHÆRIDA, Haeckel (Pls. 21–25).

> *Cubosphærida*, Haeckel, 1881, Prodromus, p. 449.

Definition.—S p h æ r o i d e a with six radial spines on the surface of the spherical shell, opposite in pairs in the three dimensive axes, perpendicular one to another; living solitary (not associated in colonies).

The family C u b o s p h æ r i d a is distinguished from the other S p h æ r o i d e a by the possession of six radial spines, which are opposite in pairs in three different axes, one perpendicular to the other two. These three axes are the typical "dimensive axes," which are more or less differentiated in the L a r c o i d e a. But in these latter the shell itself and the enclosed central capsule become affected by the unequal growth in the three axes, whilst in the former the capsule constantly, and commonly also the shell, remains spherical. Sometimes the shell assumes the form of a regular octahedron, from the six corners of which arise the six radial spines, indicating its three axes.

The most simple Cubosphærida are the Hexastylida, with one single, spherical lattice-shell. To this ancestral group all other subfamilies can be opposed as "Cubosphærida concentrica," as their carapace is composed of two or more concentric lattice-shells—two in the Hexalonchida, three in the Hexacontida, four in the Hexacromyida, five or more in the Hexacaryida. In all these four subfamilies the concentric shells are simple (not spongy), fenestrated spheres. In a sixth subfamily, in the Hexadorida, the shell is wholly or partially composed of irregular, spongy wicker-work or loose reticulations, with or without a medullary shell in the centre.

The *Six Radial Spines* of the Cubosphærida are normally opposite in pairs in the three dimensive axes, each of which is perpendicular to the other two. But in many species besides this normal form occur individual abnormalities, in which the six spines are not quite accurately opposed, but more or less divergent; and often also the three dimensive planes (determined each by two axes) are not quite regular, but more or less uneven. More rarely the six spines appear disposed in quite an irregular manner.

In the greater part of the Cubosphærida all six spines are quite equal, of the same size and form. But in some genera a more or less considerable differentiation takes place, so