Cyrtocalpis by development of irregular spongy wickerwork on the surface of the simple lattice-shell; or from Arachnocalpis (Pl. 98, fig. 13) by loss of the peristome.

1. Spongocyrtis montis ovis, Dunikowski.

Spongocyrtis montis ovis, Dunikowski, 1882, Denkschr. d. k. Akad. d. Wiss. Wien., vol. xlv. p. 31, Taf. vi. figs. 67, 68.

Shell broad, ovate, rough, spongy, thick-walled; length to the breadth = 4:3. Spongy framework very dense and dark, with very small roundish pores. Mouth constricted, with a short tubular peristome, about one-third as broad as the shell.

Dimensions.—Shell 0.35 long, 0.26 broad; mouth 0.08 broad.

Habitat.—Fossil in the Alpine Lias (Schafberg bei Salzburg, Dunikowski).

2. Spongocyrtis arachnoides, n. sp.

Shell ellipsoidal, spiny, spongy, thin-walled; length to the breadth = 3:2. Spongy framework loose and delicate, with irregular polygonal meshes and arachnoidal thread-like bars. Mouth constricted, without peristome, about one-fifth as broad as the shell. (Very similar to Arachnocalpis ellipsoides, Pl. 98, fig. 13, but without corona around the mouth.)

Dimensions.—Shell 0.32 long, 0.21 broad; mouth 0.04 broad.

Habitat.—Central Pacific, Station 270, depth 2925 fathoms.

Subfamily 2. Archicapsida, Haeckel, 1881, Prodromus, p. 428.

Definition.—Cyrtocalpida, with the basal mouth of the shell fenestrated (vel Monocyrtida eradiata clausa).

Genus 532. Halicapsa, Haeckel, 1881, Prodromus, p. 429.

Definition .- Archicapsida with an apical horn.

The genus *Halicapsa*, and the following closely allied *Archicapsa*, represent together the small subfamily of Archicapsida, or of those Cyrtocalpida, in which the basal mouth of the simple shell is closed by a lattice plate. This may be the original state of this family, if it is derived from the Circospyrida (*Circospyris*, *Dictyospyris*) by loss of the sagittal constriction and the primary ring. But it is also possible that the Archicapsida have been partly derived from the Archicorida by secondary fenestration of the open mouth. The genus *Halicapsa* may be easily confounded with the similar Ellipsid *Lithapium* (compare p. 303, Pl. 14, figs. 8–10). The skeleton of both genera may be perfectly similar, the only distinction being the structure of the central capsule, which in *Halicapsa* is that of the Monopylea, in *Lithapium* that of the Peripylea.