1. Discopyle osculata, n. sp. (Pl. 48, fig. 19).

Disk circular, with spiny margin, three times as broad as the triangular, *Triopylc*-shaped medullary shell. Three gates of the cortical shell kidney-shaped, on the inside with an interradial spine, twice as broad as the three pentagonal arms. Chambered equatorial girdle with twenty-four subregular chambers, in the radius of one odd gate with a large marginal osculum, which is as broad as the medullary shell, and surrounded by a dense corona of twenty to thirty strong conical spines.

Dimensions.—Diameter of the disk 0.15, of the cortical shell 0.1, of the medullary shell 0.05, of the marginal osculum 0.06.

Habitat.—Central Pacific, Station 272, depth 2600 fathoms.

2. Discopyle elliptica, n. sp. (Pl. 48, fig. 20).

Disk elliptical, four-fifths as broad as long, with spiny margin, three times as broad as the triangular, *Triopyle*-shaped medullary shell. Three gates of the cortical shell roundish, on the inside with an interradial spine, little broader than the quadrangular arms. Chambered equatorial girdle with twenty to thirty irregular chambers, on one pole of the main axis with a large marginal osculum, which is one-third as broad as the length of the main axis, and armed with a corona of twenty to thirty short conical spines. The osculum does not correspond to a certain radius.

Dimensions.—Diameter of the disk 0·15, of the cortical shell 0·08, of the medullary shell 0·04, of the marginal osculum 0·05.

Habitat.—Central Pacific, Station 267, depth 2700 fathoms.

Family XXIII. SPONGODISCIDA, Haeckel (Pl. 41, fig. 11).

Spongodiscida et Spongocyclida, Haeckel, 1862, Monogr. d. Radiol., pp. 452, 460, 469. Spongodiscida, Haeckel, 1881, Prodromus, p. 461. Calodictya, Ehrenberg, 1847, Monatsber. d. k. preuss. Akad. d. Wiss. Berlin, p. 53 (partim).

Definition.—Discoide a without a phacoid shell, with a flat discoidal shell, in which a simple spherical central chamber is surrounded by an irregular spongy framework (sometimes with concentric rings around the central chamber). Surface of the disk quite spongy, without porous sieve-plates.

The family Spongodiscida is the sixth and last family of the Discoidea, and bears to the other families of this group the same relation as the family Spongosphærida does to the other Sphæroidea, or the Spongurida to the other Prunoidea. Its characteristic structure consists in the irregular spongy framework of the disk, and mainly in the rough, irregular shape of its spongy surface, which is never covered with porous plates (neither phacoid shell nor corresponding sieve-plates), as in all other Discoidea. Of course a little spongy structure occurs also in many Porodiscida