

ing the latter with the former. In the Phacodiscida and Coccodiscida the capsule encloses the simple or double medullary shell, but is itself enclosed by the cortical phacoid shell. In all Cyclodiscaria (in the Porodiscida, Pylodiscida, and Spongodiscida) the capsule fills out the greatest part of the chambered or spongy skeleton, and is only protected by the superficial parts of it, in the Porodiscida and Pylodiscida by the covering sieve-plates, in the Spongodiscida by the spongy cortical substance of the shell. The growth of the capsule corresponds to that of the including shell, gradually increasing on the margin in the equatorial plane. Whilst in the greater number of *Discoidea* its form continues circular, in many forms provided with radial arms it enters into the arms and assumes their form. The protoplasm of the capsule is commonly coloured by brown or red pigment, and often contains many oil-globules. The nucleus is originally enclosed by the medullary shell or the central chamber, and with increasing size enters into the surrounding parts; in the Cyclodiscaria it often fills out the internal concentric rings. The extracapsular jelly or the calymma is commonly thick, and envelops the greater part or the whole body.

Synopsis of the Families of the Discoidea.

I. Section Phacodiscaria.	{	Phacoid shell simple, without enclosed medullary shell, . . .	1. CENODISCIDA.		
Discoidea with external phacoid shell (or lenticular latticed cortical shell).		{	Phacoid shell with simple or double enclosed medullary shell. {	Margin without chambered girdles, 2. PHACODISCIDA.	
			Margin surrounded by chambered girdles, 3. COCCODISCIDA.		
II. Section Cyclodiscaria.	{	Discoidea without external phacoid shell (no lenticular latticed cortical shell).	{	Surface of the shell covered by convex or even porous sieve-plates (not spongy). {	Concentric rings around the central chamber complete (without open spaces), 4. PORODISCIDA.
				Concentric rings around the central chamber interrupted by three open spaces, 5. PYLODISCIDA.	
		Surface of the shell spongy, not covered by peculiar porous sieve-plates, 6. SPONGODISCIDA.			

Family XVIII. CENODISCIDA, n. fam. (Pl. 31, fig. 11; Pl. 48, figs. 1-3).

Definition.—Discoidea with simple extracapsular phacoid shell (or lenticular latticed cortical shell), without medullary shell and without chambered equatorial girdles.

The new family *Cenodiscida* opens the long series of *Discoidea*, as their most simple and primitive form. The circular lenticular central capsule is enclosed by a