Subfamily 1. Sethodiscida, Haeckel, 1881, Prodromus, p. 457.

Definition .- Phacodiscida without radial spines on the margin of the disk.

Genus 181. Sethodiscus, 1 Haeckel, 1881, Prodromus, p. 457.

Definition.—Phacodiscida with simple medullary shell and simple margin of the circular disk, without surrounding equatorial girdle and without radial spines.

The genus Sethodiscus is the most simple and primitive form of all Phacodiscida, and may be regarded as the common ancestral form of this family. The simple spherical medullary shell is connected by a variable number of radial beams with the lenticular or discoidal cortical shell (or "phacoid shell"). The margin of this latter is quite simple, circular, without solid equatorial girdle or radial spines. From the nearly allied genus Carposphæra of the Sphæroidea, its probable ancestral form, Sethodiscus can be derived simply by lenticular compression of the spheroidal cortical shell.

Subgenus 1. Sethodiscinus, Haeckel.

Definition.—Surface of the disk smooth, without radial ribs or spines.

1. Sethodiscus phacoides, n. sp.

Disk with smooth surface, three times as broad as the medullary shell. Pores regular, circular; fourteen to fifteen on the radius of the disk. (Very similar to *Periphwna cincta*, Pl. 33, fig. 4, but without the girdle of the margin.)

Dimensions.—Diameter of the disk 0.2, of the medullary shell 0.07, of the pores 0.005. Habitat.—Pacific, central area, Stations 270 to 274, in various depths.

2. Sethodiscus macroporus, n. sp.

Disk with smooth surface, twice as broad as the medullary shell. Pores regular, circular, very large; five to six on the radius of the disk. (Remarkable for the extraordinary size of the pores, which reaches half the radius of the medullary shell.)

Dimensions.—Diameter of the disk 0·1, of the medullary shell 0·05, of the pores 0·012. Habitat.—North Atlantic, Gulf Stream, Færöe Channel, John Murray.

3. Sethodiscus microporus, n. sp.

Disk with smooth surface, four times as broad as the medullary shell. Pores regular, circular, very small; twenty-two to twenty-four on the radius of the disk. (The small pores are scarcely half as broad as the thick bars between them.)

¹ Sethodiscus = Sieve-disk ; andos, dianos.