Numerous living and fossil forms of Sethocyrtida were previously described by Ehrenberg, partly in his genera *Dictyocephalus* and *Lophophæna*, partly (intermingled with three-jointed and many-jointed forms) in the genera *Eucyrtidium* and *Lithocampe*. A larger number of new forms has been found in the Radiolarian ooze collected by the Challenger, and others fossil in Barbados. Many of these Sethocyrtida are common and widely distributed. When a new third joint is formed on their basal mouth, they pass over into Theocyrtida.

The cephalis is usually subspherical or hemispherical, and much smaller than the thorax, the form of which exhibits all possible intermediate stages between flat, discoidal, conical, cylindrical, and ovate forms. The wide open mouth becomes more and more constricted, and finally closed in the Sethocapsida. The majority of the Sethocyrtida may have been derived either from the Tripocyrtida, or from the Anthocyrtida by reduction and loss of the radial apophyses.

## Synopsis of the Genera of Sethocyrtida.

I. Subfamily Sethocorida. Terminal mouth of the thorax a simple wide opening	Thorax conical or campanulate, gradually dilated.	Shell simple, without mantle, .	572. Sethoconus.
		Shell double, with an arach- noidal mantle,	573. Periarachnium.
	Thorax discoidal, flatly expanded.	Cephalis very large, without horn,	574. Sethocephalus.
		Cephalis ( Mouth simple,	575. Sethocyrtis.
	Thorax cylindrical or ovate, with truncate, constricted < or tubular mouth.	with a single horn. Mouth tubular,	576. Sethocorys.
		Cephalis with two horns or a bunch of horns,	577. Lophophæna.
		Cephalis without horn, .	578. Dictyocephalus.
II. Subfamily Sethocapsida. Terminal mouth closed by a lattice-plate.	Cephalis free, not hidden in the thorax.	One horn,	579. Sethocapsa.
			580. Dicolocapsa.
	Cephalis hidden in the upper part of the thorax.	No horn,	581. Cryptocapsa.

Subfamily 1. Sethocorida, Haeckel, Prodromus, p. 430.

Definition.—Sethocyrtida with the basal mouth of the shell open (vel Dicyrtida eradiata aperta).