Synopsis of the Orders and Families of Phæodaria—continued.

III. Order
PHÆOGROMIA.
Skeleton a simple lattice-
shell, not bivalved, con-
stantly provided with
a peculiar large shell-
mouth placed on the
oral pole of the main
axis; peristome usually

surrounded by peculiar

either spherical or ovate, or of another form).

Central capsule excentric.

placed in the aboral half

(Shell

feet or teeth.

of the shell-cavity.

Structure of the shell not porcellanous stance).

Structure of the shell diatomaceous, with very delicate and regular hexagonal pores. No articulate feet,

8. CHALLENGERIDA.

(without needles imbedded in a punctulate cement-subStructure of the shell alveolar, with hollow alveoles between a double plate. A corona of articulated feet around the mouth, .

9. MEDUSETTIDA.

Structure of the shell of simple lattice-work, neither diatomaceous nor alveolar. No articulate feet,

10. Castanellida.

Structure of the shell porcellanous, with peculiar fine needles imbedded in a punctulate cementsubstance (a circle of pores around the base of each radial tube).

Surface of the shell panelled or dimpled (spherical or polyhedral). Peristome flat,

11. CIRCOPORIDA.

Surface of the shell smooth, even (ovate or subspherical). Peristome prominent,

12. Tuscarorida.

IV. Order PHÆOCONCHIA. Skeleton a bivalved latticeshell, composed of a dorsal and a ventral valve which are completely separated (rarely connected by a ligament on the aboral pole). Central capsule enclosed between the two valves.

The two valves of the bivalved shell thick and firm, regularly latticed, without a galea or cupola on their apex, and without hollow tubes,

13. Concharida.

The two valves of the bivalved shell very thin and fragile, scarcely latticed, each with a conical cupola or a helmetshaped galea on its sagittal pole or apex, and with hollow tubes.

Galea without rhinocanna or nasal tube, without frenula, .

14. CŒLODENDRIDA.

Galea with a rhinocanna or nasal tube, both connected by an odd or paired frenulum,

15. CŒLOGRAPHIDA.

Order I. PHÆOCYSTINA, Haeckel (1879).

Definition .—Phæodaria without lattice-shell, either without any skeleton, or with an incomplete skeleton, composed of numerous single pieces, which are scattered in the calymma without connection. Central capsule placed in the centre of the spherical calymma.