The genus Cælodoras is the simplest form of the Cælodendrida, and may be regarded as the common ancestral form of this and of the following family. It differs from all other members of these two families in the simple shape of the hollow radial tubes which arise from the galea, and are neither branched nor forked; the galea is very small, a flat triangular cap. Cælodoras may be derived immediately from Concharium or Concharium (p. 1723), by development of the galea and the radial tubes.

1. Cælodoras hexagraphis, n. sp.

Three straight, cylindrical, equidistant hollow tubes arise divergent from the three corners of each galea, and are about as long as the diameter of the valves, at the distal end armed with a spinulate knob. The odd sagittal (or caudal tube) is directed backwards, the two paired (or pectoral) tubes, forwards.

Dimensions.—Diameter of the valves 0.16, length of the tubes 0.2. Habitat.—Central Pacific, Station 266, depth 2750 fathoms.

2. Cælodoras octographis, n. sp.

Four hollow cylindrical tubes, slightly curved, arise divergent from each galea, and are about one and a half times as long as the diameter of the valves, at the distal end knob-shaped, and armed with four crossed, recurved teeth. Two anterior (or pectoral) tubes arise from the two frontal corners of the galea basis, and diverge forwards to right and left. Two posterior tubes (a sagittal and a caudal) arise from the posterior corner of each galea, and diverge in the sagittal plane backwards.

Dimensions.—Diameter of the valves 0.2, length of the tubes 0.3. Habitat.—Central Pacific, Station 272, depth 2600 fathoms.

Genus 728. Cælodendrum, Haeckel, 1860, Monatsber. d. k. preuss. Akad. d. Wiss. Berlin, p. 801.

Definition.—Coelodendrida without external lattice-mantle, with branched radial tubes, the hollow branches of which are free and never connected by anastomoses.

The genus Cælodendrum is the first described form not only of the family Cælodendrida, but of all Phæoconchia or bivalved Phæodaria; it is also the most common form of this group, and represented by ten different species, some of which are cosmopolitan, very common, and widely distributed. In my first description of Cælodendrum I confounded it erroneously with some forms of Cælodasea and Cælographis, the separated fragments of which I had found entangled between the branches of the former. The first figures of Cælodendrum are given in my Monograph, in 1862,

¹ Cælodendrum = Hollow tree; zuidos, δένδρον.