

in *Stephanomia* and *Crystallodes*, where they form a single rectilinear series in the ventral median line of the rigid trunk; all parts of the cormidia here hang down from its ventral or inferior side, whilst the dorsal or superior side is only covered with bracts (Pl. XVII. fig. 1). *Anthemodes* and *Cuneolaria* differ from the former in the spiral twisting of the prolonged and very movable stem; the cormidia, therefore, are turned in all directions; but they are also separated by long internodes which are only covered with bracts (Pl. XIV.). Each cormidium is composed in these four genera of a single siphon with its tentacle; one or more palpons (or cystons), usually each with a palpacle; a group of bracts, and a monoclinic pair of distylic gonodendra (a male and a female) (Pl. XV. fig. 5, *f*, *h*; Pl. XVII. fig. 4, *f*, *h*).

The Halistemmidæ—or the Agalmidæ with dissolved cormidia—comprise the majority of this family, viz., all the genera except the four above mentioned. The polymorphous persons and their organs are here more or less dislocated and scattered; the palpons and gonostyles arise (singly or united in groups) directly from the trunk of the siphosome, not from the base of the siphons as in the Stephanomidæ. Usually also here the internodes between the siphons are of equal length; they are, however, not free, but covered with palpons, cystons, and gonodendra variously arranged: sometimes rather regularly (as in *Phyllophysa*, *Cupulita*, &c.); at other times very irregularly (as in *Halistemma*, *Agalmopsis*, &c.). A peculiar structure already described by Eschscholtz (1, p. 150) is developed in *Agalma*, where the bracts compose a scale, a carapace with a central cavity, or an axial hydroecium into which the distal part of the siphosome may be retracted (Pl. XVIII. fig. 8).

*Bracts.*—The hydrophyllia or “covering scales” in all Agalmidæ are very numerous, often several hundreds, in the largest forms more than a thousand. They arise usually not only from the nodes of the trunk, where the siphons are attached, but also from the internodes between them. The carapace of scales, which is composed of the jointed bracts apposed one to another, is always complete in the contracted state of the siphosome, and often also in the expanded state. Their special form and arrangement are very different in the various Agalmidæ. Generally the bracts are thick, prismatic or wedge-shaped in the Crystallodinæ, where they cover the rigid trunk so densely that their intervals nearly disappear and the siphosome loses its contractility. In the Anthemodinæ, on the other hand, where the stem is very extensile and contractile, the bracts are usually thin, foliaceous or squamous, and the intervals between them of very variable size. The general form of the bracts is sometimes ovate, lanceolate, or rhombic, at other times trigonal, tetragonal, or pentagonal, often with three to five (rarely more) prominent teeth at the distal margin. Usually the superior or outer face is more or less convex (often with prominent ribs, armed with cnidocysts), the inferior or inner face concave; near this runs in the median line of the bract the simple blind bracteal canal. The clear and hyaline jelly-substance of the