

only a single one or a group of two. The palpons are united in a bunch, attached to the basal insertion of the siphon, in the ordinate cormidia of the Stephanomidæ; they are isolated, attached immediately to the trunk, and scattered between the siphons, in the dissolved cormidia of the Halistemmidæ; sometimes their succession is regular, at other times irregular. Usually one palpon (or cyston) is in direct connexion with the gonodendra, whilst others are independent of them. The palpons are thin-walled, cylindrical, very contractile and movable tubes, closed at the distal end, which is armed with thread-cells. Sometimes the distal part of the palpon is separated by an annular constriction and forms a subspherical cavity, in which a group of crystals or concretions (like an otolith) is turned round by the ciliated entoderm, as in an otocyst.

*Cystons*.—Hydrocysts with a terminal mouth opening, or cystons, occur very frequently (perhaps even constantly?) in the Agalmidæ; they were formerly confounded with the similar mouthless palpons. They are larger than the latter, with a thicker entoderm, which is partly glandular, and often coloured (red or brown). The fluid secretion, or the pigmented, granular or crystalline masses secreted by it, are ejected by the distal mouth, or rather the anal opening, which is closed by a muscular sphincter. Sometimes the distal part is separated from the dilated middle part by an annular constriction (Pl. XV. figs. 8, 9). I have never found more than a single cyston in each cormidium, whilst the number of palpons is usually large and variable.

*Palpacles*.—Many Agalmidæ, but not all, possess a number of long and thin palpacles, feeling or tasting filaments. Usually a single palpacle (or "accessory tentacle") is attached to the base of each palpon and probably also of each cyston. But in some species they have not been described; possibly they were either overlooked or lost accidentally. Each palpacle is a very slender cylindrical tubule, the muscular wall of which is very expansible and contractile, the cells of the exoderm covered with palpcils and partly containing small cnidocysts.

*Gonostyles*.—All the Agalmidæ have monoecious corms and monoclinic cormidia; each cormidium possesses a male and a female gonodendron. These arise sometimes from a common pedicle, at other times separated from two neighbouring gonostyles. The ordinate cormidia of the Stephanomidæ always bear a small pair of gonostyles, a male and a female, attached to their common trunk near the siphon. The loose cormidia of the Halistemmidæ, however, exhibit a variable arrangement. Sometimes a monoclinic pair of gonodendra, united with a palpon or cyston, arises from each internode, midway between two neighbouring siphons; at other times each internode bears two to four or more pairs of gonodendra; and sometimes their disposition is quite irregular, numerous male and female gonodendra being scattered irregularly along the whole trunk of the siphosome. Usually the gonodendra are small clusters, and their gonostyles simple or little branched. The female gonophores are smaller and more numerous than the male. Their umbrella is usually well developed, pedunculate, but sometimes rudimentary.