

cormidia, and branching irregularly, giving off a special canal to each branch of the gonodendron and to each gonophore budding from it. (11) *The palpon canal* (Pl. IV. fig. 18, *q*), the simple blind cylindrical cavity of the gonopalpon, which arises from the distal end of each gonodendron. (12) *The gonophore canal*, running through the pedicle of each gonophore to the centre of its subumbrella, and dividing there into four radial canals which are united at the margin by a ring-canal. (13) *The spermarial canal* (Pl. VII. fig. 46), or the simple central cavity in the axis of each androphore (spadix), arising from the centre of its subumbrella and being the direct prolongation of the gonophore-canal. (14) *The ovarial canal*, arising from the centre of the subumbrella of each gynophore (as the prolongation of its pedicular canal), and running either in the axis of the ovarium as a simple spadix (Pl. II. figs. 9, 10, *c*), or forming an irregular network of spadicine canals around the egg.

*Gonodendra*.—The corms of the Auronectæ are monœcious, the cormidia monoclinic, and the gonodendra monostylic. Each cormidium bears in the small Stephalidæ a simple gonostyle with a single gonopalpon (*g*), a single androphore (*h*), and several gynophores (*f*), usually between ten and twenty (Pl. VI. figs. 32–38; Pl. VII. figs. 48, 49). The large Rhodalidæ, however, bear on each cormidium one or two clustered gonodendra, each branch of which corresponds to the small monostylic gonodendra of the Stephalidæ, and is composed of a few androphores and a greater number of gynophores; usually a single large gonopalpon is attached to each gonodendron (Pl. I. figs. 2, 3; Pl. II. figs. 6–12; Pl. IV. figs. 15, 18).

*Gonostyles* (Pl. I. figs. 2–5; Pl. II. figs. 7, 8; Pl. VII. fig. 49, *ab*).—The stems of the gonodendra, or the branched gonostyles, are in the Auronectæ very thick-walled cylindrical tubes, which arise from each cormidium near to the base of the siphon, on its axial side (fig. 48). The wide axial canal of the gonostyle (figs. 2–4, *c*) is convoluted spirally in the highly contracted spirit specimens examined, and surrounded by a strong muscular wall of remarkable thickness. The transverse section of this wall (Pl. I. figs. 4, 5) exhibits the same structure as the pedicle of the siphons. An inner thin layer of ring-muscles (*mc*) and an outer thick layer of longitudinal muscles (*ml*) are separated by a thick elastic fulcrum (*z*). This fulcral plate arises outside in the form of numerous branched radial lamellæ. The stem must be very expansible and contractile in the living animal. The branching of the gonostyles is unilateral in the small Stephalidæ (fig. 49), dichotomous or irregular in the large Rhodalidæ (figs. 3, 7, 8, 15).

*Gonopalpons* (Pl. I. fig. 2, *r*; Pl. IV. figs. 15, *r*, 18, *q*; Pl. VI. figs. 37, 38, *q*).—The single form of palpons or tasters, which occur in the Auronectæ, are the sexual palpons or “gonopalpons.” Usually (or always?) a single tubular gonopalpon is attached to each cormidium, as a distal branch of its gonostyle; it is a simple cylindrical tube closed at the pointed distal end (fig. 18, *q*). The gonopalpons seem to be very contractile, but were for the most part detached and lost in the specimens examined.