

stricted portion which projects as a button into the cavity of the ventriculus (Figs. 1 and 2). The peculiarities mentioned seem to me to justify us in returning to Emery's contention of 1899 that the Pseudomyrmicæ constitute an independent subfamily. I have endeavored to show in a recent paper (1919a) that neither the larval nor the imaginal Metaponini can be regarded as at all closely related to the Pseudomyrmicæ. Emery's section Promyrmiciniæ should therefore be abandoned and his term Eumyrmiciniæ may be regarded as merely synonymous with Myrmiciniæ.

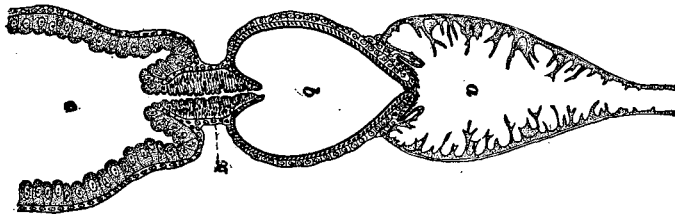


Fig. 2. *Vitivicola tessmanni* Stitz; a sagittal section through part of the alimentary tract, including *a*, the ingluvies, or "crop" (much contracted); *b*, calyx of proventriculus, or "gizzard," *c*, its cylindrical portion, and *e*, anterior portion of ventriculus, or "stomach."

A study of the larvæ of the Cerapachyini shows that they are extremely like the larvæ of the Dorylinæ. This was noticed by Emery in his observations on the larva of *Acanthostichus serratulus* (1899). The mandibles are small, narrow, pointed and rather feebly chitinized, and I have failed to find a trophorhinium in either group. Apparently the young are fed only on soft food. That the foraging habits of certain Cerapachyini (*Phyracaces*) resemble those of the Dorylinæ was shown in my paper on the Australian species (1918a). We know nothing of the pupæ, but they are probably not enclosed in cocoons as in the Ponerinæ. Although the worker of the Cerapachyini has a Ponerine habitus, the characters of the female in the various genera are peculiarly diverse. In some cases (*Phyracaces*), this caste is winged and not unlike the females of certain Ponerinæ, in others (*Parasyscia*, *Eusphinctus*) the female is wingless and ergatomorphic and in still others (*Acanthostichus*, *Nothosphinctus*) the female is so much like the corresponding caste in the Dorylinæ, that it might be regarded