important secerning functions. Behind is a remarkable lingual organ, which in longitudinal section presents much resemblance to the tongue in mammals. It is attached at the base posteriorly to a dense glistening muscular mass—separated by a layer of horizontal fibres from the complex series of radiating muscles which diverge upward to the periphery of the organ. In vertical longitudinal sections in the middle line these fibres are separated posteriorly, by septa passing downward from the thick cuticular (chitinous) coat, into spaces that enlarge as we proceed anteriorly. In such sections most of the fibres in the posterior half are more or less vertical, though it is evident they are closely interwoven. The muscles at the tip of the tongue arch backward over the posterior part of the preceding glandular region (which forms a highly vascular cushion), and pass downward to the front of the dense glistening basal mass formerly alluded to—the curve of the arch becoming less and less till the fibres are nearly vertical behind the cushion, or at the commencement of the smooth and dense cuticular region of the tongue. The chitinous cuticular surface of the organ is so largely developed at this part that it is as thick as the hypodermic layer. In this region also there are at least three strong plates of transverse muscular fibres extending from summit to base. If the section deviate to the lateral regions, the decussation of the fibres is extremely complex. In transverse sections, again, near the tip of the tongue, the thickness of the hypoderm on the rugæ of the prelingual mass as well as in the lingual papillæ is considerable. Moreover, it is apparent that the entire diameter at the base of the prelingual mass is formed on the same plan, the central region (lingua proper) being, however, most muscular. When the section passes through the thick mass of the tongue an inextricable series of crossed and interwoven fibres occurs, the base assuming a somewhat stratified appearance, since the numerous blood-vessels are situated at intervals in regular horizontal rows. Nothing can exceed the complexity of the muscular structure of the organ, which is thus eminently calculated to subserve very important functions. The tip of the tongue is highly vascular; indeed, the organ throughout is largely supplied with blood-vessels. The dorsum of the free tip is covered by a series of elevated papillæ—truncated at the tip, and with one angle pointed—composed of processes of the hypoderm sheathed in cuticle. Schmarda describes a series of small blackish horny teeth as situated on the ridges of the vault of the proboscis, but, in the present instance, nothing further than the hypodermic longitudinal furrows covered with cuticle have been observed. Ehlers found similar ridges in *Euphrosyne racemosa*, but in the latter as well as in the *Euphrosyne foliosa* of Britain the parts are less developed than in the large African form.

Behind the tongue the alimentary region presents on its ventral aspect a large and a small fold, the former in longitudinal section often having a broad summit applied to the vault of the canal and a narrow base so that the whole resembles a pedicled mass, but it varies according to the condition of the spirit-preparations. This region is furnished with numerous transverse folds, so deep in some cases as to