

are extended, the laciniae partly cover the labial groove, and the lacinial comb apparently is used to pass materials along this groove. But the comb is not always present, or if so, may be small and inconspicuous. It is usually continuous, though discontinuous in some sexual forms. Conspicuous setae are sometimes present on the lacinial gonia, as in *Dorylus*.

As with the maxillary palpus, the labial palpus has fewer segments in species that are strongly hypogaecic. A distinct sensory peg is often found at or near the tip of the last labial palpus segment in the Dorylinae; this is most noticeable and constant in the genus *Aenictus* (fig. 123). The shape of the labial palpus in *Aenictus* is also quite constant. Although this palpus is reduced to 2 segments in many species, the segments are much less highly modified than they are in the genus *Dorylus*. In *Dorylus*, the palpal segments are elongated and rodlike (fig. 151).

The prementum is similar in its basic construction throughout the ants, although the premental shield may vary in degree of sclerotization or differ in shape. The premental shield always extends laterally along the labium, where it becomes membranous. The proximal lateral corners, which are extended laterally, are usually heavily sclerotized, and serve as points for muscle insertion. While heavy sclerotization of the premental shield provides greater protection for the mouthparts, and while this protection may be of greater advantage among active foragers and predators, such heavy sclerotization seems to be absent in the Dorylinae. In this connection it is important to note that, in the Dorylini and Ecitonini, the labrum and stipites together effectively cover the premental shield when the maxillo-labial apparatus is retracted. The premental shield commonly has several long setae, which extend out beneath the mandibles when the mouthparts are withdrawn and may serve as tactile sense receptors. Prominent setae, for instance, occur on the prementum of *Paraponera clavata* (figs. 66, 67) and of the male of *Dorylus fulvus* (fig. 173).

The proximal lateral extensions of the premental shield articulate with the epimental sclerites. These supporting sclerites are present in all ants but are seldom clearly defined. They are membranous in part and difficult to discern. In 1925, Bugnion indicated that these sclerites terminated distally in brown triangular expansions that he called the *raquettes*. He also described the *raquettes* as being provided with muscles whose action probably assisted the progress of particles along the labial groove. In the present investigation the *raquettes* were never clearly seen as the distinct structures described by Bugnion. In only a few species [e.g. *Eciton quadriglume* soldier (fig. 240)] were there any structures that even remotely resembled the *raquettes*, and these appear to be membranous expansions associated with the labial groove and infrabuccal pocket and not with the epimental sclerites. It is suggested, therefore, that the term *raquette* be abandoned.

In 1925 also, Bugnion indicated that the term paraglossa was not accurate in describing the subglossal brush and the plate on which it is inserted, insisting that the subglossal brushes were not, in fact, homologues of