

past the center as measured from the mandibles to the occiput, and on the edge of the scrobe. Mandibles stout, convex, anterior margins feebly curved to nearly straight, the masticatory border bearing five, heavy, blunt teeth, the apical ones best developed and the others diminishing slightly in size. Antennae 11-segmented; scapes short, flat, about $2\frac{1}{2}$ times as long as wide, with convex anterior and straight posterior margins; scapes almost fill the upper and deeper portions of the cephalic scrobes where they are overarched by the facial carinae. Funiculi longer than the scapes, decidedly flattened, but with the upper surface weakly convex and the lower surface flat to almost imperceptibly concave; funicular segments 2 to 7 much broader than long and gradually increasing in size; last three segments much larger, forming a spatulate club, the penultimate and antepenultimate members of which are nearly as broad as long, the terminal segment longer than broad and twice the length of the penultimate.

Thorax long and narrow, about $2\frac{1}{2}$ times as long as broad, and narrower than the head; humeri well-developed, pro- and mesonotum fused with no trace of dorsal sutures; meso-epinotal suture distinct and slightly impressed, especially laterad. Entire thorax including epinotum, marginate to submarginate laterally, the bordering ridge continuing transversely across the front of the pronotum, setting off a distinct collar which joins the head at a low level. The margins continue also to the epinotal angles which then terminate in broad, dentate processes at the same level as the thorax, and finally turn ventrally to border the declivious face of the epinotum. Dorsum of the thorax moderately convex from side to side, feebly from anterior to posterior ends; basal face of epinotum nearly horizontal, but passing through an abrupt, slightly concave angle to the vertical declivity; basal face twice as long as the declivious face. Thoracic pleurae and epinotal sides vertical but noticeably concave. Petiole almost flat dorsally, subquadrate except that the postero-lateral corners are divergent and produced into prominent teeth; the posterior border is broadly excised. The dorsum is separated from the sides, front, and back walls by marginate borders, the walls concave in each case, descending and converging mesially toward the midline, thus producing the appearance of a flaring, cuneate, petiolar node. Anterior peduncle short and constricted; posterior peduncle hardly more than an acetabulum for the condyle of the postpetiole. Petiole armed with a thin, translucent, median, ventral, blade-like keel, pointed at its middle. Postpetiole $\frac{2}{5}$ wider than long, almost flat dorsally, marginate on all borders, but the ridge more rounded than the corresponding one on the petiole; anterior and lateral walls vertical and not tapering mesially, the post-petiolar node being thus no broader than the body of the segment. Anterior peduncle short, posterior peduncle obsolete, the postpetiole joined to the gaster by a wide face, though leaving a deep constriction between the two. Ventral surface of postpetiole produced into a short, triangular, transverse tooth, as a ventral extension of the anterior wall. Mesothoracic spiracles appear to be covered by backward extending flaps developed from the tops of the pro-mesothoracic pleural sutures. Epinotal spiracles large and easily visible. Petiolar spiracles located at the base of the anterior peduncle, postpetiolar spiracles laterally on the node of this segment. Spiracles present on the first three gastric segments.