

about 0.5 mm larger. In *P. pergandei* the head, "when measured from side to side thru the eyes," is said to be slightly broader than long; when measured in this manner, the head of the male of *P. californicum* is about 1.3 times as broad as long, which I would be inclined to call distinctly broader than long.

Smith's statement that the pronotum is "somewhat concealed by the mesonotum" would seem to imply that the latter overhangs the former; this condition is not true of *P. californicum*. In this species, the posterior face of the pronotum is vertical and is not overhung by the mesoscutum. The gaster of *P. pergandei* is described as smooth and shining; since Smith noted the presence of punctures elsewhere on the body and made no mention of gastric punctures, I assume he meant there were no evident punctures, although very fine, piligerous punctures must surely be present. The first gastric tergum of Cook's species is conspicuously and closely punctate; the second segment is likewise conspicuously punctate, but the punctures are notably sparser and somewhat finer than on the first segment.

Males of the European species, *P. melinum*, have not been available to me. Although this caste was described by Emery (1895), the description is not sufficiently detailed to be of much assistance here. The size of Emery's male and the mention of abdominal punctures may corroborate the relationship to *P. californicum* suggested by the females of these species.

The evidence examined above indicates that *P. californicum*, based on a male specimen, is distinct from previously described species of New World *Proceratium*, while there is some indication that it may be more nearly related to the European species, *P. melinum*. This accords with what is known of the presumed females of *P. californicum* which are clearly distinct from those of the other known species of the New World. It is on the basis of the relationships expressed above that I have associated these females with *P. californicum*.

The following key has been prepared to facilitate the identification of females and workers of the described species of *Proceratium* occurring in the New World. The following three species are placed in the key on the basis of comments in the literature as they have not been available to me: *P. brasiliense* Borgmeier, *P. convexiceps* (Borgmeier) and *P. mancum* Mann.

KEY TO NEW WORLD *PROCERATIUM*, WORKERS AND FEMALES

1. Petiole erect, compressed from front to back; middle lobe of clypeus not produced forward as a triangular process; females with distinct thin, blade-like process on middle of metanotum and with strong longitudinal carina on apical one-half or more of scutellum.....2
- Petiole nodiform, anterior face convex or strongly inclined, not compressed (except in *P. californicum*); clypeus produced medially as a narrow triangular lobe (except in *P. convexiceps*); female without blade-like process on metanotum; longitudinal carina usually absent from scutellum, when present, very faint, limited to posterior one-fourth, or less, of the segment.....4