

through 173 pages of text. Forel (1921:133-140) treated five subfamilies. The latest is that of Bernard (1951), but it can hardly be called a conspectus, because the characterizations are scattered through 47 pages (1040-1087) of text; furthermore he raised the eight subfamilies to family rank.

KEYS

In 1910 (p. 557) W. M. Wheeler presented a key to the five subfamilies and in 1922b (631-632) a key to the seven subfamilies. The latest cosmopolitan key is that of Clark (1951:14-16); he recognized 15 subfamilies, 5 of which are not accepted today.

None of the above mentioned is illustrated. In fact we have never seen an illustrated cosmopolitan key to the subfamilies of Formicidae. We present our version below. Few if any keys are perfect and this one is no exception: there are a few genera which will not key out; we have taken care of one such tribe, the Odontomachini, because it includes two large tropicopolitan genera.

SPHECOMYRMINAE

Workers.—Clypeus and frontal carinae simple but ant-like. Eyes large, convex, near the middle of the sides of the head. Ocelli large. Mandibles short, curvilinear, bidentate. Antennal scapes elongate (but shorter than usual in worker ants); funiculi long and filiform, the second segment the longest. Thoracic somites and epinotum separated from each other by 2 complete sutures; mesoscutum separated from mesoscutellum by a sunken area. Metapleural glands well-developed. Pedicel of a single segment, which bears a node. Sting well developed. Claws toothed.

This subfamily was established by Wilson, Carpenter and Brown in 1967 to include 1 extinct species in a new extinct genus, *Sphecomyrma freyi* from the Upper Cretaceous amber of New Jersey.

DORYLINAE

Workers.—Clypeus very short and not delimited by sutures. Frontal carinae vertical, close together or even fused, not covering the antennal insertions. Antennae short, of 7-12 segments, inserted near the mouth and quite close to each other. Eyes vestigial or absent. Palps 2- or 3-segmented. Sutures of thorax more or less effaced; metanotum concealed from above. Pedicel of 1 or 2 segments. Sting developed.

Females.—Dichthadiiform. Antennal segments 10-12. Eyes vestigial or absent; no ocelli. Sutures of thorax more or less effaced; metanotum concealed from above; wingless. Pedicel of 1 segment.

Males.—Mandibles developed, usually large. Antennae 13-segmented. Eyes and ocelli well developed. Winged; thoracic segmentation normal. Pedicel of 1 segment. Genitalia completely retractile; subgenital lamina forked. No cerci.

Larvae.—Elongate, slender, subcylindrical (but with a slight progressive attenua-