## PART I. DESCRIPTIONS OF AMERICAN MYRMECOCYSTI.

## 1. Myrmecocystus melliger Forel.

(Fig. 2.)

?Formica melligera Llave, Reg. Trim. o Collect. Mem. Hist. Lit., 1832, p. 463, &.

Myrmecocystus melliger Forel, Ann. Soc. Entom. Belg., XXX, 1886, p. 202, &

(exclus. synonymy); Emery, Zool. Jahrb., Abth. f. Syst., VII, 1893, pp. 666,

667; Forel, Biol. Central. Amer., Hymenopt., III, 1899-1900, p. 130; Dalla

Torre, Catalog. Hymenopt., VII, 1893, p. 218 (in part).

Worker major. -- Length 8-9 mm.

Head rather large; excluding the mandibles, about as broad as long, a little narrower in front than behind, with rounded posterior corners and somewhat rounded or convex sides. Eyes small, less than  $\frac{1}{5}$  as long as the side of the head. Clypeus broad, convex in the middle, but not carinate, with broadly rounded but not projecting anterior border. Frontal area large, triangular, its outline indistinct behind. Frontal groove replaced by a rather indistinct ridge or raised line. Mandibles large, 7-toothed, with the apical tooth long and curved. Antennæ slender. Last joint of maxillary palpi but little more than  $\frac{1}{2}$  as long as the penultimate joint. Thorax long, constricted in the mesonotal region; in profile low and depressed above. Epinotum, when seen from above, broad, truncated behind; in profile with subequal base and declivity, meeting at a rounded and very obtuse angle. Petiole lower than the epinotum and about half as broad, thick, very blunt above, with a faint median impression. Gaster rather large, broadly elliptical, somewhat flattened above. Legs long.

Surface of body very finely punctate and shagreened; feebly shining, head more glabrous. Mandibles coarsely longitudinally striated.

Hairs and pubescence grayish, the former erect, rather abundant and covering all parts of the body, including the maxillary palpi, legs and antennal scapes. Pubescence dense on the gaster, petiole, thorax and legs, so that these parts have a silky luster, much shorter and sparser on the head, so that its shining surface is exposed.

Head and anterior portion of thorax yellowish red. Posterior portion of thorax, petiole, and legs more brownish red; gaster black but appearing gray on account of the layer of pubescence. Mandibular teeth and anterior border of clypeus blackish.

Replete.— Length 9-12 mm.

In all respects like the worker major except in having the gaster filled with honey and dilated to form a translucent sphere, as large as a pea (6-8 mm. in diameter), on the surface of which the sclerites appear as isolated dark patches separated by the tense, pellucid, yellowish intersegmental membrane.

Worker minor.— Length 4.5-5 mm.

Resembling the worker major, but with the head distinctly longer than broad, as broad in front as behind and with straight, subparallel sides. Color deeper, the red of the head, anterior portion of the thorax and legs being duller and more brownish.