

ADDITIONS TO OUR KNOWLEDGE OF THE ANTS OF
THE GENUS MYRMECOCYSTUS WESMAEL.¹

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Since my paper on the honey ants was published in 1908² our knowledge of the distribution of these insects has been increased and two new species have been brought to light. Mr. Percy Leonard of the Raja Yoga Academy at Point Loma, California, has discovered a new subspecies of *M. melliger* and has published an interesting account of its habits and of those of *M. mexicanus mojavæ*.³ During the winter of 1910 I made a second journey to Arizona and California and was able to observe the latter and several of the other subspecies in the field. The discovery of the typical *M. mexicanus* in Arizona and Southern California by Mr. W. M. Mann, Mr. Leonard and myself brings all of the known species, subspecies and varieties of the genus within the confines of the United States. The separation of these from the Old World forms, till recently regarded as *Myrmecocysti*, but now placed in Förster's genus *Cataglyphis* by Emery and Forel, is also an important step in advance, as is also the recognition by the former authority of the fact indicated in my former paper that *Myrmecocystus* is closely allied to the circumpolar genus *Lasius*, whereas *Cataglyphis* is more intimately related to another circumpolar genus, *Formica*. These diverse relationships of the New and Old World genera are most clearly seen in their respective males. An unsolved problem is still presented by some of the small species of *Myrmecocystus* and *Formica* of the subgenus *Proformica*, such as *M. lugubris* Wheeler of Arizona and *P. emmæ* Forel of Algiers, which resemble each other in the most extraordinary manner. This resemblance, however, may be due to convergence of habit, as both are desert ants. Mr. Leonard has found that *M. melliger lomaënsis* has, replete, or "honey pot" workers, like the typical

¹ Contributions from the Entomological Laboratory of the Bussey Institution, Harvard University, No. 60.

² Honey Ants, with a Revision of the American Myrmecocysti. Bull. Amer. Mus. Nat. Hist. XXIV, 1908, pp. 345-397, 28 figs.

³ The Honey Ants of Point Loma, California. Trans. San Diego Soc. Nat. Hist. I, No. 3, 1911, pp. 85-113, 6 figs.