

THE MARRIAGE-FLIGHT OF A BULL-DOG ANT
(*MYRMECIA SANGUINEA* F. SMITH)

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During a recent visit to Australia I had an opportunity to study in the field the habits of a number of species of the large ants popularly known as "bull-dog ants," belonging to the very primitive genus *Myrmecia*. This genus comprises some sixty described species, subspecies and varieties, all confined to Australia and the island of New Caledonia. They bear about the same relation to the more specialized and more modern ants that the Marsupials of Australia bear to the placental mammals of other continents. Many of the species are among the largest of ants, several of them are beautifully colored and sculptured, and all of them sting or both sting and bite severely. In his latest work on the Ponerinae in the "Genera Insectorum" Emery divides the genus *Myrmecia* into three subgenera, *Myrmecia* sens. str., *Pristomyrmecia* and *Promyrmecia*. I have found that the species of these three groups differ greatly in nesting and other habits. A detailed account of my observations will be published later in connection with taxonomic descriptions of the various forms. Here my remarks will be mainly confined to one of the largest and most aggressive species, *Myrmecia sanguinea* F. Smith, an ant which must be widely distributed in Australia, since it has been recorded from Queensland, New South Wales, South and Western Australia and Tasmania. I found it very abundant at Salisbury Court, near Uralla in northern New South Wales, where, through the courtesy of the government entomologist, Mr. W. W. Froggatt, I was able to spend a few days at a laboratory recently established for the study of the blow-flies that have acquired the unfortunate habit of injuring living sheep.

In the open forest surrounding the laboratory there are many large nests of *sanguinea*, mounds of earth of a more or less conical shape, varying from three to five feet in diameter at the base and one to two feet in height. The surfaces of these