

contents to flow out. They say that when this operation, namely the removal of the head and thorax, is not performed, the honey diminishes and, according to the peasants, is consumed by the ants.”¹

Concerning the function of the replete worker Wesmael promulgated an erroneous conception which he gleaned from the statements of Baron de Normann, who brought the types of *M. mexicanus* to Belgium. He says: “According to the statement of M. de Normann, this species of ant constructs subterranean habitations, which the individuals with vesiculate abdomens never leave. There, condemned to almost complete immobility, their unique function is to elaborate a kind of honey, which is then disgorged into special reservoirs analogous to the waxen cells of bees. Unfortunately M. de Normann saw only a fragment of this kind of comb, too distorted to give an accurate idea of its structure, and he could not bring it to Europe, as he knew not how to preserve it during the voyage. For my part, I am much inclined to believe in the reality of the facts reported by our honorable envoy; first, because I have no reason to doubt his veracity; and second, because these facts follow almost of necessity from the structure of these singular ants; for how can we impute the active habits of their congeners to individuals all of whose movements must be impeded by the volume and weight of their abdomen, which, moreover, would have its delicate walls torn by contact with the slightest projection? On the other hand, since these ants, in their capacity as workers, have the ovaries completely suppressed, the volume of the abdomen can be attributed only to an excessive development of the digestive organs it contains, a development which must originate in the superabundance of nourishment brought to these sedentary ants by the other workers; and these workers in turn, would not waste their time and efforts in furnishing their big-bellied companions with such a copious amount of food, if the latter did not return it to the community with interest. Hence the big-bellied ants are only the cooks, so to speak, who prepare food and provisions without other utensils than their stomach.

“One is much inclined to ask, whether in the colonies of the Mexican ants, the big-bellied individuals are already such on quitting the pupal stage. In the absence of positive information on this point, we may suppose that the excessive development of the abdomen is, perhaps, merely the result of over-feeding, coupled with perpetual inactivity. It is well known that in our own species certain individuals who have reached an age when the sexual organs lose their activity, sometimes take on, in the midst of repose and abundance, an enormous abdominal amplitude. It is also

¹ I have here translated Lucas's translation of Llave, as I have been unable to find the original even in the beautiful library of the new Hispanic Museum.