

corner of the nest a number of *Myrmica* workers had formed a circle about a few of their small larvæ which they were cleansing and feeding. A *Leptothorax* soon found its way to this cluster and stepped from the back of one ant to that of another, lavishing a shampoo on each in turn and apparently filling its crop with the liquid contributions thus solicited.

This and numerous very similar observations, which could be made at any time on removing the cover of the nest, prove conclusively that the *Leptothorax* workers demand and obtain their food from the *Myrmica* workers. The method of soliciting food, however, differs from that of any other myrmecoxenous animals known to me. These animals usually request food by tapping the ant with their antennæ (many myrmecophilous beetles), or stroking its face with their fore feet (*Atemeles*), but none of these guests are so unconventional as to mount the backs and scratch the heads of their hosts for the purpose of inducing the latter to regurgitate. Even the slave-holding *Polyergus* and the social parasite *Anergates* demand and receive food after the manner of other ants. The *Leptothorax* workers are so persistent in their peculiar attentions to the *Myrmicas* that I have come to doubt whether the little guest ants ever really feed themselves. Once only was a *Leptothorax* seen to approach the dish of syrup, lap up a very little of it hastily, and then return to the nest. This happened before the ants had definitely settled under the pane of glass. After that only the *Myrmica* workers visited the manger, and the *Leptothorax* usually waylaid them as soon as they had entered the nest. During my first visit to the four natural *Myrmica*-*Leptothorax* nests I found the latter species loitering in the outer galleries just under the stone. I am convinced that they prefer this situation in order to be on hand the very moment a food-laden *Myrmica* enters the nest. The *Leptothorax* workers often walked on the lower surface of the roof-pane, although they had to turn over to mount the passing *Myrmicas*. They must do this also in the natural nests, for the specimens taken August 1 were, as above stated, crawling on the lower surface of the stones.

Although the feeding of the guest ants commonly proceeds