

observations extending from August 30 to September 4 are condensed in the following notes :

*August 30.* The round cell, which remained undisturbed all day yesterday, was still intact at 8 o'clock this morning. By noon, however, the *Myrmicas* had torn down its wall in several places, and three of them were found in the cell, submitting to a vigorous shampoo. By 8 o'clock in the evening the circular nest had been rebuilt. The opening at *r* had been closed and a new one opened at *m* (upper left-hand corner of cell in Fig. 9).

*August 31.* Almost an exact repetition of yesterday's performance.

*September 1.* This morning the reconstructed *Leptothorax* cell is smaller. Its upper entrance, *m*, and the two subterranean entrances, *n n*, have not been changed. The ants have sunk the pupæ and eggs to a greater depth in the earthen floor of the nest, so that they are almost in contact with the board. The nest was not molested by the *Myrmicas* during the day.

*September 2.* The cell this morning has further decreased in size but is still intact. Its cavity is not more than 7 mm. in diameter, so that the *Leptothorax* family is much crowded. The two subterranean entrances at *n n* are still in use but the upper entrance has been shifted to *m* (lower left-hand corner of cell in Fig. 9). The *Myrmicas* still leave the cell unmolested.

*September 3.* To-day, too, the *Leptothorax* were left in peaceful possession of their cell. Many of them went out into the galleries from time to time to shampoo the *Myrmicas* and solicit food, which they then distributed to their queen and to the few workers remaining at home. During the day the upper entrance at *m* was closed so that the wall of the nest was everywhere in close contact with the roof-pane. The ants still entered and left the chamber through the two underground entrances at *n n*.

*September 4.* At 8 A.M. the *Leptothorax* nest was unchanged, but by noon its circular walls had grown perceptibly thinner, as the *Myrmica* workers had again taken to removing the earth from the outer surfaces. The nest was now shaped like a volcano with sloping sides and the guest ants inhabiting the crater. By 5 P.M. the *Myrmicas* had made two breaches in the walls. The nest remained in this condition throughout the evening.