

from the aperture. In this respect it behaves essentially as does the major of *Colobopsis*. There are, however, a number of interesting differences in the process. When the head of the major of *Colobopsis* is serving in its phragmotic capacity, the only portions of it presented to the exterior are the jaws and the truncated anterior face. The antennae are folded back against the sides of the head and they are well removed from the exterior: it is difficult to see how they could receive tactile stimuli. This may be why Wheeler (Bull. Amer. Mus. Nat. Hist., Vol. 20, No. 10, p. 154, 1904) was unable to elicit any response when he attempted to cause the withdrawal of the *Colobopsis* major by touching the exposed portion of the head with a pin or straw. The head of the major of *ulcerosus*, when in the phragmotic position, can readily receive tactile stimuli with the antennae. For these parts are not concealed, but held so that each funiculus lies at one side of the aperture. The returning workers touch the exposed antennae of the occluding major with their own antennae to secure entry for, when thus stimulated, the major withdraws its head from the aperture. This same response can be elicited by touching the antennae of the occluding major with a bit of grass. The major of *ulcerosus* is capable of a rather surprising range of behavior when acting as a guard. As a general rule a strange ant can walk across the face of the *ulcerosus* major, when the latter has assumed the phragmotic position, without producing any visible response. Occasionally, however, the major will seize the strange ant in its jaws and jerk it into the nest, where it is, presumably, killed. Furthermore, the major of *ulcerosus* does not always take a position where its head blocks the entrance. During periods when little traffic is passing the "door", the major on guard often remains well inside the carton, with only the tips of the antennae showing at the aperture. From this position it can pop into place instantaneously, which it does if a strange ant walks onto the shield. If foraging has ceased and there are no strange ants in the vicinity, the major may retreat so far from the aperture that it cannot be seen when a beam of light is thrown through that opening. It is of interest to note that the major of *ulcerosus* is not limited to serving