biting at and trying to cut the prey cuticle. Once it has breached the cuticle, the larva attaches itself to the prey by means of its mandibles and forces its head into the interior, where it can reach the internal soft parts or fluids (Fig. 29). The attachment serves to anchor the larva, and because of the prey-larva weight differential, the larva is able to draw itself to the prey, and extend itself within, without moving the prey, by contracting its thoracic segments. While this movement is thus not completely autonomous, it is evident that the flexibility of the thorax permits movements not seen in larvae belonging to other genera examined. The larvae of *Amblyopone* are distinguished, by their mobility and by their relative autonomy, from the larvae of more advanced ants. It was also noted that the larva, apparently seeking food, may try to attach itself either to other larvae or to the workers.

It should be noted that there is no preparation of the food by the workers beyond its paralysis and transport; not even their simple piercing of the integument seems to be needed by the larvae. When it has finished eating, the larva withdraws its head from the chilopod body and remains completely immobile. It may attempt to reenter the chilopod, but only after a considerable period of time. The workers may at times move the prey while one or more larvae are trying to feed, causing the larvae to suddenly detach themselves. Workers can withdraw a larva and place it back with the other brood. This observation agrees with that of Le Masne (1952) on *Hypoponera eduardi* (Forel) where the prey may be taken away from the larva before it is entirely eaten. In certain cases, the larva is so well attached to the prey when it is eating, that a worker, in attempting to take the larva away, does not succeed and moves the chilopod at the same time. Workers were never observed to bring food to a larva that remained with the rest of the brood. Dietary differences between the youngest and oldest larvae were not detected.

The different castes once fed, the chilopod is abandoned although it is often far from being completely consumed. Before the 1st signs of decomposition are manifested externally by a blueing of the cuticle (yellowish in life), it is removed from the brood and placed at a distance of from 1 to 4 cm. This observation appears to be different from that of Haskins and Haskins (1951), who noted that in *A. australis,* pieces of insect chitin are left in the brood chamber for a relatively long time and are frequently licked by the brood.

The duration of feeding time on a given chilopod is evidently quite variable. However, in most cases it is only intense for a few hours. The prey, although far from being entirely consumed, can be used for 24 hr and then is removed without being cut up.

We do not know if there is any regurgitation of stomodeal food from the workers to the larvae, a phenomenon seen in those Ponerinae that are more advanced than *Amblyopone,* such as *Hypoponera* (Le Masne 1953) and also in the possibly less advanced genus *Myrmecia* (Haskins and Whelden 1954). In the instance of *A. pluto,* trophallaxis with the larvae was never observed, nor was there any evidence of such exchange. Here again, a fundamental act of important social behavior in advanced ants seems to be lacking in *Amblyopone.*

The workers can also stimulate the larvae with their antennae (and anterior tarsi?) between the 8th and 12th abdominal segments. From the extremity of the larval abdomen, as a result, there comes a liquid which congeals quickly on contact with the air. The drop can also ooze out without solicitation. The worker extends its mouthparts and ingests the droplet. Deposits of this liquid were never found on the plaster substrate of the laboratory nests. Le Masne (1953) has similarly described workers of *Ponera* ingesting larval excretions.

Neither liquids nor solid pieces of food were seen to have been passed from adults to larvae. Neither were the workers ever seen to lick or chew cocoons, meconium, or fluids from the cocoons. It should be noted that the cocoon debris are not put in a particular corner of the nest (another primitive characteristic?). Everything is cast away at eclosion and is simply put at a distance from the brood. The workers can breach the skins of larvae that have been dead for a short while. They pierce the body with their mandibles, causing the hemolymph to ooze out, and then ingest this fluid. Toward the end of this activity, the exudate becomes more viscous and forms filaments between the worker mouthparts and the larval body. This feeding behavior can last several minutes.

Several cases of cannibalism have been observed for *A. pluto,* confirming the observations of Haskins and Haskins (1951) for *A. australis.* In 1 colony subjected to fasting for 4 days, the workers consumed half of the larvae present among the brood. Cannibalism can also occur between sibling larvae. The contents of certain cocoons are dismembered and eaten by the larvae which thrust their head and 1st thoracic segments into the interior of the pupating larva. The mandibles can be observed through the larval integument to shear the tissue contents and to draw the alimentary debris toward the labium. It was not possible to predict which larvae would be eaten by their congeners (perhaps diseased or otherwise unhealthy larvae?). In any case, this cannibalism, which takes place on all stages (eggs, larvae, pupae), cannot be confused observationally with such care as is furnished the larvae by the workers. One curious larval behavior pattern was observed: the larvae often rub their heads and thoracic segments against their sister larvae as though they were seeking to devour them.

One last trait reflects finally the primitive behavior of this species, considering the term "primitive" as indicating the marked independence of the individual with respect to its society. Although cocoon spinning