

its dark abode. The mouth is filled with a blackish fluid when withdrawn from the feeding spot. If gently touched, the head and fore part of the body would be raised, as stiffly as consistent with such a soft insect, and this posture maintained for some moments.

The little animals were carefully watched and examined several times a day, until finally the larger one, having withdrawn nearly all the juices from the pupa and become swollen to an unwieldy size, changed, after a day or two of resting, into a pupa—still in the original cell which I had removed from a stone and turned upside-down for more convenient examination. The smaller one was restless and refused to finish its feeding on the original pupa, so, as it had apparently not completed its growth, I tried it with a fresh one of *Tropisternus glaber*, which was immediately accepted as a substitute. The first pupa was probably spoiled, either by mould or bacterial decomposition, hence the necessity for fresh food in this instance. As soon as the larva had completed its growth I consigned it to the alcohol bottle for study.

How the *Brachinus* gets into the cell of its host, whether brought as a young larva clinging to that of *Dineutes*, or deposited as an egg by the mother, is a mystery to me. When small it is more active than when larger grown, and with advanced age becomes gradually more helpless. In any case the complete adaptation to a parasitic habit is apparent in the whole structure—the soft, juicy body, unprotected by chitinous scutes, the weak legs, quite useless for ambulatory purposes, and the lack of strong, locomotive bristles. The appearance is almost that of some Hymenopteron, not at all resembling the strong raptorial larvæ of Adephaga in general. I cannot believe that the larvæ of all our American *Brachinus* live on *Dineutes*, but it is quite possible that they feed on the helpless pupæ of such other Adephaga as frequent the damp spots favoured as habitations by these beetles. Perhaps some of the readers of the CANADIAN ENTOMOLOGIST may be induced to investigate the matter, or to make known the results of study if the investigation be already made.

While two *Dineutes* pupæ were infested as noticed above, another of the same species was seen to be the abode of several little maggots, which soon changed to small black pupæ, loose in the cell, without spinning cocoons. From these I finally got four specimens of a small Chalcid, eleven or twelve days after I first noticed the larvæ, which, however, were nearly full grown at that time. From Mr. Ashmead, to whom I sent the little insects, I hear that they belong to the genus *Cyrtogaster*, not