

inferior in extent is the collection of larvæ preserved at the Museum of Comparative Zoölogy, and I have no doubt that good collections are at the laboratories of the Cornell University and at Champaign, Ills., though I have no personal knowledge of them. Finally, I hope that valuable material is accumulating at the various experiment stations. What I said before of collections of imago specimens may be repeated here : if the biological material now scattered in various collections could be concentrated we would see that far more has been accomplished than we are generally inclined to suppose. Still, there is an almost exasperating want of knowledge of the larvæ of just such families or genera the systematic position of which is in doubt. Thus the larva of the South American *Hypocephalus armatus* would throw light, and in all probability fully clear up the affinities of this remarkable and much discussed beetle. In our own fauna, if we had the larvæ of *Cupes* or *Rhyssodes* the uncertainty regarding the affinities of these families would be removed ; if we had the larva of the genus *Nicagus* we would at once know whether it is a Lucanid or a Scarabæid.

The life histories of Coleoptera, so far as these are of common importance have generally been well studied and recorded with great thoroughness. The investigations of the life histories of our Blister beetles, the root-feeding Chrysomelidæ, the Elateridæ, the May beetles, are only a few examples of what has been done since the foundation of our Club. How much can be learned by careful study of the natural history of what were supposed to be well-known Coleoptera is illustrated by Dr. Riley's recent discovery of the first larval state of our common Bean and Pea weevils (Bruchidæ), and also by Prof. Forbes's admirable studies in the food-habits of our common Carabidæ and Coccinellidæ.

Outside of economic entomology very little work has been done in the investigation of the full life history of our Coleoptera, except the almost countless little notes that have been published on the food-habits or other habits of both imago and larva, on the mode of work of the latter, time of appearance, length of life, number of annual generations, etc. These notes furnish in their aggregate much valuable, though somewhat fragmentary material for the biology of many species and genera. How difficult it is to trace the full life history of a given species is well illustrated by the Coleopterous Beaver parasite, *Platypsyllus castoris*. Through the exertions of Dr. Riley the most careful investigations were carried on in various parts of the country and at various seasons to fill