period of the year is so rapid, and the sap circulates through the branches in such abundance, that the comparatively small quantity consumed by these plant lice seems scarcely to be missed. In a few days the young leaves expand, when the insects are distributed over the foliage, and usually attract no further notice.

All the lice hatched in the spring are females, and they reach maturity in ten or twelve days, when they commence to give birth to living young, producing about two each every day for two or three weeks, after which the older ones die. The young locate about their parents and mature in

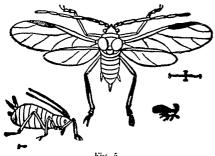


Fig. 5.

ten or twelve days, when they also become mothers as prolific as their predecessors. As the season advances some of the females acquire wings, by means of which they fly to other trees, where they found new colonies. In figure 5 both winged and wingless specimens are shown much magnified. Late in the autumn males, as well as females, are produced,

and the work of the year closes with the deposit of eggs as already Were it not for the activity of Lady-birds and other useful described. predaceous insects, which appear early upon the scene and devour multitudes of these lice, they would soon swarm on every leaf of our apple trees and become a source of serious trouble.

## NOTES ON THE EARLY STAGES OF CALOPTERON RETICULATUM. FABR.

BY D. W. COQUILLETT, WOODSTOCK, ILL.

On the roth of July I found a pupa of this species suspended by the hind end of its body beneath a log. The larval skin was rent and worked backward, but still retained nearly its original shape and color, and by comparing it with certain larvæ which I have frequently met with in similar situations, there is no doubt in my mind but that these latter belong to the above species.

These larvæ very closely resemble that foured by Packard on page 465 of his "Guide" (fig. 432), which in the text on the succeeding page is referred to *Photuris*. The dried specimens now before me measure