scarcely a crevice of the bark but what is filled with the yellow pupal forms which will in a few days disclose the imagines. The ground immediately surrounding the base of the trees is covered with the pupae, which have been dislodged from their positions in the bark by the eager efforts of larvae crowding in the crevices to undergo transformation. As this change occurs within the crevices of the bark of trunk and limb, it becomes impossible, unless at great labor, to apply means for exterminating the pest. The evil, however, is likely to cure itself, for the larvae are so numerous, and such insatiate feeders, that starvation will probably end the visitation. Much good, however, can be done by brushing down the trunks of the trees, sweeping the ground immediately beneath, and destroying the entire mass by fire.

## FURTHER REMARKS UPON THE VARIATION OF THE ELYTRAL MARKINGS IN CICINDELA SEX-GUTTATA.

BY C. H. T. TOWNSEND, CONSTANTINE, MICH.

Having been away from home the greater part of the summer, I regret that I have not been able to collect some of these beautiful beetles this season, so as to further observe the interesting relation between the varieties in number, as I should like to have done. I hope, however, that some one has made observations upon them, and will favor us with an account, which would, no doubt, be very acceptable to those interested in the genus.

Since contributing the first notes upon this subject, I have noticed that Say has described two varieties of *C. sex-guttata* in his monograph of the genus Cicindela, commencing on page 415, vol. ii., of the American Entomology, edited by LeConte. The first is

"Var. a. Elytra each with an additional spot, which is fulvous or white, and generally inconspicuous, placed behind the middle triangularly with respect to the two anterior, marginal ones."

> .

This additional spot is the one I have called the fourth, and var. a of Say therefore includes the second and third varieties given in my table (CAN. ENT. XV., 208), as the description says that this fourth spot is "generally inconspicuous," implying that in occasional specimens it is conspicuous; in the second variety of my table this spot being rudimentary, while in the third it is well developed. This phrase also implies