

butterflies winging their way about over the clearing, I did not see a single mistake made on the part of the sparrows. They had become adept enough in two or three weeks to be able to distinguish a Cicada with an unerringness that was simply surprising, when we come to consider that none of their immediate progenitors could have seen or tasted a Cicada.

Other bird enemies appear to be very few, and these not over-voracious. Mr. J. J. Harrison, of Painesville, Ohio, saw the crow black-bird feeding upon them in 1846, while the labourers on the Station Farm at Wooster claim to have observed the robin to attack them. A species of *Tachina* fly seemed to play havoc with the latter portion of the brood, and either owing to this or some other reason, they suddenly disappeared between June 24th and June 28th. On the former date, in the Experiment Station orchard, they were excessively abundant, while on the latter there was not a living Cicada to be found there, while the stench arising from the dead bodies was quite apparent to one walking through the orchard.

As usual, the injury inflicted was slight, except in cases of very young orchards, and I saw in one case a, to me at least, unique form of attack. This is shown in the plate (fig. 3), and instead of the regular, quite conspicuous punctures (fig. 2) made by the female for a nidus, she appeared to have simply thrust her ovipositor into the wood, and with no further external wound deposited her ova.

The distribution of the brood in Ohio is illustrated in the accompanying map, plate 8, fig. 1.

In its distribution, rivers do not appear to have had much influence, as it will be noticed that in southern Meigs county a small area outlined by a bend in the Ohio River is only partly covered; in one township, Letart, the Cicada not being found at all; while a corresponding point of West Virginia comes within the range of distribution, even though lying across the river. From this point the dividing line trends slightly to the south-west, passing north of Gallipolis, and extending to the Scioto River, at a point a few miles above its mouth, but not extending beyond this to the westward. North the line follows the east bank of the river until the bend between Waverly and Chillicothe is reached, when it crosses the river and holds to its nearly northerly course to near Circleville. Here the line makes a sharp curve to the north-east to the city of Lancaster, in Fairfield county, but trends north-west to the eastern line of Franklin county, thence almost northward along the east line of