

situation, some pupating on the bottom of the box, others beneath the lid, while others again attached themselves to the side, in every instance producing a perfect beetle. The lot of larvae taken August 24th had all changed to pupa on September 8th. They began to emerge on September 17th, and were all out on September 20th.

On August 26th, I found a large colony of larvae and beetles. The larvae were of two sizes, some very small and others about full grown, but about the only noticeable difference, apart from size, was that in the young larvae the yellow markings were scarcely to be seen. The small larvae had lately moulted, and the cast skins were on the leaves, showing that in this respect *Physonota* differs from *Coptocycla* and *Cassida*, the larvae of which slip the cast skins on the tail. Until nearly full grown, the larvae of *Physonota* are social, keeping together in compact groups, the heads in the centre, surrounded by a circle of uplifted tails, presenting a most curious appearance. When nearly full grown they separate and scatter over the plants. By most of the later writers on the insects in question, but one species is recognized, *P. unipunctata* Say. Prof. Riley, in the Supplement and Index to Missouri Reports, p. 53, says: "*Physonota quinquepunctata* Walsh & Riley (Rep. ii., p. 59).—This is synonymous with *Ph. unipunctata* (Say), there being no question as to the specific identity of the two, both having been bred by Mr. F. H. Chittenden, of Ithaca, N. Y., from larvae on wild sunflower (*Helianthus*)." That *P. quinquepunctata* W. & R. is synonymous with *P. helianthi* Rand., is I believe correct, but its identity with *P. unipunctata* Say is I think still an open question. With regard to this point Dr. Hamilton writes me: "But even if they were so bred, it does not prove identity, because (if species) both are found in the same vicinity, and may have mingled on the same plant. Besides it may have been *helianthi* instead of *unipunctata*, since both go by the same name."

The records of these species appear to me to point to the conclusion that they are distinct. Say describes his species as yellow, with the margin whitish. Dr. Hamilton, CAN. ENT., vol. xvi., p. 135, speaking of a colony of *unipunctata* found by him, states that all taken were of Say's type, pale above with one black spot on thorax. He also tells us that a few of the larvae were feeding with them, their colors bright yellow. As in all the *Cassida* the colors change after death, I wrote to Dr. Hamilton, asking him what the color of the specimens found by him was in life. In answer he informed me that all taken by him were entirely pale, except the black.