

As I believe it to be unfair to anticipate knowingly a communication which is near its publication, I would only give a short notice of some facts which may perhaps serve Prof. Riley in bringing to the front, at least for the cases observed by me, the connection of pear-blight with this beetle. The twigs were attacked about two feet above their origin out of the trunk, where they are about two inches thick, and higher up to half an inch thickness. The next year, if the dead branch is not removed, the beetle goes further down. The cradle is perpendicular in most cases, except where it begins just below the base of a bud, and is about an inch long. The galleries are to four inches long, and rather deeply injuring the sap-wood. The hole for the pupa goes deeply, to 4 millim., in the wood. I have observed the beetle only in pear trees, but I possess it from Europe on *Prunus domestica*.

I know Mr. F. J. Burrill's papers in Proc. A. Ass. 1880, p. 583, and Amer. Nat. 1881, vol. xv., p. 527. I failed in trying to repeat his observations, what I consider of no importance against Mr. Burrill's conclusions, as just such observations need a trained skill not at my command. But I know that other scientists perfectly trained for such observations have also failed. As bacteria are everywhere to be found, we will have to wait for other reaffirming observations before we are able to accept Mr. Burrill's views. I should add that I am acquainted with the older literature on pear-blight, and with the different hypotheses about its causes.

HISTORY OF THE PREPARATORY STAGES OF PHYCIODES PICTA, EDW.

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EGG.—Sub-conic, truncated, the top convex, the upper part from one fourth to one third the length marked by low vertical ribs, about 24 in number; below these the surface is shallowly and irregularly indented; top similarly indented, convex; color when laid yellow green. Duration of this stage about five days.

YOUNG LARVA.—Length .04 inch at 12 hours from egg, cylindrical, each segment a little rounded; color yellow-green; a few long black hairs spring from minute black tubercles; these are in longitudinal rows, two being dorsal, and two sub-dorsal (one on either side); these rows run