

## INSECTS REARED FROM GALLS ON MUHLENBERGIA MEXICANA.

BY F. M. WEBSTER.

Eight years ago, in Indiana, I found a gall on this grass that had somewhat the appearance of a diminutive ear of corn with the husks, but more pointed and minus the silk. The husks (I can find no better term for them) were imbricated and pointed, being placed regularly, one over the other, leaving the junctures along the margins. In this gall I found a pupa or, as seems now more probable, a puparium, but reared no insect therefrom. The past spring, Prof. L. H. McFadden, of Westerville, Ohio, kindly sent me a number of these galls, from which, and the stems to which they were attached, I reared the following species:—



Muhlenbergia  
Mexicana  
Gall.

1st. Several specimens of an *Oscinid*. 2nd. A *Pteromalid*.  
3rd. A *Eurytomid*. 4th. A great number of *Lasioptera*, probably the author of the gall. 5th. Numerous examples of a species of *Polygnotus*, probably a parasite on the *Lasioptera*. 6th. Specimens of a species of *Eupelmus* that might have come from eggs of Orthoptera, which had been placed in the gall by the parent, or from the puparia of a *Chlorops*, of which I reared no adults.

Thus, from a single species of gall, with a few inches of the stems to which they were attached, were reared six species, with proof of their having contained the seventh, while another, the eighth, had used it as a nidus.

Replying to a question by Mr. Lintner, Mr. Webster stated that it was possible that all the species named did not emerge from one gall, as there were about twelve galls in the breeding jar, but all from the same locality. It was not known how many came from a single gall, or how many from any particular gall. He also remarked upon the recent researches of Mr. Enock in regard to the Hessian Fly, who found that the breast bone of the larvæ was used in turning around within the puparium.

Mr. Smith remarked that in all species of *Cecidomyia* which he had reared the larvæ turned, but he did not see the necessity of using the breast bone.

Mr. Webster asked if there were not *Cecidomyidæ* without a breast bone, and thought that if this could be ascertained the question of its use in turning would be settled.