this moth as a basis, he pointed out that a comparatively trifling tax only would be necessary to raise a sum sufficient to control the pest, and was very strongly of the opinion that the work of the Commission should be upheld and continued.

Mr. Howard said he was familiar with the work of the Commission and had gone over the territory and examined the methods of procedure in detail somewhat recently, and was convinced that anyone, seeing the operations and the results already reached, would be impressed with the fact that the work is now being done in the best possible way and according to methods which are most likely to accomplish the ultimate extermination aimed at. He offered a resolution regarding the work of the Commission, which was subseqently acted upon by the Association.

Mr. Lintner said he had been one of the first called to inspect the work and the conditions of the work, and had been deeply impressed with the amount of exertion necessary and the difficulties of successfully prosecuting it. He also had been most favorably impressed with the value of the methods at present employed. Whether ultimate extermination would prevail or not was at present, of course, merely a matter of opinion, but he was convinced of the necessity of continuing the work on the basis of extermination rather than mere control.

The next paper was read by Mr. Lintner on the striped "Cottonwood Beetle" in which he drew attention to the threatened destruction of the basket-willow industry of Onondaga and some other counties of western New York, from the ravages of an insect which has long been known as the striped cottonwood beetle, *Lina scripta* Fabr., but which hitherto has not been regarded as injurious. After describing the insect and its habits, and giving an account of the willow industry and its commercial importance he related the methods which had been made use of to control the insect and especially drew attention to a mechanical contrivance, called a "bug catcher" which had proved very effective for the collection and destruction of the beetles.

Mr. Webster read a somewhat technical paper on the probable origin of the genus Diabrotica. This was followed by a paper by Mr. Hopkins of Morgantown, West Va.

ON THE STUDY OF FOREST-TREE INSECTS.

The study of the insects affecting forest growth, from an economic standpoint, is in many respects a unique branch of economic entomology, which should in our opinion be designated by the term "forestry entomology."

The importance of advancement of knowledge in this particular branch of science may be inferred from some references to the character of insect injuries to forest growth; to estimates of the amount of damage and the annual pecuniary loss occasioned by such injuries; to the limited knowledge of this class of insects, and to the possibilities of preventing a large per cent. of the loss by the adoption of simple, practical methods of combating the pests.

Character of Injuries.

The injuries to forest growth may be separated into two classes, those affecting the living plants and those affecting the dead or dying plants. Of the former we have injuries to the foliage by leaf-eating, leaf-mining, sap-sucking, and gall-making insects; to the twigs and branches by sap-sucking, twig-mining, bark and wood boring insects; to the trunk by bark and wood-boring, and to the roots by wood-boring, bark-boring and sap-sucking species; the effect of the injuries thus caused upon the living plant being either destructive or detrimental to its growth or usefulness.

The injuries of a destructive character are those caused by insects which occur in sufficient numbers and make their attack in such a manner as to destroy or weaken the vitality of the tree sufficient to be the prmiary cause of its death.