

ment for a small sum.

The treasurer, G. W. York, in his report, showed a balance due him of \$4.22.

Prof. A. J. Cook, formerly of Agricultural College, Michigan, now of California, gave the following address:

APICULTURE AT OUR EXPERIMENT STATION.

Bee-keeping has merits that very few, even of bee-keepers themselves, rightly appreciate. It not only gathers up a most wholesome and nutritious article of food, which would otherwise go wholly to waste, so far as man is concerned, but it confers an added benefit that is so great and far reaching that it is difficult even to compute it. There is nothing more certain than that the productiveness of very many of our fruit and vegetables, and those the most valuable, is often tremendously increased by bees in the important work of pollenizing the flowers. True, other insects aid in this valuable service, but in our northern land so many of our insects are effected by the rigors of winter, that in early spring when most of our fruit trees are in blossom, there are very few of these "marriage priests" to perform the great service of wedlock in the vegetable world; and so without bees, pollenization would be scantily effected. Here early flowering vegetables are imported, and so there are not the real insects to perform this valuable service and the bees, which are also imported, and which from their habits and man's wise and provident care do not succumb to the winter's cold, become the chief agents in this important work. They are on hand when the flowers first burst forth in earliest spring, and so celebrate the marriage rites without which the plants would be far less prolific.

Is not the man who makes the twin apple replace the single fruit of yesterday just as worthy as he who multiplies the grass production?

The importance of bee culture once appreciated and recognized, and it goes without saying that every wise person will not only see that this industry does not languish, but will use every reasonable endeavor to foster its development in every proper way. Thus, in urging such action, we need offer no apology; we are only doing what every wise statesman and well informed, thoughtful patriot would do.

What adds emphasis to this argument, is the exceptional precariousness of bee-keeping as a pursuit. Most kinds of business can face a single off year with composure. Even two consecutive seasons of failure

may be met with fortitude, unless they occur too frequently, but when three or even four years of failure confront the business man, it requires exceptional profits at other times, which bee-keeping is a stranger to, or else great love and enthusiasm for the business, which does characterize bee-keepers to an exceptional degree, to keep the ranks of such employment full. That there has been a great falling off in the business of bee-keeping of late is most certain. For the last two seasons the apple crop in Michigan has been very close to a failure. That it is wholly due to the absence of bees, I would not assert; but that there is an important relation between the two facts, cannot be truthfully denied.

To urge all proper means to stay this rapid falling off and its attendant evils, is the duty of every patriotic citizen.

Experimentation and experiment stations are a product of our nineteenth century civilization. The most advanced nations have done the most in these directions. Germany, to whom all other nations grant supremacy in all that pertains to education, progress and the real elevation of its people, is at the front in this important work, with France, the United States and Great Britain a close second. This very fact, were it not for the rich and stupendous results of experiment as exemplified in the work of such men as Koch, Pasteur, Lawes and Gilbert, Gray and Edison, would be proof enough of the value of experiment stations and their work.

There are to-day a few bee-keepers that know all about the business, and they are usually box-hive bee-keepers who have never read the journals and can tell you all about the "king bee." The most of us realize that this business, founded more upon genuine science than are most manual labor pursuits, is far from perfect, and that the wisest in the craft has yet much to learn, and that the business has yet unsolved problems of greatest importance. I think there is no question but this business, important as it is, has a very bright future before it. Yet how can it successfully face the repeated disasters of the past few years, except as by study and experiment we learn how we may bridge such disaster. That bright men, full of energy and enthusiasm, to man the experiment stations in the several great honey producing states could and would, with opportunity, accomplish great things for agriculture is true beyond question.

The United States Government, recognizing the importance of agriculture, and the added impetus given to any business as the result of wise experimentation carried