

and perhaps also as to the quantity of surplus, it is mostly fall honey and off color, though the quality is good.

The severe drouth of 1887 so killed the white clover that it required all this season to regain all its foothold in the pastures. I doubt if it is fully re-established now. So we got no white clover honey worth speaking of. Basswood (linden, if you like the word better,) blossomed very full in 1887. This was its off year, and the yield light. The fall flowers yielded fairly well. Bees seem to be in good condition. I have not heard of any foul brood.

The Chapman honey-plant was tried to some extent. There is no doubt about the fondness of bees for it, but whether it would pay to cultivate for honey, is another question. A fine exhibit of bees, honey and implements was made at our State Fair, and at some of the local fairs. The art of bee-keeping seems to be keeping step to the music of progress in other departments of rural life.

EUGENE SECOR.

## SECOND DAY.

### MORNING SESSION.

#### THE WIDTH OF SECTIONS.

J. H. Smith made several widths of sections, but sold ten thousand of the inch and seven-eighths to one thousand of any other width.

E. R. Root said that their experience was that of Mr. Smith.

Frank. A. Eaton said that it all depended upon whether separators were used. One inch and seven-eighths was the proper width with separators; if they are not used the sections must be narrower.

Dr. Tinker preferred that the space between the top bars and between the bottom bars should be three-eighths of an inch instead of the usual one-quarter of an inch.

#### WHEN SHALL BEES BE PUT OUT OF THE CELLAR ?

Dr. Besse—When there is something for them to do. When they can gather pollen.

Dr. Miller—About two weeks after the right time. [Laughter and cries of "good;" "that's it."] I suspect that we put our bees in too late and take them out too early. I used to take them out at the blossoming of the soft maple, but it has several times fooled me. Freezing weather came after the maples had blossomed.

#### SECURING MORE COMPLETE ORGANIZATION AMONG BEE-KEEPERS.

Dr. C. C. Miller—We have local societies, State societies, and the North American Society, and the latter is largely local. Unless something is done to make it a more represent-

ative body, we might just as well kill it and have done with it. I would suggest that the State and local societies send delegates and pay their expenses.

Prof. A. J. Cook—The State and local societies will not do this, and I do not believe that this society is yet ready to die. Suppose that we do have a large local attendance, we also have a scattering attendance from abroad. We could have the different States represented by essays from the best men.

A. I. Root mentioned that religious bodies send delegates to meetings and conventions and pay their expenses. Apicultural societies might do the same. He would give more to see a man and hear him talk than he would to have an essay from him.

Upon motion it was voted that all State and local societies be invited to send delegates to the North American Society's conventions. Next came an interesting talk by Prof. A. J. Cook, upon

#### EXPERIMENTS IN APICULTURE.

With one or two exceptions, the Michigan Agricultural college is the only one that has experimented in apiculture. Until lately there has been a lack of time in conducting the College apiary. At last an able assistant has been secured, and the passage of the Hatch bill has provided the funds, and the prospects are that much more will be done. One line of work will be that of crossing different varieties of bees; another, that of determining the value of special planting for honey; and the third will be in regard to the adulteration of honey. Rocky Mountain bee-plant, Chapman honey-plant, pleurisy root, and perhaps others will be tried. Considerable is hoped for the Rocky Mountain bee-plant, as it flourishes in a drouthy climate. At present the bees at the college are a cross between the Syrians and the Carniolans and they seem to possess the good qualities of both.

Prof. Cook feels sure that bee-keepers do not adulterate honey, neither does he believe that it is done by grocers. He considers them no more honest than many other classes, but adulteration does not pay. He does not believe that the chemist can tell positively in regard to adulteration, and experiments are to be made to determine, if possible, whether adulteration can be detected.

A. I. Root asked how Prof. Cook knew that their bees were a cross between the Syrians and Carniolans.

Prof. Cook—We do not know positively. There are no bees nearer than three miles. Besides, I have studied the characteristics of each race, and I cannot fail to recognize them.

Mr. Thomas G. Newman then addressed the