

the necessity or the methods of securing ventilation, a high temperature, a dry atmosphere, late brood rearing, or even as to the necessity of cellar wintering, but they are in practical accord in affirming the necessity of supplying bees for winter with stores of a good quality. This is a significant fact. Stick a pin here and bend a hook on the point of it.

And again why is it that bees in the cellar suffer most severely during winters when they suffer most severely out of doors?

Without stating my deductions at length let me only say in conclusion that I have found among my own bees that colonies with plenty of good stores, known to be such, always winter well, while those with stores of a doubtful character winter more or less disastrously.

I am satisfied I cannot winter a colony well on stores that are decidedly poor in quality by any method with which I am acquainted. Who can inform me how to do it? I am confident I can winter any fair colony well on stores which are certainly good by any of the approved methods. Who doubts his ability to do the same?

Of course it is not to be denied that a low temperature, moisture, etc., seriously aggravate the ill effects of poor stores, but I seriously question whether, unless present in an extraordinary degree they would seriously affect the welfare of a colony well supplied with pure stores.

R. L. TAYLOR.

Lapeer, Mich., Nov., 1887.

After the reading of the foregoing essay it was discussed as follows:

Mr. Betsinger asked, if sugar is better for bees, why is it not better for human beings?

Mr. Heddon explained that honey contained nitrogenous matter and for this reason it is better for brood-rearing, and for supplying the waste of muscular tissue, but, for this very reason, it is not so good for a winter food for bees, there being more likelihood of the bee's intestines becoming loaded.

Mr. Betsinger agreed with Mr. Heddon, but thought the public ought not to be told of this, as many inferences might be drawn.

Mr. McLain, thought we ought not to pay much attention to what the public think, but more to what is best for the bees. He then gave an account of his work at the U. S. experimental station during the past year.

On motion of Dr. Mason it was voted that the thanks of this society are due, and are hereby tendered to the Commissioner of Agriculture for his efforts in behalf of the bee-keeping industry, and for establishing an apicultural station near Chicago for experimental work.

The convention then adjourned to meet at Toledo, O., at the call of the executive committee next year.

W. Z. HUTCHINSON, Sec.

Flint, Mich.

MICHIGAN BEE-KEEPERS.

FOLLOWING is the address delivered by President Hilton, at the Michigan State Bee-keeper's Convention which opened on the 6th. inst.

PRESIDENT HILTON'S ANNUAL ADDRESS.

Brother and Sister Bee-keepers of the State of Michigan: We have assembled here together with our friends the Horticulturists, at our 21st annual convention, to consider that which pertains to the best interests of our pursuit. I shall not occupy your time with an exhaustive address, for the program is full and very complete, and our time is short at best to consider the important subjects which will be presented.

I am here as a member of this society to assist as best I may in throwing light upon the topics brought before us. I take it as an expression of good will and great generosity in those who have arranged the preliminaries of these meetings that everything for the comfort of us all has been so amply provided and that all arrangements are so thorough and complete, let us see to it that we endeavor to perform our part in as faithful a manner as our committee have done.

It is with pleasure and pride that I congratulate this society on attaining its majority, and while the last year of our second decade has been discouraging from one point of view, from another, we start on our third with most flattering prospects. The dearth of honey has not only established paying prices, but has sounded the death knell of the "Wiley lie," and all advocates of "manufactured honey," and to me the prospects were never brighter.

Yes, we have reached a crisis in the history of bee-keeping which must be acknowledged to be of national importance. The question no longer remains, "Shall we commence at all?" or "Shall those of us who are all ready engaged in it continue?" I now say, without fear of successful contradiction, that the possibilities in bee-keeping have not yet been reached.

Need I say less of Horticulture? In the words of Eugene Secor, "The true horticulturist, like the successful bee-keeper, is an enthusiast." I need not remind anyone who plants tree and grow fruits, of the genuine pleasure that thrills the soul when nature responds to his intelligence, thought and careful direction? He lives in a