

gathered by the bees, and if they need no pollen they could gather some honey instead. But this is not true, because the bees fill up the brood-chamber with pollen for future use, if no brood is present—what every bee-keeper surely will have observed.

Some experiments show that more honey is secured, if the queen is caged or entirely removed for some time. I do not doubt this, but it is easily explained, if we say that the bees used the empty cells for storing honey, which in the other experimental hive were occupied by the brood. Here they had not enough cells for the honey. If we always give to a strong colony empty cells, we will see that nothing is gained by caging the queen. This caging may be done with advantage for the purpose of preventing swarming. I will not discuss this here.

Further, we see how important it is that the bees have plenty of pollen when brood is reared. Some experiments prove that for a short time the bees can rear brood without pollen. They use some surrogates which they find in old combs; in this condition they may use some honey too, but then the larval food will be of other composition. The larvæ may not die by this diet, but surely we will rear a degenerated colony, and in many cases the bees stop breeding entirely.

L. STACHELHAUSEN.

Selma, Tex., Jan. 10, 1889.

From the Nebraska State Journal.

NEBRASKA BEE-KEEPERS.

THE tenth annual meeting of the Nebraska State Bee-keepers' Association began in the Botanical Lecture Room of the University on Jan. 9, at Lincoln, Nebr., at 3.30 p. m., with President M. L. Trester, of Lincoln, in the chair.

Nothing of special importance beyond perfecting the preliminary organization was done in the afternoon meeting, but a little discussion was had on granulated honey.

In the evening the Association listened to a report on glucose, and an essay on wintering bees, by R. V. Murr. A general discussion followed, participated in by nearly all the bee-keepers present, and covering the entire subject.

A vote of thanks was tendered Mr A. Tower, for his able work in conducting the bee-column in the *Western Resources* during the past year.

An adjournment was taken at 10.40 p. m. until 9 o'clock the next morning.

SECOND DAY.

The convention began with an essay treating

on the question, "Does it pay to plant for honey?" by A. C. Tyrrel, of Madison. Mr Tyrrel advised planting clover for early forage, and melissa for surplus honey in the fall.

Mr Johnson agreed with the essayist in recommending planting for honey, and advised adding alfalfa to the list of profitable plants.

Mr. Tower suggested that buckwheat ought to be added.

Mr. Muir thought it hardly advisable to plant for honey except in the case of melissa.

Mr. Hardy favored all of the plants mentioned, but thought that none of them would pay to plant for honey alone.

Mr. E. T. Abbott had visited Colorado, and was much pleased with alfalfa. He said that it produces excellent honey, and makes good food for stock.

Mr. Whitcomb recommended alfalfa, if planted where it could be irrigated, or in soil that is not deep to water. Other suggestions were also made by various members, the discussion being very interesting and profitable.

A report of the work of the season was made by Mr. R. R. Ryan, of Bradshaw. He reported that he increased his apiary by division, and complained of imperfect queens. The subject of rearing prolific queens was discussed, a majority favoring rearing queens under the swarming impulse, and dividing the colony when it swarms.

The address of the President, Mr. M. L. Trester, was given in the afternoon. Many valuable suggestions were made, the most important being that pertaining to a better law in regard to foul brood.

An essay was read by Mrs. J. N. Heater, of Columbus, on "How to produce the most honey in marketable shape." As this is the object of all the bee-keepers, the essay was discussed at length. All were of the opinion that it is necessary in this region to keep bees breeding at stated times, in order to have a large number of workers to gather the nectar when the flowers that produce honey are in bloom.

The remainder of the afternoon was taken up with a discussion of the subjects, "How much foundation should be used, if any?" and "How to dispose of honey to the retail trade."

The evening session was well attended, and the meeting proved to be a very interesting one. The principal feature was an essay by the Rev. Emerson T. Abbott, of St. Joseph, Mo., on "Bees and Horticulture."

Mr. Abbott explained that when he prepared the essay he did so with the understanding that the Nebraska State Horticultural Society would meet in Lincoln at the same time and place,