

colonies of bees to gather the honey, then we must extract it at the time when it could be done to the best advantage and with the least hindrance to the bees. It was hard to lay down specific rules—every bee-keeper must be a law to himself, and find out the methods best adapted to his own locality. Experience must be bought by practice, and at considerable expense; he only hoped that it would not cost others as much as it had cost him. Pres. Root gave the stereotyped directions for the production of extracted honey, but said that these were subject to modification in individual cases.

Mr. S. T. Pettit gave his experience in producing extracted honey. He had missed it by not leaving the honey in the hive long enough to ripen. One season his honey was all of an inferior quality, owing to this cause. He did not believe that we could ripen the honey as well as the bees themselves do it. He said that we should have at least one-third of the honey capped before extracting, and he believed it was better if all was capped over.

Rev. L. L. Langstroth did not know that he could add much to the ocean of intelligence that was tiding all around, but he wished to say a word or two. He believed there were many things that the bees could do—certain things better than we can—and ripening honey was one of them. There was too much artificial work in bee-keeping. One bee-keeper had invented nippers to pull dead bees out of the cells, but live bees would do it better.

Dr. Mason said that the "big bugs" of the Convention had been poking fun at him for getting only 05 pounds of honey per colony, but they would find it impossible to get an average of 300 pounds in his locality—a city on one side and a wilderness on the other. Small as his average yield was, it was larger than that of any of his neighbors. He wished that his critics would show him how to produce 300 pounds per colony, but the trouble was as Mr. Clarke said, they did not disclose their secrets.

Rev. W. F. Clarke wished to ask if formic acid in honey was not the element which gave it its keeping qualities. He put the question to Prof. Cook. For his own part, he believed that the formic acid was added by the bees in the capping process, which was carried on mainly by the use of their tails—the sting—being the last polishing tool. It was because the formic acid was thus added that honey must be one-third capped to be good, and all capped to be first-rate.

Prof. Cook thought that no one knew how or when the formic acid was added. He was also of opinion that too much stress was laid on the matter of taste. Few could discriminate as thoroughly as had been suggested.

The Convention then adjourned until 7.30 p.m.

EVENING SESSION.

The meeting was called to order at 3 p.m., by Pres. Root. An essay was read as follows, by Mr. R. F. Holterman, of Brantford, Ont., on the

CARE OF HONEY FOR MARKET.

I bring this subject before you, fully aware that it is not of as great importance as many others, being indirectly connected with the production of honey; but on that account it has perhaps not received that public attention which it merits. It is our duty when blessed with the means to procure a crop of honey, that we should acquaint not only ourselves but every bee-keeper with what will secure to us the article in the highest state of perfection, and place it thus in the consumers' hands. Have we, as a body, endeavored to do so? Looking at it from a business standpoint, past experience has taught us that in order to realize the best results financially, from any article extensively produced, it is necessary not only to better our own but we must better that of the entire land.

Let us imagine the land completely destitute of vegetation. Here is a heavy soil, in the distance is a sandy one, and between, all grades of soil. Here is a hill, there a swamp, and at other distances, intermediate elevations. Now, could our eye stretch from north to south within the honey-producing area, and were this area to be decked with our present vegetation, which of the aforementioned conditions would influence the quality of honey? The heavy soil would give us a richer honey than the lighter; the more extremes of cold climate would give a better quality than the more equable. Would the high and the low land influence it? We know that honey from every species of flower has its peculiar flavor, no matter how indistinct, and that the season, its winds, temperature, and degrees of moisture, influence not only the quantity, but the quality of our honey.

The progress bee-keeping has made, and so many making a specialty of it, has enabled us in a measure to conduct ourselves accordingly; but to the ordinary bee-keeper most of the previously named conditions cannot be controlled. But, how much lies within our power!

One of the first questions, would be when shall we extract? Shall we extract before or after the honey is sealed? What are the advantages and disadvantages of the two systems? If entirely sealed, we require to uncap a large surface, the bees must with the ordinary appliances be cramped for store-room, the brood-nest becomes contracted, not alone meaning loss of time until extracted, but many think they do not