

had been of different sizes, character and appearance. This year they were all cut away.

R. L. Taylor thought that bees and queens were guided in finding their hives by the larger surrounding objects, trees, etc., rather than by the hives themselves.

Dr. Miller did not think that increasing distance between the hives aided the bees very much. He would place the hives in groups.

Following this came a lively little discussion upon

THE USE OF CHAFF HIVES

E. R. Root led in the discussion, very fairly presented the good and bad features. They afforded protection from cold, also from the direct heat of the sun's rays. The bees are always ready for winter, so far as protection is concerned, and the cool nights of the late summer do not drive the bees from the supers. With chaff hives there is no laborious carrying of bees in and out of the cellar. Mr. Root said that by referring to their statistics, they found that cellar wintering of bees predominated in Michigan, Wisconsin, Iowa and Minnesota; as far south as southern Ohio chaff hives and cellars held about equal sway; south of this, chaff hive wintering of bees greatly outnumbered other methods.

Dr. Tinker thought that the saving in stores in the spring would alone pay for the expense of chaff hives.

Frank A. Eaton emphasized the point of leaving the bees in the cellar until the danger from cold is over; then the bees make rapid progress, and chaff hives are not needed.

Dr. Tinker replied that we often have frosts after warm weather has been "on deck" several weeks.

R. L. Taylor admitted that there might be a saving of honey by having the bees protected early in the year, but for actual work in the apiary, producing either comb or extracted honey, he could not endure using a chaff hive, and did not see how any man could. Their capacity is limited—only 50 sections can be used upon one hive, and it is often desirable to put on 100. Only one set of extracting combs can be used, and it is often desirable to use several. The hives are heavy and unwieldy, and if it were desirable to move an apiary to more desirable pasturage, chaff hives would almost prohibit it.

Dr. Mason called attention to the fact that 80 sections can be placed in a chaff hive.

R. L. Taylor—Oh, yes, if you put them in the wide frames; but I can't "play" with my bees

in any such way as that. When I said 50 sections, I meant when they are in cases so that you can work with them.

John Calvert called attention to the single-story chaff hives. It overcame most of the objections urged against the chaff hive.

R. L. Taylor—Yes; but the trouble is, the chaff hives do not do what is claimed for them. They do not winter the bees. A single-walled hive is just as good for wintering bees; with it the sun can warm up the bees; with a chaff hive it does not.

Dr. Mason would prefer to winter the bees in the cellar, but valued protection for them in the spring. If he wintered his bees out-of-doors, he would use chaff hives.

Mr. Chase mentioned that Mr. Shane had two apiaries. In one the bees are protected in the spring by packing; in the other they are not. The packed apiary always comes out ahead, and gives the best results.

Frank A. Eaton did not get in a hurry to take the bees from the cellar. They were left in until chaff hives were not needed.

The following interesting letters were then read:

DAYTON, O., Oct. 2, 1888.

MY DEAR FRIENDS:—I am very sorry to say that I cannot be present at your meeting at Columbus. I have taken such a heavy cold that it will not be safe for me to leave home. It oppresses me so much that I cannot even commit to paper the essay which I have prepared.

I am more disappointed than I can well express, for I was looking forward to a very happy time in seeing again many of my old friends.

Wishing you a pleasant and profitable meeting, and desiring to be kindly remembered to you all, I remain very sincerely your friend,

L. L. LANGSTROTH.

PEORIA, Ills., Oct. 3, 1888,

I regret exceedingly that I am not meeting with you to-day. My poor health would not justify the outlay of strength necessary to travel all night to reach Columbus. I hope that Father Langstroth is there. I imagine I see him now, with his hand upon his cane, with his benignant face beaming upon all.

MRS. L. HARRISON.

FOREST CITY, Iowa, Oct. 1, 1888.

Travel, reading, observation and conversation with bee-keepers in various parts of the State lead me to think that the crop of honey is light in Iowa this year. While the season has been better than last as regards the condition in which the bees will be at the beginning of winter,