

The convention adjourned until 2 o'clock p.m.

AFTERNOON SESSION.

President Taylor called the convention to order at 1.30 p.m.

The following resolution was presented by Thomas G. Newman, and adopted:

Resolved: That we appoint Prof. A. J. Cook a committee of one, to use his best endeavors to secure an appropriation from the general government—out of the \$5,000 that can be used for the aid of apiculture—to be used in securing the best bees to be found in the Orient, or elsewhere, for the purpose of experiment—looking for a still greater improvement in the good bees we now have.

Question—"In doubling up colonies, would you save both queens?"

B. Taylor answered, no. He would have no use for the extra queen after doubling up two weak colonies. He had wintered two weak colonies by using a queen-excluding honey-board, and he thought that weak colonies could be wintered better in that way than by uniting them. He had wintered half a dozen weak colonies in that way last winter, with clusters 3 and 4 inches apart. If the clusters should touch they would unite.

A. I. Root said that this was his hobby years ago, to winter two queens in a hive. He first tried tin between the clusters, and lost them; then he used wire-cloth, wood, etc., between the clusters, and the wood worked best.

Dr. Miller said he had wintered two queens in one hive, with from two to four quarts of bees in each, with a 3 inch board between the clusters. He had tried it and given it up. He could always winter weak colonies in that way.

B. Taylor gave a separate entrance to each colony.

A. E. Ault, of North Liberty, Iowa, wants strong colonies in the spring, and uses a 3-inch division board, and crowds the bees on what combs they can cover, and they wintered well.

Dr. Miller said that the weak colonies will winter better in that way than separately, and will build up in the spring as fast as if they were single colonies.

Question—"Will a colony of bees winter without sealed honey?"

Dr. Mason said that it would, but he would rather not risk it very often. It would winter better in a dry than in a damp season. In a dry cellar it would be the same.

R. McKnight asked—Is not unsealed honey unhealthy for bees?

Dr. Miller said that unsealed honey will sour much more readily than when it is sealed. He preferred it sealed.

R. B. Leahy said that he had experimented with feeding unsealed sugar syrup. He had wintered 50 colonies successfully in a wet cellar.

J. C. Stewart, of Hopkins, Mo., wintered bees in chaff hives two years ago on sugar syrup. They had 15 to 20 pounds fed to each, beginning on Dec. 6; those fed first lived, and those fed later all died. These stores were unsealed, and the bees were out of doors.

Dr. Miller asked what amount of sugar syrup and honey was consumed.

President Taylor said that when the stores were sugar syrup the consumption was much less. Those fed with honey consumed 22 pounds; while those fed on sugar syrup consumed from 8 to 7 pounds.

W. J. Finch asked whether the strength of the colonies would not account for the difference, and whether those fed with honey did not come out stronger.

President Taylor thought not, as they seemed of equal strength. All were destitute of brood in the spring. Those fed with sugar syrup had more vitality in the spring. Honey is stimulative, and more is used.

R. McKnight said that the amount of brood-rearing makes an enormous difference, as the weight of brood is of great importance, and the weight of the hives does not show the amount of consumption. It is, therefore, not an accurate test.

President Taylor said that bees without brood would present a good test. Taking the average of testimony, the sugar syrup will go further.

A. I. Root said that he could not advise the use of cheap honey for feeding bees, as there was danger of its being tainted with foul brood. He would not take away sealed honey and feed sugar syrup.

S. A. Shuck asked if bees that consume less will do as well in the spring as those that consume more.

President Taylor always expected and found better progress in the colonies wintered on sugar stores. Honey is stimulating, and not so powerful for food, but makes the bees active—stirs them up. Sugar syrup is what is wanted for winter—good food keeps them quiet.

A. I. Root said sugar is sweeter than honey.

Chas. Dadant said the best sugar should be used.

Mrs. Harrison asked—Is there any difference in the sugar from cane and that from beets?

A. I. Root said that pure sugar was the same from each source.

C. P. Dadant said that the beet sugar used in Europe was just as good as any cane sugar.

Dr. Miller—All must agree that we must feed granulated sugar, if we have to feed, whether the sugar comes from cane or beets.

Eugene Secor said that Orange Judd, in his last paper, asserted that sugar from cane and beets is precisely the same. He had just returned from the large beet sugar factory at Grand Island, Nebr.

Dr. Mason—Get the granulated sugar, and do not trouble about the scientific part.

President Taylor said that if a man has the time, and is willing, it will pay to extract the honey, and feed sugar syrup, but for himself he did not like the business of extracting and feeding.

C. P. Dadant said that he did not believe it paid to do it at all.

J. C. Stewart said that it would not pay, for the honey extracted in a third or fourth class article, and not marketable.