

Mr. Campbell used the deep frame; he had no reason to be dissatisfied; he thought the frame was more easily handled and a better wintering frame; he never tried any other. Mr. Smith looked at two colonies the previous day and found the bees clustered near the top bar of the frames.

Laurence Welsh thought he would not like a single story hive.

Mr. Smith stated he would like the top story, but in his hive he could not get them to work in the top.

Mr. Kindree asked Mr. Jones to give his opinion, as he represented Messrs. Gould & Co., and had manufactured and used several hives, his experience should be of value.

Mr. Jones then stated that he found a two story hive with the proper frame the best. He was an ex-student of Mr. Jones, of Beeton. When starting he had used the deep frames for two years, he found there was too much labour about it, during a good flow he had to extract twice a week, or the bees were idle or commenced crowding the brood chamber; then one could only obtain a few pounds of honey from each frame. If farming or from any reason unable to extract, the bees were idle. If in the deep frame honey was allowed to be capped over time was lost. He wanted a hive he could extract about fifty pounds at a time from, and if unable to extract he could raise the full story and lace another empty set of combs immediately above the brood; he did not want the brood displaced and wished to disturb it as little as possible. His first idea was to have a frame ten inches deep, as he was very much prejudiced against the shallow Langstroth frame, but he found the queen did not lay quite up to the top bar and when the bees once commenced storing above the brood in the same comb they commenced gradually crowding the brood out, so he finally was compelled to adopt the Langstroth, and with this he had no trouble as to storing honey above the brood in the same comb. Then, immediately above the brood is the natural place to store, he gets this in the top story and in extracting, the brood is not disturbed, as he gets the honey by itself. In a single story hive he has to take brood and all out, the bees become disorganized, they cease their labour, become more irritated, and there is very often a danger of chilling the brood. With an upper story one can have an extra set of combs for it and one has only to replace the full story by an empty one, which full story, when emptied, takes the place of the next full story and so on. If harvesting, short-handed, ill, etc., he can give the bees room more readily and extract with less labour, as the upper story will hold fifty pounds. In the two story or shallow-framed hive, the bees commence breeding near the top bar, towards one end of the frame, in the other end of the comb they store their honey, as the bees are able to cover the brood, he turns every alternate frame and the queen soon fills the lower story comb with brood. When putting on his upper story he takes two cards of brood, which he places in the upper story, putting a division board on each side of the frames and a quilt above the frames, between the division board and side of hive, and when the bees require more space he takes two more, and so on, replacing the brood frames by foundation, or empty combs. In this way he gives the queen plenty of room to lay and the comb above entice the bees, and as the brood hatches gives them full combs to store in. If they are gathering honey very fast and he sees the honey is just ready to cap, he will slip under the full story another, which gives the bees plenty of room, and the upper story he often removes in the evening when he comes home, as he is engaged in business all day. Unless he had the upper story he could not

manage his bees as he does. A small boy does all the work during the day.

For comb honey he wants the best, which every one admits is placed immediately above the brood. With a shallow frame and upper story we get this, but not by a half story upon a deep frame. The bees, too, object to crossing all that full space of comb honey between brood and upper half story.

Mr. Kindree wished to know if the queen did not go to the upper story?

Mr. Jones stated that he gave them room if they required it; he took out combs of brood and if the queen did occasionally go to the upper story and deposit eggs in extracting combs, he did not mind, as the brood could be made use of; they rarely went to sections; he laid a perforated metal honey board when required.

In a two-story hive he found it easier to find a queen, as all the bees in the top story could be removed; in extracting only the bees in the top story required shaking and brushing off the combs. Towards the end of basswood the queen would commence to contract the brood chamber and the bees would store honey in the lower story; this must be extracted if the bees are to have room to store on; with a single story this difficulty is overcome. In spring the upper story makes a nice repository for a chaff cushion and the brood underneath it is kept in the warmest part of the hive, as it is nearer the top of the frames.

Mr. Kindree was asked why he objected to putting top story, or half story, on the deep-framed hive.

Mr. Jones stated that the distance was too great to the top of the hive, the honey could not ripen next the brood, and the full story was practically between the brood and combs for storing (the space of comb between the brood and top bar of lower story.) Several objected to the bees being so close to the draught in the shallow frame.

Mr. Jones stated that in out-door wintering he took a half-story and put it underneath the lower story and above the bottom board, thus raising the bees very nicely out of all such currents of air.

Mr. Campbell stated that he was very successful with his deep frame hive and referred to large yields.

Mr. Holtermann here stated that the large yield and success, which, depending upon the hive to a certain extent, could be no decisive guide, as the yield depended upon locality, management, etc., very much. Martin Engh had been very successful. Three seasons ago he had about fifty pounds per colony (mostly comb) and he used a shallow frame now. This was, no doubt, largely owing to locality. He found that wherever Alsike clover had been that year there was a better yield, and Mr. Engh's success was, no doubt, largely owing to this.

It was then moved by Mr. Kindree, seconded by Mr. McCallum, that it is the sense of this convention that the two-story hive is the best for all purposes. Carried.

Next question—

THE USE OF FOUNDATION.

Mr. Kindree believed the foundation a decided advantage, full sheets prevent drone comb.

Mr. Holtermann stated that it depended very much upon how the foundation was used. If a colony was put upon full frames of foundation the bees would draw it out very quickly and fill the cells with honey, so rapidly at times that the brood-chamber would be very small, and if the honey was not extracted the colony would probably be in a very poor condition by winter. In fact instances were on record where one's hand would cover all the brood-chamber in a

colony. If extracted all was well and the foundation a very decided advantage.

By giving only starters, the combs were built more gradually and the queen could occupy more cells with brood. He found it an excellent plan to use foundation as soon as a little honey came in, put it in colonies to fasten and draw out in twenty four hours; they could be taken out and would be ready for swarms, etc. Some colonies will work on foundation more readily than others. Placing the foundation between sheets of uncapped brood he found worked well.

Mr. Jones found it well to have the foundation drawn out in the upper story.

Mr. Campbell favoured the use of foundation. When it became hard he found dipping it in warm water worked well.

Mr. Jones thought foundation, if too light, was not good. A foundation with a light ball and a heavy wall was the best.

HOW TO INCREASE COLONIES.

Mr. Campbell preferred dividing, because he runs no risk of losing.

Mr. Jones preferred swarming in the two-story hive, as he could retard swarming by tiering up until he obtained a large swarm.

Mr. Holtermann had divided two years, then thought swarming might be better, and tried it, but now thinks dividing has advantages. He took a strong colony, and, after finding the queen, shook three-fourths of the bees into the new hive and placed gone third of the combs with them and removing them to a new stand, the old bees would return to their old home, making the division pretty equal.

Mr. Kindree preferred dividing.

Mr. Jones thought by swarming the bees worked with more energy. He moves his colony from which a swarm issues and puts swarm and new hive upon the old stand, thus getting any bees in the field with the new swarm.

HOW TO PREVENT SWARMING.

Mr. Wm. Smith found it difficult to prevent swarming.

Mr. Kindree finds if the hive swarms once he can generally control it.

Mr. Holtermann thought swarming could be very much checked by ventilation and shade. He thought not enough attention was paid to shade. If the bees were allowed the morning sun and were shaded from the noon and afternoon, he believed they would be much benefited.

Mr. Campbell found shading beneficial; he found hives with slanting roofs and holes in the gables very good.

HOW TO HANDLE BEES MOST SUCCESSFULLY.

Mr. Kindree examined them when they first commenced flying. If weak he built them up by the stronger; he also feeds early. If he desires increase he lets them swarm; towards fall he replaces any poor queens; he gives them enough store for winter early; he fills the upper story with chaff.

Mr. Smith thought early feed paid.

Mr. Jones thought the same; he feeds candy.

Mr. Holtermann thought feeding sugar-cake good, and by its means bees could be kept engaged in the hive on cold winter days; he found keeping them warm, contracting the entrances according to temperature, was beneficial; handling often and feeding syrups he believed often caused the bees to rush out of the hive and be lost.

The next meeting will be held at Cayuga, at ten a. m. on Feb. 12th, 1895.

Mr. Wells, of Phillipstown, exhibited some comb foundation. Messrs. Gould & Co., Brantford, had a very nice exhibit of apian supplies. There were about thirty present.