

bottom board, but that was not a system that the Association could recommend. Still those who were anxious to do so should try the Heddon hive on a small scale. They must always remember that the English climate was a moist one, and therefore the strength of outer casing was an important consideration.

Mr. Blow wanted to know something about the non-swarming properties of the hive, and he asked whether the bees would not swarm out if crowded down in one brood-chamber.

Mr. Jones said experience proved that, so long as the bees had plenty of space in the sections and brood above, they were not inclined to swarm; but if they did attempt to do so it was only necessary to place the queen-excluder board on the bottom board, which gave the bees access to the hive through the queen-excluder, while the queen was unable to leave the hive to swarm.

In reply to the Rev. Mr. Raynor, Mr. Jones said that the Ontario honey season lasted from about the middle of June to the 1st of August.

Mr. Jones said another important point in connection with the production of comb-honey was brought out by the fact that the brood-sections of 2 inches in width were common in Canada at one time, but their use had now been discontinued, practical experience proving beyond questions that one and three-eighths or one and one-half inches would be filled and capped in much less time and in much nicer condition than the broader ones. It was asserted that much more honey could be secured by the use of the narrower sections, and in better shape, and there would be many less unfinished sections remaining in the apiary at the end of the season. The reversing of sections caused them to be completed in a much shorter time than by the ordinary system, and, as stated before, he strongly recommended it.

In answer to Mr. Baldwin, who contended that English bees preferred to build sections of 2 inches, and even larger, in the place of smaller ones, Mr. Jones said he would venture to prophesy that there would be more people adopting 1½-inch sections in five years' time in England than there were now using the sections of 2 inches. It was natural for bees to build the ordinary width of brood-comb, and there was a limit to the width they liked to build. The further man tried to get rid of their natural instincts by making them build wider combs, the less they were inclined to fill the sections properly, which caused bulging and irregular structures. It was stated by some that narrow sections required more capping, but he had

found that he secured more honey, which was the great object he had in view.

Mr. Garratt asked what should be the size of the entrance to the hive, and Mr. Jones replied that the entrance should be full size of the front of the hive during the honey flow.

In reply to a inquiry, Mr. Jones said that quilts were not necessary with the Heddon hive, the frames being next to the lid, leaving just a bee space between the top of the frames and the under side of the lid. The bee space should never exceed three-eighths of an inch.

Mr. Lyon asked whether in the event of two or three days' rain the water would not penetrate between the tiers? To which Mr. Jones said that the coating of propolis placed on the inside by the bees would effectually prevent saturation.

In reference to a remark made by Mr. Sambels, Mr. Jones agreed that the Canadian hive embodied some of the principles of the C. W. Stewart hive.

The Chairman exhibited and explained the working of an instrument invented in Switzerland for securely fastening foundations in wire frames.

Mr. Jones said that a good many people wanted to know how they in Ontario managed their queen business, and he exhibited a new queen-nursery, which he had used with success, and appeared to have valuable features about it. It consisted of twenty cages, each holding a queen, where she might be kept in safety in any hive for weeks, or months if necessary. He had had frequently a hundred queens, and more, in a hive where the old queen was laying, breeding going on in the ordinary way, and he had kept them there for weeks without loss.

Mr. Cheshire asked if the queens would not be killed under such circumstances; to which Mr. Jones replied that the cages were so constructed that the bees in the hive could not reach the queen. A few bees were put in the cage with the queen to feed her.

A gentleman stated that he had put a queen in a cage very similar to Mr. Jones' on the top of a bar-frame hive, and soon after found her to be dead.

Mr. Jones said that he had had a similar experience in reference to one queen that had cost him a considerable sum of money. That queen came from Palestine. He placed her in a wire-cage sixteen meshes to the inch, and on examining her after a couple of days he found that the bees from the outside had got hold of her wings, feet, and legs, and had gnawed them.