boring sections with sufficient force to break them; then, by the friction of the comb surface, the capping is broken and the liquid honey escapes and tends to depreciate the value of the entire crate. The dealer receiving such a shipment is a loser. He has no redress, and is likely in the future to be less inclined to handle and sell honey. With well-filled sections, properly crated and packed, there is no risk in shipping. The advantages to be derived from having sections with combs of an even thickness, and built straight, are:

They can be handled by dealers with small experience; facility in crating; sections more nearly of uniform weight and pleasing to the eye. In the experiments conducted, separators were used between adjoining sections and the evenness and uniformity of the comb were entirely satisfactory.

Again, comb honey producers know that, with rare exceptions, in the comb honey supers now used, sections having their faces next the wood are filled last, and the inner sections have to be left capped and finished on the hive, waiting for the bees to finish the surface of the sections joining the wood. Some have practised a system of removing the supers, freeing them from bees, taking out the sections, and returning the unfinished ones. This causes so much additional time and trouble, that it is almost, if not quite, impracticable.

The present experiment was conducted to test a plan to overcome this difficulty, the method adopted being suggested by S. T. Pettit, Belmont, Ontario, viz., to compare supers that have bee space over the sections with those without bee space; and the result of the present year's work confirms observations and experiments made by us in this direction during the past three years.

The main objects in the experiment were:

1st. To compare the number and size of pop holes in the sections of supers with the bee space above and those without. Those without, had a quilt next the sections; those with, had a board with ¼ inch bee space over the super, between the board and the sections.

2nd. To compare comb honey having the ends of the last sections and wood sides of supers separated by only the usual one bee space, and those having two or more bee spaces. The two or more bee spaces were secured by means of dividers of different construction. Some were of solid boards with holes bored in them. See Fig 2, No. 2. Others were made of strips. See Fig. No. 3. The bee space used was ¼ inch in every case, and it is very important that this should be exact.

Following is the result of the work of seven colonies with cloth and no bee space over the sections:

Hive No. 1—An average percentage of pop holes.

Hive No. 2—Same as number one.

Hive No. 3—Pop holes slightly more numerous than the average.

Hive No. 4—Rather better than preceding supers.

Hive No. 5—Although sections were particularly well filled, the pop holes were remarkably numerous.

Hive No. 6—A still larger percentage of pop holes in the corners both at top and bottom.

Hive No. 7—About the same as number six.

The result of experiments with ¼ inch bee space over the sections, nine colonies in the group, is as follows:

Hive No. 1—About 10 per cent. fewer pop holes than the average of the above

Hive No. 2 and 3—Same as number one.

Hive No. 4, 5 and 6—About 7 per cent. fewer pop holes than the average of above.

Hive No. 7—Still fewer pop holes.

Hive No. 8 and 9—A very decided advantage over no bee space.

Hive No. 10—About the same as the average of those having no space above.

Nos. 11 to 16 showed a smaller percentage of pop holes.

GENERAL REMARKS.

One fact was very conspicuous, viz., that the pop holes in sections with ¼ inch bee space were smaller than in those without. This report tallies with results obtained from experiments conducted in previous years, but not before reported. The probable reason for their being fewer and smaller pop holes with the bee space above the sections, is, that the bees appear to require a space to pass from section to section, and a bee space above facilitates this passage.

The result of the experiment with two or more bee spaces between the side of the super and the face of the section next the side, is as follows:

Two bee spaces and divider at one side of the super and only one bee space at the other.

Hive No. 1—The outside of sections with the two bee spaces and divider were better finished and cleaner than the side with only one.

Hive No. 2 and 3—Same as number one.

Hive No. 4 and 5—No perceptible difference as to finish of comb, but the sections were cleaner.

Hive No. 6—A difference in favor of the two bee spaces.