

place and improperly ventilated. Such have trouble with foundation sagging or melting down. For this they sometimes unjustly blame the supply dealer. A man not careful should wire frames.

J. B. Hall—We do not need wired frames let people do it more carefully.

S. T. Pettit—It depends much upon the wax. Water has a weakening effect on wax. When you have wax properly rendered you can make it thin say 7 ft to the lb. Frames 9 in. deep or less. Then discretion must be used in giving it to the bees and you need not wire. I at one time used artificial means of keeping up foundation but now I give room and air at that time. If foundation is made right and wax right, all is well. Shade when hot. I have foundation drawn out in the upper story.

John Myers—I have used wired and unwired. The expense of wiring is not great. When using wires you can get full sheets of brood comb.

Wm. McEvoy—With best made wax it is all right, otherwise it is not.

J. B. Hall—I have had 1600 frames and all perfect, not a wire in one of them. I put in sheets to swing easily in the frame, the lower side of sheet is narrower than the upper, and lower half of sheet sloping a little away from the side bar. The bees attach the sides of the sheet, first two-thirds of the way down. With the remaining one-third of sheet there was no sagging. I ventilate properly and turn the quilt back two or three inches, put an eight inch run over the quilt and upon this the lid.

R. H. Myers—Some may succeed but beginner's better wire.

Shall we paint hives?

F. A. Gemmell—All things considered, yes.

Jacob Alpaugh—I want no paint except on the cover. There is moisture escaping from the bees at all times of the year, if the hive is not painted this moisture is forced through the sides, it passes through the wood. Again the painted wood is much colder. In hot weather white paint is not hot, but about as hot as wood. I have had unpainted hives ever since I began bee-keeping these are perfectly good now.

Comb honey supers, I paint to keep them from warping.

J. B. Hall—I used to paint hives, but am now stopping.

S. T. Pettit—I used to paint and also advocate painting, but it makes the wood more of a conductor. It is certain that moisture escapes from the wood. In the spring of the year I have found blisters under the paint, upon examination I found they were blisters of water which had been

forced through the wood.

What kind of foundation that on the press or roller mill is best and will the bees build out the quickest and the thinnest after the bees work it out?

Mr. Hall—(Showing a sample made on the Pelham mill) The Pelham mill or Given press.

Mr. Holtermann—I fail to see why the Pelham mill should be any better in this respect than the Root. I also think Mr. Taylor, in getting his samples of comb foundation did not consider many points in the making of comb foundation which are very important.

How do you avoid the building of brace combs?

It is in the blood of the bees not the race. Accurate and correct spacing $\frac{1}{4}$ inch on top three-eighths inches every other place.

A vote of thanks was passed to Mr. Thos. Wm. Cowan, Editor of the *British Bee-Journal* for the interest he has always taken in Canadian Bee-Keepers and especially upon the sugar honey question. After the usual formal votes of thanks the convention adjourned.

They Hum! They Do Not!

IS IT NATURAL AND NORMAL FOR BEES TO
"HUM" IN WINTER QUARTERS?

(Written for C. B. J. by G. W. Demaree.)

MR. EDITOR—This question is up again. The question is not as to whether or not bees sometimes hum or roar during the bitter cold weather, but do they "hum" or "roar" under normal conditions during zero weather when undisturbed in their winter quarters? This is the question. Bees may "hum" in the cellar, and may hum when sick or disturbed anytime or anywhere if there is life and energy enough in them to do it. But in a state of health and quiet, I say from fifteen years experience that no sound can be heard from any hives in my apiary if the temperature is below the freezing point. I live in a moderate climate, but the weather sometime gets on a "tare" for a few days at a time, and I have seen the temperature flash down to 20° below zero. and I have often seen it at zero, and at such times I have walked in my apiary and everything was as still as the grave.

What I have always claimed is, that perfect silence is the natural state of bees in their winter quarters, in cold weather.

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