

that favoured them. Southard and Ranny, of Kalamazoo, Mich., are old, practical and successful honey producers. Their choice comb and extracted honey can be found in many markets, in large quantities. For several years they made a hobby of, and many experiments with different depths of hives. They have finally settled down on one whose comb depth is between 6 and 7 inches. During the unprecedented disastrous winter of one year ago, they carried their large apiary through practically, without any loss. All were wintered on their summer stands, arranged as follows: No upward ventilation or absorption given; a seven-eight board cover glued tightly on the hive, which rests about 4 inches above the ground, over which a loose box was placed, large enough to leave about 4 inches space between the sides and a little more between the covers, all of which were filled with chaffy straw. The entrance was bridged and was as small as $1 \times 1 \frac{1}{2}$ inch.

To the best of my memory this was the arrangement, and, while it is not in harmony with many of our conceptions, nevertheless, facts are stubborn things and we cannot afford to ignore them.

It is my opinion that whoever constructs a hive with a special view to its wintering qualities, will lose much more than he will gain.

It seems that the idea is something like this. "A good hive in which to winter bees out-of-doors, would be one 18 inches high by 10 inches one way and $11 \frac{1}{2}$ the other; a tall and proportionally narrow one. "Bees incline to place their stores farthest from the entrance," Father Langstroth correctly tells us, and so the bottom part of these combs would be empty and the upper part be filled with stores. The bees will cluster below the top, and there will be a vacancy above them. This must be heated before the temperature of the cluster can be raised. This heat serves the purpose of warming their stores. It warms stores that will not be consumed for months.

Let us lay this hive down on its side. Now we have the 8 frame Langstroth. The cluster is near the cover. The heat rises as before. When it reaches the cover it stops. Radiation as compared with circulation, is as a snail compared with a hound. It now glances to right or left and warms the stores in that direction and radiates away just the same as in the deep hive. Of course it will move away from the cluster a little more rapidly in the deep hive, and this looks like a point in favour of the shallow one. The bee-keeper I first quoted claims that bees keep warmer and avoid injury from moisture better in shallow than in deep hives.

While I should take no notice of the wintering problem when deciding the depth for my hives, I think my friend quoted, has the argument. In practice, at least, the shallow hive bee-keepers winter their bees as safely as any. There has been much "right reasoning from wrong principles," regarding the question of radiation and preservation of heat. When my time and your space permits, I wish to say something about "Thin Wall vs. Chaff Hives for Summer."

JAMES HEDDON.

Dowagiac, Mich.

It is a long time since we tried shallow frames, although we tried the Langstroth for 14 years side by side with the deep ones. We succeeded better with our own style of frame which was deeper. It is our intention the coming season to test carefully the new Heddon hive, and we will be able to judge after the first winter as to their wintering qualities compared with deep frames. There are strong arguments in favor of both sides. If Mr. Bingham and others have been successful even in our most severe winters, we see no reason why we should not be equally so.

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HONEY AS AN EYE REMEDY.

WELL T. M. G., Washington, Kan., (see page 165 in your issue for Feb.) if he has a good calf to try putting pure strained honey in its eye. Let the honey be fresh and of best quality of white-cap honey; he can turn the calf's head to one side and with the help of an assistant hold open the lids and drop from a tea or other spoon a few drops of pure honey in each eye, morning, noon and night of each day, and note results, and if the eyes are not injured so that there is no sight remaining I think he will find the films disappear in a short time, and the calf will have his eyes restored as good as ever. I know from experience that totally blind eyes in sheep and cattle have been restored by the use of pure honey as stated. In obstinate cases it may take some time to clear the film from an eye, but with perseverance I have never known a failure. Not knowing anything about the calf, or how its eyes were injured, I only tell what will clear an eye of film that was once a good one, but has been injured by some known or unknown cause and as a consequence of such injury has had a film grow over the eye and so its sight has been destroyed. If it does not cure T. M. G.'s calf and restore its sight it may be of benefit to some other reader or readers of *The Gazette*. After each application the watery substance will run from the eye freely, which if left, only increases the thickness of the film, thus the more