

to wide frames, for taking comb honey in the body of the hive, years ago.

On the whole, I think our friends have made a decided improvement in their hive, and I feel sure they will find it much better than the old style beveled-top hive, to which they have clung so long and persistently.

With becoming modesty our friends do not claim to have originated a new hive, but simply to have combined several well known principles all in one hive.

NOTE.—In our next issue we hope to give a description of the Richardson hive, and this will end our papers on "Hives." We will at the same time add some remarks as to hive-making by amateurs, and suitable machinery therefor.

From the Nor-West Farmer.

How Bees Act.

AN Edmonton correspondent asks the following questions:—

1. Do you find bees unusually cross after the honey flow is ended?

Yes. Bees are like anybody else. When times are dull they are cross and find fault, and the chances are that they will vent their feelings on some one who is not to blame. They are quite human like.

2. Have you noticed an unusually large amount of dead bees cast out of any of your colonies this fall or any fall previously?

Yes in some of them, but not so noticeable in former seasons. I cannot venture an opinion as to the cause, unless they were the older bees hurried to their end through the effects of a sudden cold spell.

3. Do you think that bees require acclimatizing, the same as imported animals to withstand this country's climate before they will succeed properly?

Newly imported bees, if they arrive in good shape, seem to do well; yet, I believe acclimatized bees are better. Why should they so differ in this respect from other classes of the animal kingdom?

It is a law of nature that animals will accommodate themselves to their surroundings providing the chances are not too extreme. I have as a rule had better returns from acclimatized bees. In the spring the most trying time of the year, is when well acclimatized our native bees would have the advantage.

4. Have you known of bees being frozen to death when in good dry well ventilated hives in Manitoba or elsewhere, or can they be frozen to death in dry times where there is no rain or frost?

No, but if you attempted to winter them in much of our 40 degrees below zero weather, they most likely would freeze to death. In such extreme cold the bees could not keep the inside walls of the hive warm enough. The moisture from the bees coming in contact with the cold sides of the hive would condense and form rime. If the bees survive a cold spell and the weather moderates a little, the heat from the bees would melt the rime and you have a very wet hive.

5. My bees were flying when the thermometer was showing 5 and 6 degrees in frost. Is this an unusual thing with you?

So unusual that I have never seen it occur except when the bees were disturbed and then they repented of it right away. There must be something peculiar about your atmosphere or altitude, or bees, that has got them into that habit.

C. F. BRIDGMAN.

From the Dominion Grocer.

HONEY.

SCIENTIFIC FACTS.

HONEY is secreted by the nectariferous glands of flowers, from whence it is collected by the working or neuter bees, which extract it by means of the proboscis, and pass it into the dilatation of the œsophagus, known as the crop or honey bag. When the animal has arrived at the hive, it disgorges the honey, probably altered by admixture with the secretion of the crop. It is used by the bees as food, but it is its general properties and uses to man that here require notice.

COMPOSITION OF HONEY.

The composition of honey varies somewhat according to the food of the bees, their age, the season, etc. Hybla, a mountain in Sicily, and Hymettus, a mountain in Attica, were in ancient times celebrated for their honey; doubtless in consequence of the wild thyme and other fragrant herbs growing upon them. The honey of Narbonne and Chamouni is now held in high estimation for similar reasons; and honey obtained by bees having access to heather has, as is well known, a peculiarly agreeable taste.

The substances which have been recognized in honey are sugar of two kinds—one crystallizable and analogous to glucose, and the other uncrystallizable, mannite, gummy, waxy, coloring