

uncapping rest the end bar on the point of the nail. The cappings will drop into the harrel and drain into the pail below. What to do with the wax will be told later.

The impurities present in extracted honey consist of fragments of wax, pollen, parts of bees, such as wing or leg, also occasionally a few larvæ. The first mentioned are all lighter than honey, so will in time rise to the surface; so in the case of a small run the honey may be allowed to stand in the machine for a day before it is drawn off. A piece of clean, strong muslin tied over the faucet makes a good strainer.

Bulk-extracted honey is generally stored in cans. The chief point to remember is, seal the can tight to keep the aroma in and moisture out. Honey absorbs moisture from the atmosphere, becomes thin as a consequence, then ferments and turns sour. In air-tight vessels well-ripened extracted honey will keep for many years.

Most honeys granulate—that is, candy—in a little while. To liquefy, set the can in a dish of water on the stove, but with pieces of wood between the can and the bottom of the vessel. Melting is slow, but if there be no hurry it is a good plan to leave the can of honey above the water-tank that is found in most stoves. Of course, the can-cover should be loosened.

Honey that has been melted does not granulate so quickly as at first. The higher the temperature to which it is raised the longer will it remain liquid, but if made too hot the colour will change to amber. The average buyer of honey in small quantities does not like to be bothered with the melting of it; therefore it is a good plan, before putting the honey into jars, to bring it to a temperature of 150 to 160 degrees, never more than the latter.

CHAPTER XI.

Feeding.

We have seen that in the spring months the bees build up a huge army of producers to secure the benefit of the heavy flow of honey in June. All during the breeding season every drop of nectar is converted into more bees about as fast as it is brought in; then in June and July every cell in the comb is plugged full of honey, on which they will have to subsist until dandelions bloom in spring. But the bee-keeper finds a ready market for the toothsome honey, and therefore robs the hives of the stores, not infrequently leaving too little for the bees to winter on, with the natural result that, unless other provision is made, the colony will starve to death. Again, for some reason the bees may have consumed stores in the winter much more rapidly than was anticipated, so that they must get help in the spring. We have also seen that at the end of fruit-blossom there is often a dearth for a few weeks which would put an end to brood-raising unless the bee-keeper lent his aid. In each instance the necessary assistance is given in the form of sugar syrup, made from the best granulated sugar; any other kind is risky.

The feeding in the fall for winter and spring consumption is the most important. About the beginning of September an estimate should be made of the amount of stores in each hive, this being done by examining each frame and sizing up how many sections of honey it is equal to. Roughly speaking, an ordinary frame will hold eight sections of honey, each weighing about 14 oz., let us say 1 lb. To be in safe condition, each hive should contain about 25 lb. of stores. For every pound short of that amount, feed 1 lb. of sugar dissolved in water.

Fall feeding is usually done quickly—that is, large quantities of syrup, often as much as 25 lb., are given at one time. Some men give the full amount needed about the middle of September; others give half then, the other half about the end of October.

The syrup fed in the fall is made rather thick. The thinnest ever used is got by taking equal quantities, by measure, of sugar and hot water, boiling, if possible.