

at a time and kept constantly stirred until dissolved to prevent it from settling on the bottom of the vessel and burning, because burnt sugar is very unwholesome for bees and would cause their death during winter. To prevent the syrup from granulating, a teaspoonful of tartaric acid may be added to every twenty pounds of sugar.

Candy for feeding in an emergency during winter is made by dissolving over a slow fire 6 pounds of sugar in $1\frac{1}{2}$ pints of hot water and boiling it to 238° F. over a hot fire with $\frac{1}{4}$ teaspoonful of cream of tartar for a few minutes without stirring. Boil longer if too soft. When the candy becomes almost cool enough for the finger to bear it, it should be stirred until it begins to whiten. It should then be poured quickly into moulds to form cakes about one inch thick.

Syrup made as described above should be given inside the hive and covered up so that bees from the other hives cannot get access to it. To prevent undue excitement and robbing, it is best to feed in the evening.

There are many kinds of bee feeders. For stimulative feeding in spring and summer a good one is the division board feeder, which hangs in the hive like a frame. For rapid feeding in autumn there is nothing better than the Miller feeder, which consists of a wooden box so constructed (see diagram) that the bees can not get drowned. This feeder is placed on top of the frames and an empty super or extension will be needed to cover it.

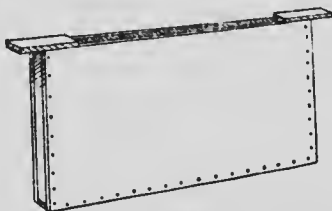


Fig. 35.—Division board feeder to hang in hive in place of frame.

A bee-keeper never need be at a loss for feeders. A simple feeder may be made by punching a number of small holes in the cap of a two-pound glass fruit jar. If the jar is then filled with syrup and the cap screwed on tightly it may be inverted over a hole in the quilt on the top of the frames. For rapid feeding a ten-pound lever lid tin pail with about a dozen small holes punched in the lid, also turned upside down over the frames, will usually prove quite satisfactory. If the syrup begins to run through

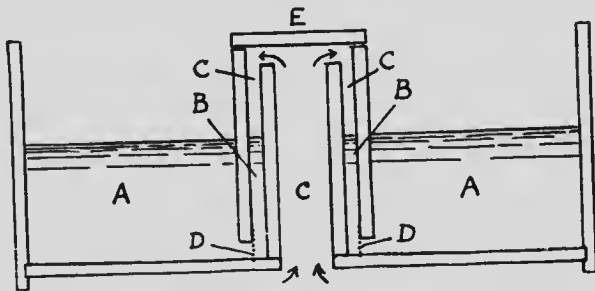


Fig. 36.—Section of Miller feeder, showing method of construction. A, B, reservoir for syrup; C, passage for bees to syrup; D, wire cloth; E, movable cover.

the feeder faster than the bees can take it, a piece or two of cheese cloth may be placed under it. A favourite method of feeding is to half fill a shallow tin pan with syrup and fill it up with grass or weeds which enables the bees to obtain the syrup without any danger of their getting drowned.