

It is important to dissolve the sugar thoroughly, so stir well. Some bee-keepers, for fall feeding, use as much as two parts of sugar to one of water, but this strength should not be exceeded.

In the spring months a very much thinner syrup is better, one composed of two parts of hot water and one of sugar. This is given slowly, say from half a pint to a pint a day, according to the needs of the colony.

After four years' experience in the Wet Belt the writer wants to say plainly that sugar syrup is a poor substitute for honey, at least there. Feeding sugar must be looked upon as a makeshift in a time of stress, not as a regular habit.

FEEDERS.

There are four methods of feeding—namely, open-air, above the brood-chamber, in the hive, and below the brood-chamber. Open-air feeding has several limitations. One is not to feed other bees if there be any within a couple of miles; then there is a temperature limit, for the writer finds bees will not take up syrup from below unless the thermometer is above 50 degrees, so that the same conditions will probably apply to the open air. Feeding below the hive has much to recommend it with suitable dishes, but on the Coast regions it is unfortunately impracticable in the spring



Fig. 24. Division-board feeder.

months, as there are often weeks of cool weather. For fall feeding this system is all right. For giving syrup in spring, preference should be given to a feeder that fits into the brood-chamber, where the syrup will retain the heat and be readily got at by the bees. In the fall it is usually most convenient to feed from above.

There are many devices by which syrup can be given from above the brood-chamber. Perhaps the simplest is the ordinary friction-top can, such as is used as a container for syrup, jam, etc. Prepare it by punching the lid fairly full of small holes with the point of a nail. Fill the can with the syrup, put in the top, set the can upside down on the top of the frames. As many cans as the frames will hold can be used at once. The bees will carry the syrup as fast as it leaks out. Of course, an empty hive must be on top of the hive to hold in the heat and to prevent bees from other hives getting at the supply. A Mason jar will do just as well. An excellent top feeder on the market is known as the Miller. With it 25 lb. of syrup can be fed at one time.

For spring feeding the writer recommends the Doolittle division-board feeder, which is placed in the hive alongside the brood-nest like an ordinary frame. The illustration will show its construction. The sides are made of $\frac{1}{4}$ -inch wood, 5 x 17 $\frac{1}{2}$ inches, rough on the inside to give foothold to the bees. The bottom and end bars are of $\frac{3}{8}$ -inch wood, 1 $\frac{1}{4}$ inches wide. The end bars are 5 inches in length; the