

when the season comes, let the weather be what it may.

Up to the past fortnight those of us that were compelled to feed (which I was not) gave the bees candy or dried sugar, but now we give them syrup, made by boiling about three pounds of sugar to one quart of water, adding one tablespoonful of vinegar as we lift it from the fire. For autumn feeding we give five pounds of sugar to the same amount of water. We use West Indian cane sugar, that being the nearest to honey in its composition, of all sugars; glucose and beet sugars are inferior. Our test is polarised light.

I send herewith cuts of two syrup feeders that are most popular here. By them you can regulate the amount of food given to a nicety.

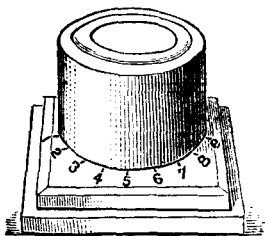


FIG. 1.

FIG. 1. is Mr. Blow's "perfection" feeder for which he has gained many prizes, medals and diplomas. The stand is made of two square pieces of pine with a hole four inches in diameter in the centre of each, fastened together with a sheet of zinc fixed between them. This piece of zinc has a slot cut in it in the shape of a semi-circle. The glass bottle has an air-tight zinc cap to it, pierced with nine holes in the form of a semi-circle also; it also has an index or pointer. You will observe the nine spaces on the top of the stand are numbered from one to nine. We use the feeder in this way. We cut a hole four inches in diameter in the centre of our top quilts, over the cluster of bees. Over this hole we place the stand, and the bees at once come up into the bottom part of the stand and thrust their tongues through the slot cut in the sheet of zinc in the form of a semi-circle. The bottle is now filled with syrup, the lid pressed on (the lid is lined around the edge with cork to make it air-tight), and the bottle is inverted and placed with its neck into the top part of the stand, which keeps it firm so that a rude shake will not knock it over. The contents of the bottle are held in suspense, but by placing the index at any number you please the bees are enabled to draw down the food through the number of holes that your index denotes. It is estimated that one hole is equivalent to sixty loaded bees returning

from the fields every minute. By this arrangement you can regulate the amount of food given, to the actual requirements of the bees and thus prevent them from storing sugar-syrup.

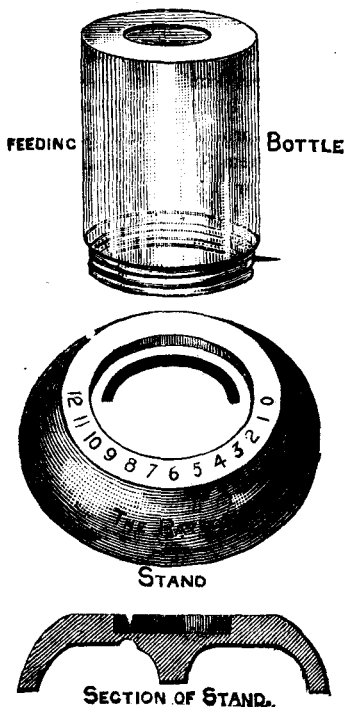


FIG. 2.

FIG. 2. represents the Rev. G. Rayner's improvements on Mr. Blow's "perfection." This has also taken very many prizes at our best shows. The stand is all wood hollowed out to allow the bees to get at the food, but the plug is to give them foothold on which to hang as a cluster. It is lined with cloth to keep it warm. You will also observe the bottle is larger and there are twelve holes instead of nine. Some object to zinc coming in contact with syrup or honey. The acids acting on the zinc soon makes honey poisonous for food, so always be careful not to store in zinc or galvanized vessels but in tinned. But syrup is in the feeder such a short time and all careful bee-keepers will frequently wash their feeders, so that no harm need be feared on that score from the zinc lids and parting to the stand of Mr. Blow's. Some complain that the lid of the bottle is sometimes forced off and the syrup is ejected in on the bees, thus lowering the temperature and making a general mess, as well as probably starting robbing, but this is the fault of badly made food which ferments, and not the fault of the feeder. The