

The Benton Melter, which I invented three seasons ago, will handle all the comb honey one man can cut off the foundation without any trouble whatever, supplying steam for the uncapping knife and separating the honey from the wax at one and the same time. I send a photo, in the hope that the Editor will reproduce it in the Journal. The advantages this machine has over others will be readily seen.

1. It is light and handy.
2. It is heated by means of steam generated outside the honey house, in a boiler made out of an oil-drum.
3. It gives off little heat in the honey house.
4. It supplies steam for the knife.
5. The honey and wax separator is attached to the machine, and is part thereof.
6. As soon as the comb is reduced on the coil, it passes through, falling on to a cooler and not a hotter surface, as is the case with all other machines.
7. Pollen and slum-gum are caught on the screen underneath the coil, which is easily accessible, and easily cleaned.
8. It costs nothing to work, only wood fuel and water being needed to keep the heat up for both the melter and uncapping knife.
9. A small gas tap, regulates the supply of steam for the knife.

For clarifying the honey, including extracting honey, I advocate the use of a tank 4ft. 6in. deep by 18in. in diameter, with a pipe 2in. in diameter from the bottom of the tank up the side about 4ft., exactly similar to the elbow pipe used for separating the honey from the wax on the melter.

In addition to this outlet pipe, another tap is needed to drain the honey out of the tank when there is no more to put in. By this method of clarification the clear honey at the bottom of the tank is forced up the pipe and out on a level with the honey in the tank. A bulk tank stands alongside, so that the honey flowing from the pipe flows therein.

In conclusion, I hope the foregoing may be of a helpful nature to those of my readers who have thick honey to harvest in large or small quantities.

Facts about Frames.

By E. G. WARD.

There are two errors in my "Hints on Hive Making." The distance between rabbets should be 19 3/16 instead of 19 1/16. Depth of half supers should be 5 1/4 inches instead of 5 1/2 inches, as printed. Whether the fault is mine or the printer's I do not know, as I have not got a copy

of my article; but I have known cleverer men than myself make bigger blunders.

The necessity for machinery in frame-making is even greater than in hive-making, but as some people (myself included) are fond of "making things," I will give some data.

The top bar should be 19 inches long. When the frame is put together, it should measure 17 3/4 outside end bars and 9 1/4 wide over all.

In the half depth frames the top bar is 19 inches long, and outside the end bars should measure 17 3/4 inches, just the same as in full depth frames. Width over all 4 1/2 inches. There are differences of opinion as to how wide the top bar should be. Some advocate 1 1/16 in., claiming that there will be less burr comb by using the wide top bar. I have tried various widths, and prefer the top bars 3/4 x 3/4, with a central groove only. I groove the bar 1/4 deep, and drop the foundation into the groove, and run hot wax down one side only. It is much quicker and better than the wedge and double groove, I think. I make the top bars in the half depth frames full 1/2 inch thick. I make my bottom rails 3/4 inch wide and 5/16 in. thick.

If you examine a factory-made frame, you will at once see why machinery is so necessary if you wish to construct yours in the same way; but if you make what is known as the simplicity frame, the construction can be simplified. I will assume you are going to make some simplicity frames. Get some boards 6 or 8 inches wide, and plane to 3/8 thick. Cut to 19 inches long, and rabbet both ends 1 1/16 in. x 1/2 in. Rip up and plane to 5/8 wide, and run a central groove for the foundation. Make your end bars 8 3/4 inches long, 3/4 wide, and 3/8 thick. Make the bottom rails 16 3/4 in. long, 3/4 in. wide, and 5/16 in. thick.

In putting together, drive two nails through the end bars into the end grain of the top rail, avoiding the groove. Also use two fine nails to nail the bottom rail in between the end bars. It should not be necessary to nail down through the top bar into the end bars. Before nailing up, bore the end bars for the wire. I bore three holes, but some people prefer four. Please yourself. I find a spot of glue a great advantage when nailing together, and it does not take any appreciable time, and makes the frame nice and rigid when dry.

If you would like to make these frames into self-spacing frames, it can be done by cutting strips 3/4 x 1/4, and nailing a piece to each side of the end bars through the 3/4 inch way with very small nails. Bevel the bottom end of these pieces, and make them 3 inches long.

Tho' a cold in the head seems a simple thing,
 'Tis the cause of discomfort and suffering;
 You have inflamed nostrils and aching eyes,
 And incessant sneezing your bumper tries.
 'Tis a weary affliction that all have endured,
 It is easily cured, and easily cured;
 That is to say, 'tis easy and sure,
 When using Woods' Great Peppermint Cure.

If I have made myself clear about how to construct a full depth frame, you can easily work out the sizes for a half depth. If you are going to produce section honey, bear in mind that the outside sizes of the section holder must be the same as the half depth frame, and the inside measurement 11 inches x 4½ inches to take four sections. The top and bottom bars are to be 1½ in. wide and ends 1¾ in. wide.

Letters from Department of Agriculture.

Wellington, 2nd July, 1918.

The Secretary,

National Beekeepers' Assn. of N.Z.,
Kati Kati, Bay of Plenty.

Sir,—
With reference to your letter of the 25th February last, and to the deputation from your Association which recently waited upon the Hon. Minister of Agriculture and of Industries and Commerce in regard to the advisability of appointing a Chief Apiary Instructor, I have the honour by direction of the Hon. Minister to inform you that this question has been gone into, and it is considered impracticable to make such an appointment at the present time. The matter will, however, be kept in view for favourable consideration after the conclusion of the war. I have the honour to be, Sir,

Your obedient servant,

F. S. POPE,
Secretary.

Wellington, 17th July, 1918.

F. C. Baines, Esq.,

Sec. National Beekeepers' Assn. of N.Z.,
Kati Kati, Bay of Plenty.

Sir,—
With reference to the request expressed at the recent Conference of your Association that the pound for pound subsidy on subscriptions received by the Association be continued for a further period of three years, I have the honour to inform you that it has been decided to grant a renewal for that period, the grant not to exceed £100 per annum. I have the honour to be, Sir,

Your obedient servant,

F. S. POPE,
Secretary.

Will sell 56 lbs. granulated honey at 2s. 3d. unless offered more; cash or deposit; H. Hill, Belmont, Ockbrook, Derby. Adv. British Bee Journal, April 27, 1918. [You modest beggar!—Ed.]

Beekeeping for Beginners.

MONTHLY INSTRUCTIONS.—AUGUST.

(As these instructions conform to the seasons in the Auckland District, an allowance must be made for difference in latitude North and South. Average bee-seasons in the extreme North are four weeks earlier, and in Southland three weeks later.—Ed.)

In many parts of the country a certain amount of activity will be seen at the hives on fine days, which indicate that breeding is beginning, and the chief item the beekeeper has to think of now is that the hives are well filled with stores. During the winter months the bees consume very little, but immediately the queen commences to lay the stores deplete very rapidly, as there will be very little nectar in the fields just now, and unless the bees have plenty brood rearing is retarded, and the hive will become poor and weak, the very thing to be avoided, because, unless young bees are hatching out in gradually increasing numbers every week, the hives will not be the proper strength to take advantage of the honey flow when it arrives.

Keep a sharp look-out for any hive that from the outside seems lacking in activity compared with others, as this will indicate there is something wrong inside. Should you notice one where the bees, instead of a number flying in and out, some with pollen on their legs, and a general appearance of "business as usual" being carried on, a number of bees are on the alighting board simply crawling about as if they were in want of something, in the middle of a fine day rapidly look through the combs, without disturbing the bees too much, or keeping the hive open too long to attract robbers, and see if it is queen-right or not. If you see a small patch of brood built closely together, you can be satisfied it will come along all right, provided the stores are plentiful; but if the brood is patchy, a sealed cell here and there, you will know that the queen is failing, and should be replaced at the very first opportunity.

Should there be no brood showing at all, they evidently are queenless, and the best thing to do is to unite them to a queen-right colony. To do this, go to your queen-right colony, take off the cover and mat, and lay a sheet of newspaper over it; then lift the queenless hive, cover and all (not the bottom board, of course), and place it on top. The bees confined in the top will soon gnaw through the paper, and thus unite without fighting. There may be other causes for the signs of listlessness. You may find disease, which you can detect by the darkened, sunkenappings on many cells, and our advice in this case is not to tinker with it; get rid of the hive as soon as possible. Or the queen may be only a drone layer. This will be detected by the brood-cells being capped over in a raised dome-shaped way, and there will probably be a few undersized drones in the hive. Kill the queen, and unite as with a queenless colony.