

Improved Pricker Pad

BEESKEEPERS in areas where the honey produced will not leave the combs freely use an implement known as a pricker pad. This article by D. Roberts, Apiary Instructor, Department of Agriculture, Auckland, describes an improved pricker which requires less time to operate, is less severe on combs, and enables more honey to be extracted.

HEAVY thixotropic (jellifying) honeys cannot be satisfactorily extracted without the use of a pricker pad. To manipulate the pricker in its present form is tedious and severe on the combs. In addition complete removal of the honey from the combs is not possible, as not more than from 75 to 80 per cent. can be recovered. Because of the extra work entailed, the reduced life of the combs, and the limitations to the amount of honey that can be extracted, any improvement in the design of the pricker pad that will increase its efficiency should be welcomed by apiarists.

Messrs. Belin brothers, of Milford, Auckland, operate their apiaries in an area where the honey produced is mainly manuka and they have developed a steam-heated pricker pad of greater efficiency than the type in general use. Results over a period indicate that much more honey can be obtained from the combs and it is not unusual for the combs to be extracted entirely free of honey.

Construction of Pricker

Damage to combs is practically eliminated and the time saved is considerable, as the combs are pricked on one side only. Although the pricker is not as simple to make as the common type, its construction should not be beyond the average beekeeper. No high degree of technical skill is required, but the work takes time, and accuracy in the positioning of the pins is essential.



[Sparrow Industrial Pictures Ltd. photo.]

The steam-heated pricker pad.

Materials

The materials required are three pieces of 18-gauge copper sheet, one 7in. x 6½in., one 6in. x 5½in., and one 6½in. x ¾in.; 2 strips of metal 3½in. x ¾in.; 2 pieces of copper pipe similar to that used for the boiler of the uncapping knife; 1 wooden handle about 5in. long (the handle of a discarded electric iron is excellent for the purpose); 2 brass bolts ¼in. in diameter and ½in. long with nuts and washers; and about 700 heavy-gauge plated brass pins 1½in. to 1¾in. long (the type known as blanket pins is satisfactory).

For those who have not access to a high-speed drill, 18-gauge brass sheet could be used in place of copper, as brass is much easier to drill.

Necessary tools are a soldering iron, tin snips, and a small drill.

The working surface of the pricker illustrated is 5in. x 4¾in., sufficient to treat one-sixth of a comb at each insertion.

Making Steam Chest

A square of comb foundation is laid over the piece of copper 7in. x 6½in. and an area 5in. x 4¾in. is marked out for drilling, care being taken that the holes are in the middle of the cell bases. An area ¾in. wide is then marked out all round the area to be drilled and the metal remaining outside the drawn lines is bent up to form a shallow oblong container ¾in. deep. This serves as the steam chest.

When the holes for the pins are being drilled a piece of wood should be attached to the underside of the metal so that the holes continue through the wood. This forms a jig which will ensure that the pins maintain their correct position when soldered into place. Care should be taken in drilling to ensure that the holes provide for a neat push fit only.

After the sides and ends have been formed and the pins soldered into position a strip of copper ¾in. wide is fixed lengthwise in the centre of the container. This strip has a ¼in. hole bored ½in. from one end, and the strip is placed in position with the hole at the end opposite the steam inlet and exhaust openings. The piece of copper sheet 6in. x 5½in. is then bent over ¼in. all round to form the lid of the steam chest. Before the lid is soldered in place, two ¼in. holes are drilled 3½in. apart to take the bolts which hold the handle brackets. The strip when affixed should be given sufficient diagonal inclination to clear the heads of the bolts which hold the handle brackets. Two further holes are drilled ¼in. from the end of the lid to take the copper steam inlet and exhaust pipes, which should be of the same size as those used in the uncapping knife so that an equal distribution of steam is obtained. These holes must be positioned so that they fall

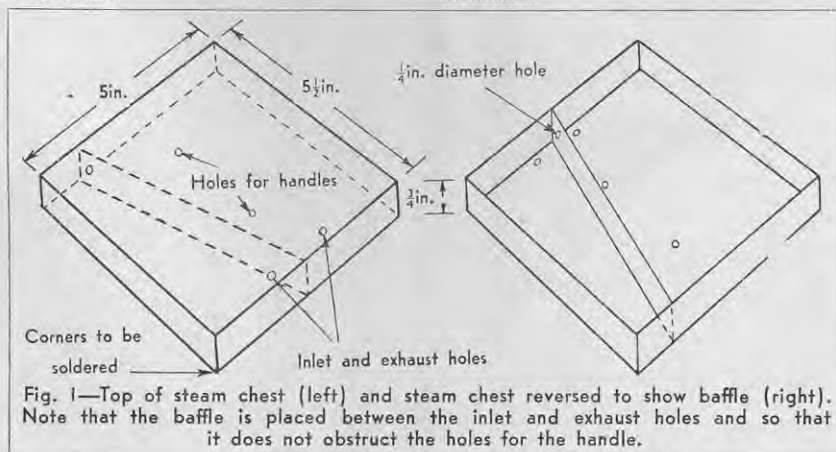


Fig. 1.—Top of steam chest (left) and steam chest reversed to show baffle (right). Note that the baffle is placed between the inlet and exhaust holes and so that it does not obstruct the holes for the handle.