

CONSTRUCTION OF STEAM-HEATED PRICKER PAD

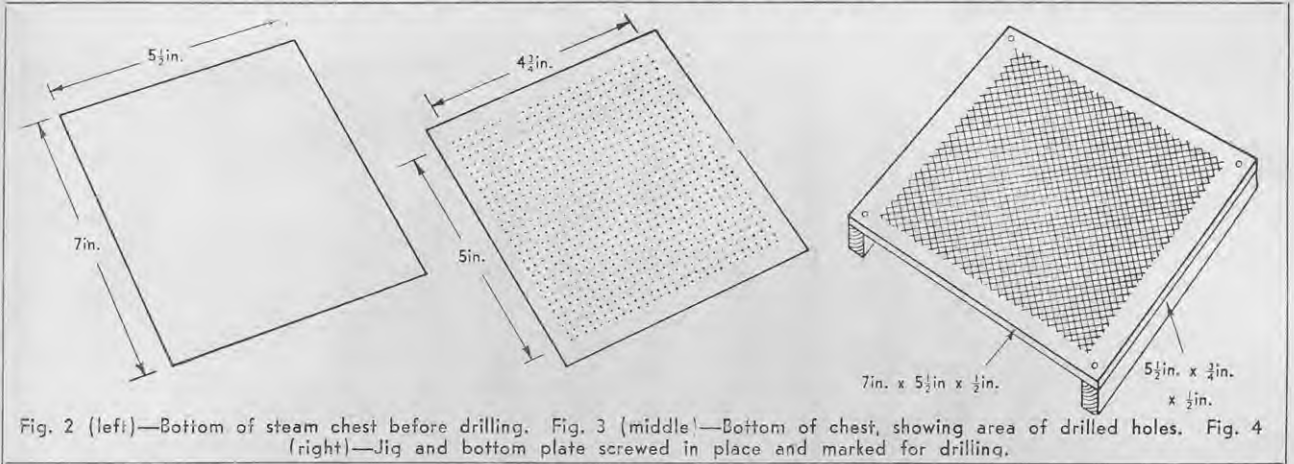


Fig. 2 (left)—Bottom of steam chest before drilling. Fig. 3 (middle)—Bottom of chest, showing area of drilled holes. Fig. 4 (right)—Jig and bottom plate screwed in place and marked for drilling.

one on each side of the central dividing rib to ensure that steam is constantly available the full length of the pad. Steam should flow from the inlet along the container to the hole in the central rib at the opposite end, back along the other side to the exhaust. The pad is thus maintained at a constant temperature all over.

Alternative Method of Construction

Another and perhaps simpler method of construction is shown in Figs. 1 to 5. The top sides and ends of the steam chest are made from a sheet of metal 7 in. x 6 1/2 in. (Fig. 1) and the working surface which is the portion containing the

pins is made from a piece of metal 7 in. x 5 1/2 in. (Fig. 2). This piece is screwed to a block of dressed wood with squared edges (Fig. 4). An area 5 in. x 4 1/2 in. is marked out (Fig. 3) using comb foundations as a guide for the pin holes. To plot the holes with greater accuracy a carpenter's bevel may be employed to form a series of diagonal lines from each side, the pins being inserted at the points of intersection. After the holes are drilled and the pins soldered into place the piece of metal which has been formed into the steam chest including the dividing rib is now placed in position and the two sections soldered together, excess metal being then cut away. In

this method the working surface holding the pins is not turned up, but is simply a flat plate and is held to the steam chest by a fillet of solder (Fig. 5).

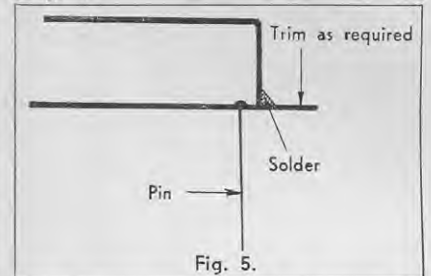


Fig. 5.

Australian Rice Harvest



[Australian Official Photograph.]

A GOOD growing season in 1949-50 and perfect harvesting conditions resulted in a near-record Australian rice crop. At present rice is grown commercially in only one Australian State, New South Wales. In 1949-50 about 72,000 tons of rice were harvested from 36,250 acres sown (26,795 acres in the Murrumbidgee irrigation area and 9455 acres in the Wakool-Tullakool irrigation area). Australia's record rice crop was 75,000 tons from 40,500 acres in the 1943-44 season. The illustration shows the bagging platform of a self-propelled auto-header. However, many Australian rice farmers prefer horses for drawing their pneumatic-shod engine-operated headers, because horses move at a slow, even, and economical speed in heavy and sometimes boggy rice fields.

To ensure that the hands do not come into contact with the hot steam chest, the handle brackets should be arranged so that the handle is at least 1 1/2 in. above the steam chest.

Use of the Pricker

It will be noted that the dimensions are considerably smaller than those of the type of pricker in general use, as similar dimensions applied to this type would be unsatisfactory, because the pins are pushed completely through the midrib of the comb, which creates resistance. Experience has proved that penetration of the comb midrib by the pins does no harm and the bees repair the punctures immediately the combs are replaced on the hive. The comparatively light-gauge pins do not damage the cell bases and the bees are not induced to build drone comb, as is frequently the case when combs are torn about by prickers of the orthodox type.

In use the pins are pushed completely through the midrib of the comb thus breaking the adhesion of the honey to the cell walls simultaneously on both sides of the comb.

A slight see-sawing motion is used when pressing the pins into the honey. The usual type of metal tray with a raised centre on which to rest the combs is used. When not in use the pricker should be suspended by the handle to a bracket within easy reach. A metal drip tray is fastened underneath the bracket to catch any honey dripping from the pricker.