

Roof: This is made with $\frac{7}{8}$ in. square bearers all round, giving inside measurements of $16\frac{1}{16}$ in. by $11\frac{7}{8}$ in. Cover with double thickness benzine-case side timber, and over all cover with benzine-tin sheet cut as shown in Fig. 1. Flatten out the tin, and solder small V-shaped pieces into the breaks on each side. Give $1\frac{1}{2}$ in. lap to the tin all round. The double thickness of roof-timber gives weight and stability, with less liability to being blown off, and also more protection against summer heat and winter cold. Instead of hand-holes for lifting, a flange of $\frac{7}{8}$ in. square wood is run right round the outside of the hive-body 1 in. below the top. The roof-sides rest on this flange, which also tends to further prevent the roof from being blown off if the hive is exposed to strong winds.

The hive should be put together with all case-marks turned to the inside. Paint all over with three coats, giving the tin part of the roof a coat of red-lead paint inside before nailing on so as to prevent it rusting from the inside. The final product is a neat, durable, compact hive which will last for years.

Stocking and Management.

To stock the mating-box take from some other hive or hives five Langstroth frames containing brood and stores, and with a fine saw cut them in two exactly in the centre. Then nail on to each half another end bar on which has been previously nailed a projecting end to rest on the rabbet on the hive-side. Place the ten half-size frames in the hive, and cover with quilt and roof. Pull out the wire pins, lift the body off its floor-board, and place it crossways over the excluder on a strong colony of bees, covering the vacant space with a board 16 in. by 8 in. The young nurse-bees from the strong hive will immediately take charge of the brood, and the nucleus hive can be moved back on to its own floor-board the next day, and be placed on a new stand. The young bees, never having flown, will remain where they are put.

The hive is now ready to receive one, two, three, or four queen-cells according to requirements. If more than one queen-cell is given, divide the hive accordingly by slipping in one or more of the three-ply rubber-cushioned dividing-boards, and open the required number of entrances. These division-boards take up very little space, and even if one compartment is reduced to two frames only in size it has still much more capacity than one of the Root baby nuclei. If any compartment becomes weaker in bees than another, turn the hive round, bringing the entrance to the weakest portion opposite the strongest flow of field-bees. But care should be taken to do this when no young queens are due to fly, or matters will be complicated for them.

As the close of the season approaches and surplus queens are being used up for requeening other hives or for sale purposes, it is the simplest matter to remove a queen from one of these compartments and the following day to take out a partition, thus uniting its bees and brood with the next. This in turn is treated likewise, until one queen only is left in possession of the entire hive, in which she should be able to winter easily and come out strong in spring. Then the partitions and queen-cells are put in again with the minimum amount of trouble, nuclei being all ready at the start without having to re-stock them every spring.