

BEE-KEEPING

THE MODERN HIVE

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THE modern hive is an artificial structure so made as to give the bees all their requirements and something more than they find under natural conditions. The additional comfort man gives them in these hives is a sort of a bribe to induce the bees to live under changed conditions. In return for the attention paid to them, they supply man with honey and wax.

In nature, bees store their honey in the upper parts of their combs. Modern artificial hives are, therefore, made of two sections, one for the brood and the other for the honey, the honey chamber being on top of the brood chamber. Both chambers are fitted with parallel frames and the width of the frames and the spaces between them are the same as under natural conditions.

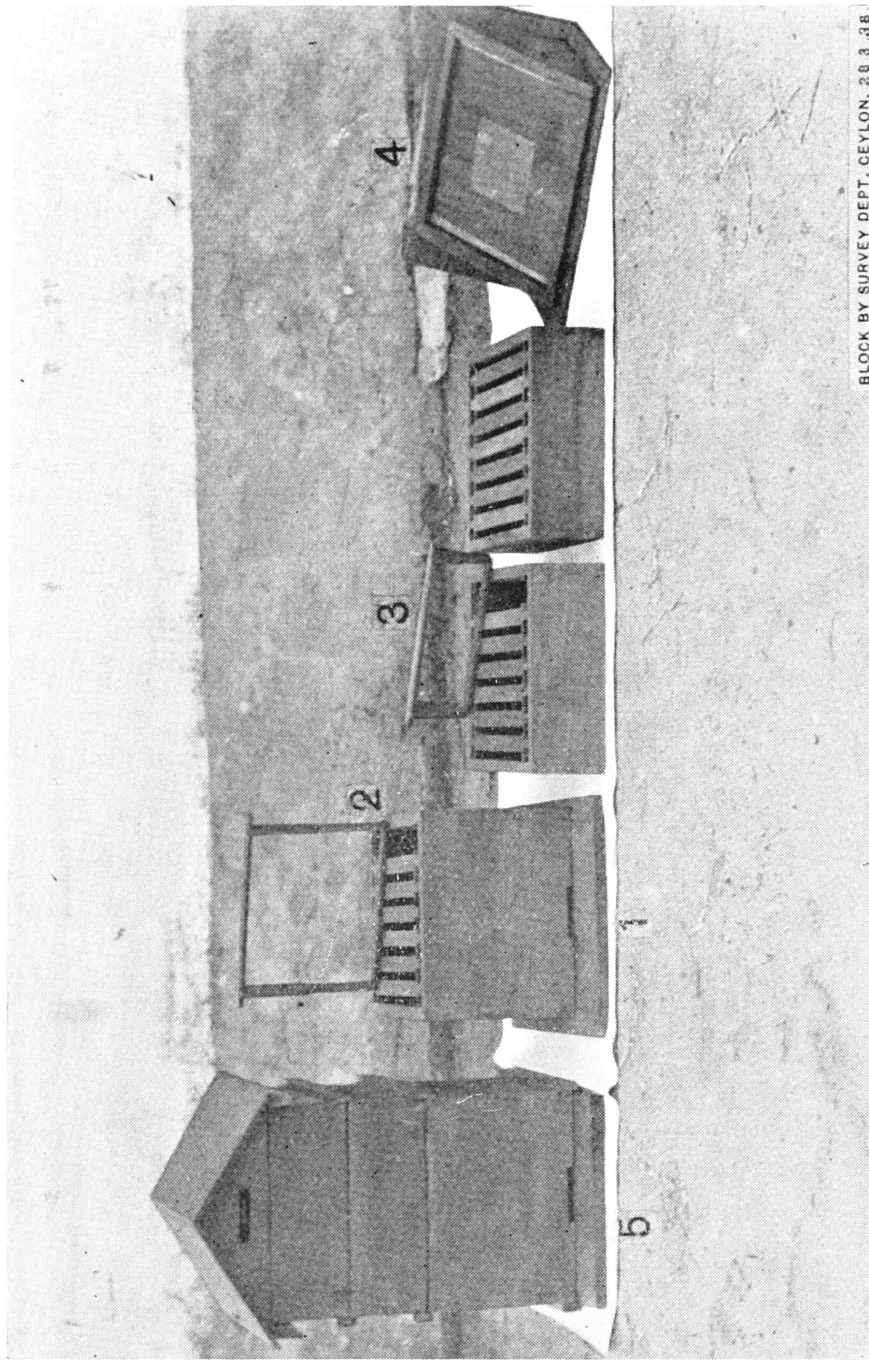
When the frames are fitted bees have no alternative but to build their combs in them. The combs are moreover protected from inclement weather and from the natural enemies of bees.

CONSTRUCTION AND DIMENSIONS OF A NEWTON MODEL HIVE

The Newton model hive consists of five different sections namely, the bottom board, the brood chamber, the two supers and the gable roof.

The Bottom Board measures 12·8 in. by 10·4 in. It projects 2 to 3 in. from the entrance to the hive: this projection serves as an alighting board. It is made with a slight slope to prevent the pollen brought by bees from hitting against its edge.

The Brood Chamber has internal measurements of 9·4 in. by 8·1 in. by 6·6 in. The entrance to the brood box is ·25 inch high and 3 in. long. There are seven well fitting frames in the brood chamber. The space between the frames is ·25 in., or the height of two bees. If there is too much space, a dummy



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board should be inserted in order to prevent the formation of burr or irregular combs between frames. The internal measurements of the frames are 7·65 in. by 6·0 in. The breadth of the top of the frame is ·75 in. and that of the bottom ·7 in.

If very strong colonies can be expected, more frames can be added and the breadth of the hive increased.

The Supers : The measurements of the length and breadth of each of the supers are same as those of the brood box, but the height is half that of the brood box. In each of the supers too, there are seven frames. The space between the top of the frames of the brood box and the bottom of the super is ·25 in.

The Roof : A roof which slopes on either side from the middle is preferable to a flat one. The angle between the two halves of the roof should be about 120°. A ceiling is always fitted to the roof to prevent the bees from extending their combs up to the roof. The space between the ceiling and the top of the super is also ·25 in. There are two ventilators each measuring 2·5 in. by ·55 in. on the two sides of the roof, and one 3 in. square in the ceiling. Thin wire gauze should be used to cover the ventilators. The roof is made to fit the super closely.

Trials with this hive have given very satisfactory results. Since its introduction into Ceylon in July, 1937, the Agricultural Officer, Propaganda, has distributed over 200 in various parts of the Island. Many encouraging reports have been received.