

structed after the same manner as the Langstroth.

We practice the same method of tonguing the cover as with the Langstroth.

In the engraving which we here present the hive is shown with the sloping or gable cover, which is made of seven pieces,—two roof boards, one ridge board; two gable ends, two sides. Either this style of lid or the flat one may be used, and both with good results. Both too have their advantages.

There are 3230 cubic inches of space in this hive. Bee-spaces are left at both sides and below the frames as is the case with the Langstroth.

JONES BROOD FRAMES.

There are twelve frames to each hive, each of which is fourteen and three-quarter inches deep and eleven and one-half inches wide, outside measure. Formerly we made what we called a V shaped top bar, but of late years none of these have been sent out. The time saved in fixing the foundation in the top-bar we now use is very considerable. I will therefore describe the late top-bar, passing the V style with what has been said. By referring to the drawing on page 807 a cross-section of the bar will be seen. Its full length is thirteen inches and before having the quarter taken out is seven-eighths of an inch square. Rabbits are made at each end of the top bar, one and one-eighth inches wide by one-half inch deep, thus leaving the width between the shoulders ten and three-quarter inches. In sawing the piece out of the top bars the table is so set that a thin strip is left by which the piece adheres to the top-bar, thus saving a great deal of labor when counting them out in filling orders. It will break out very easily. The side-bars are seven-eighths of an inch wide, fourteen inches long and one-quarter of an inch thick. Saw-cuts an inch deep are made in the bottom of the side bar, with a quarter-inch saw, into which the bottom bar, which is one-half an inch wide, by one-quarter of an inch thick and twelve inches long, is fastened. The bottom bar is, you will observe, just one-eighth shorter than the hive is wide, thus allowing nice play in slipping the frames down. There is, too, very little, if any, danger of

mashing bees or killing the queen when manipulating, as the projections on the bottom-bar always keep a bee-space between the edge of the hive. The ends of the side-bar, and bottom bar are all cut to point, so that when putting the frame into the hive the liability of killing or crushing the inmates is reduced to a minimum.

The exact inside measurement of the frame, as with the new top-bar, is ten and seven-eighths inches wide by twelve and five-eighths inches deep. Foundation will need to be cut thirteen inches scant if it is desired to have the frames full, right down to the bottom-bar.

Second storeys* and supers† are used on these hives just as on the Langstroth.

The second storeys are constructed exactly after the pattern of the brood-chambers, but are minus the bottom board, cover and entrance blocks.

The supers have the same outside dimensions as the body of the hive, varying in depth according to the system of taking comb honey which may be practised, and of which I will treat under that head.

DOUBLE-WALLED HIVES.

In Canada but very few double-walled hives are in use, as compared with the others, yet there are those who keep only a limited number of colonies, and who, owing to other duties, are not able to give their bees the same care and attention that do those who can devote their time and attention to them, and to such the double-walled hive answers a good purpose.

These hives are seldom used for other than wintering right on the summer stands. There are very many colonies wintered out of doors in clamps, which are simply double-walled hives requiring attention both spring and fall.

The double-walled hives which I have used, and which we now make for the trade, are the same dimension inside as the Jones deep frame hive. They have double walls, one inch apart, the space between which is filled with any

* By a second storey we understand a body equal in depth, size, etc., to the brood chamber, and containing the same number of frames.

† Supers are the shallow cases used to hold the sections. Half-depth frames are seldom if ever used in Canada.