



Notes to Beginners.

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I have always valued highly, upon bee-keeping, the opinions of Mr. Jacob Alpaugh. Particularly so in connection with outside wintering. As this winter we shall have something like two hundred colonies to winter, I have decided to experiment in wintering about half of them outside. To get the benefit of Mr. Alpaugh's experience I took the Monday morning train to Galt, and by arrangement met Mr. Alpaugh at the station. We of course talked over many subjects of interest. Mr. Alpaugh is a good bee-keeper, but what I wish just now to refer to is his outside case for wintering. The case contains four hives, two side by side in pairs, entrances of pairs facing in opposite directions. Mr. Alpaugh makes a platform of boards nailed on scantling for the bottom, the sides and ends are made of two 10-inch boards, the pieces being fastened together by a cleat. The cleat ends far enough above the lower edge of the board to allow the board to project over the bottom board, being level with the lower side of the bottom boards and the cleats rest on the boards. This sheds rain. The sides and fronts of the case are made of inch stuff, ripped and dressed on one side, tongued and grooved. The cover is made of the same thickness, but the boards are not joined, being connected with strips of cotton which are stuck to the boards directly after the first coat of paint has been applied to the cover. The strips are also nailed at the ends. Instead of the strips of cotton being put on tightly they are bent down between the boards, forming quite a little trough. This allows for contraction and expansion of the boards. The boards are run across the clamp and nailed at the ends to a piece of board seven-eighths inches by two inches. The boards are nailed to the seven-eighths side. The case is now pitched a little sideways, so that the water runs off one side and does not interfere with the entrance of the hives. The hives are placed about an inch apart in the cases dividing the space at the sides equally. Two entrances three inches square from the lower edge up, thus bringing the entrance in the middle of the hive. Mr.

Alpaugh prefers dry forest leaves for packing. He packs almost one quarter inch under the front of the hives and an inch under the back giving the forward pitch. A bridge one and a half inches high by three inches long, outside measure, and just wide enough to correspond to the length of the projection or front of bottom board, is placed opposite the three inch hole in the front of the case. The balance of the entrance is closed by the packing of forest leaves only. Before packing Mr. Alpaugh shoves a piece of cardboard, with a hole one half inch square, ho'e down, between the bridge and front of hive, and far enough down to be reachable under the bridge with a knife. He then packs with forest leaves, fairly tightly, all about each hive. He breaks the quilt loose at the back and inserts between the quilt and the hive a few pieces of quarter-inch strips to save the quilt and allow a slight circulation. Forest leaves fill the remainder of the case. When decidedly cold weather comes he draws the piece of cardboard down with a knife point, leaving only a half inch square entrance. Mr. Alpaugh says kept thus warm about the entrance he has never yet had it clogged, and when the bees want more entrance, they can gnaw it. He paints the case with several coats of dark paint, and leaves them there until the honey harvest.

Surplus Boxes.

Surplus boxes should not be put on until the bees are ready for them. While it is the proper thing to give plenty of room for bees to store honey, yet it is a mistake to give it at the wrong time. Too much space in early spring, when the bees are breeding rapidly is a detriment to them and will retard breeding. It is better to contract the space if the bees are not strong, than to add more to it in this instance. When the space is suited to the colony they can better economise heat, the most essential thing if brood rearing.

A hive should be full of bees and a good supply of brood present at any time before adding boxes. Almost every locality has its principal honey flow, which usually occurs the last of May or first of June and lasts six or eight weeks. Ordinarily, when this begins is the right time to add surplus boxes, and in case colonies are very strong previous to this time they may be put on sooner. It will not pay to use boxes that