The Tar Paper Packing Case for Wintering Bees
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THE TAR-PAPER PACKING CASE FOR WINTERING BEES

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The tar-paper packing case offers an inexpensive solution to the wintering problems of many beekeepers who find the cost of making two or four-colony wooden cases prohibitive. In fact, some of the commercial beekeepers who have used wooden cases have discarded them in favor of the tar-paper case.

When properly prepared, the tar-paper case winters bees as well as the wooden case, and at less cost than the yearly depreciation amounts to on the wooden case. Then, too, the wooden case must be stored from year to year, while the tar-paper is so inexpensive that it is usually burned in the spring or used to keep the grass down in front of the hive.

For the best success with bees to be wintered outdoors, wind protection on the north and west is essential. Bees not only consume less honey during winter months if they are protected from the wind, but they also brood much more rapidly in spring. In fact, bees may not fly at all in windswept locations in spring when other bees are flying freely in

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apiaries protected from the wind. If a natural windbreak, such as a hedge of evergreens, a grove of trees, or some such barrier is not available, it will pay to erect a six foot fence of refuse lumber, with the boards an inch apart, on the north and west exposure.

When ready to be packed, each hive should be full of young bees and should have a young, vigorous queen. Also, there should be present enough well ripened honey, preferably from clover, to fill from six to eight combs. If the bees have been unable to gather sufficient stores they should be fed enough sugar syrup (made in the proportions of two pounds of sugar to one pint of water, brought to a boil, and then fed in a pepper box type feeder, placed over the hole in the inner cover) to make up the desired amount. Strong colonies will winter better in two-story hives, having the upper story practically full of honey.

Pack Before Cold Weather

Packing should be completed by the time that steady cold weather prevails. Two, three, or four colonies may be packed together conveniently. A supply of the following materials should be on hand:

Single ply slaters' felt or tar-paper, 32 to 36 inches wide.

Some strong twine, such as binder twine.

Some lath or thin strips of lumber.

Some pieces of board cut three inches wide in strips.

A hammer, saw, and nails (6d).

Ordinarily, no bottom-packing is used with the tar-paper case, the hive being allowed to remain on the summer stand, raised on blocks just enough to avoid dampness. If it is desired to use bottom-packing, a frame four inches deep may be made the same dimensions as the bottom-board of the hive, and filled with packing material. This packing must not be exposed to moisture, or it will do more harm than good.

When packing is to commence, the hives are arranged in groups of two or four, placed close together on an even base, so that the bottom-boards will all be on the same level. A rim is then made of the three-inch strips of lumber by cutting strips six inches longer than the combined length and breadth of the group of hive-bodies. The parts of the rim are assembled with the front strip resting on the projection of the bottom-boards to make a tunnel when the packing is completed, the strips along the side being placed beneath the front strip and the strip at the back being placed beneath the side strips. The rim is held together by one nail at each corner.

The purpose of the rim is to allow an additional three inches of space around the hive for insulating material.

After the rim has been assembled, sufficient tar-paper is cut from the roll to encircle the rim and over-lap about a foot. Tar-paper is fastened to the sides of the rim by tacking lath around the rim outside the tar-paper. The overlapping edges of tar-paper are then fastened or pinned together with nails.

If the hives are equipped with telescoping covers with inner-covers, the telescoping covers are removed. If no inner-covers are used, the the outer cover is allowed to remain on the hive. If the cost of lumber to make the rim is prohibitive, the tar-paper may be tacked directly to the bottom of the hive body with lath.

After the tar-paper has been attached to the rim, the insulating material is poured into the packing-case slowly. The four corners of the case should be packed first, and the operator should hold the tar-paper with one hand while packing with the other to prevent pushing the paper down over the rim. After the four corners have been packed, enough additional material is added to complete the filling of the sides and to cover the top of the hives with eight to twelve inches of insulation.

The tar-paper projecting above the packing material is then folded down over the material, from the sides and ends, and the folds at the corners are pinned down, envelope fashion, with nails. Another piece of tar-paper, long enough to cover the top completely and project over each end about a foot, is used for a cover. The corners of this cover are also folded and pinned down with nails to prevent the wind from blowing it off. If the hive covers were removed before packing, they may be placed on top of the tar-paper cover to hold it down, the covers themselves being weighted down with stones or brick. If the hive covers were left on the hives, the tar-paper cover may be secured with strings fastened to nails projecting from the rim at the bottom, on front and rear.

An opening about one-half inch by five inches is then made in the tar-paper for an entrance for each hive. The regular entrance-block is placed in each hive entrance, inverted, before packing. If mice bother, it is well to cover the entrance-block with tin to keep mice from chewing their way into the hive.

Second Season Possible

The tar-paper may be used for two seasons if it is removed carefully and allowed to remain in the sun long enough to warm up so that it will

not crack when being rolled. Two-year old paper can at least be used for making covers even if it is not tough enough to use for the sides of the packing-case.

If early spring manipulations are necessary, the top packing can be placed in large gunny sacks in quantities sufficient to spread out as a blanket about six inches deep after the sack is tied. Thereafter, it is necessary only to remove the sack when making an inspection instead of scooping out the packing-material each time.

Packing should not be removed in the spring until danger of frost and cold changes of weather are past. For this reason, it is desirable to winter in two-story brood-chambers in order to allow room for brood-rearing before unpacking. The top story must be practically full of honey, and the lower chamber should contain empty comb for clustering space.

The cost of materials for the tar-paper case should not exceed 15 cents per colony.