

## Out-Door Wintering.

The hive used by the writer is the standard eight frame Langstroth with Hoffman self-spacing frames and follower, using eight frames all the year around. Instead of a piece of cotton cloth to cover the frames with, a super cover is used summer and winter, made out of a board  $\frac{1}{2}$  inch thick nailed on a  $\frac{3}{4}$  inch thick rim, a bee-escape hole  $1\frac{1}{2}$  inches by 3 inches is cut in the board at one end, which is covered in summer with a thin piece of wood, and in winter with a piece of cotton cloth. The supers are taken off (using bee escapes to clear them of bees) about the first of August, when each colony is seen to have a good queen and at least ten or fifteen pounds of honey, when they are now given a rest till about the first of September, when each colony is put separately on the weighing scales, and the amount short of thirty pounds of stores is noted in the record book. The percolator feeder I like best, which I make as follows: A box  $12 \times 17\frac{1}{2}$  inches outside and 5 inches deep inside is made, using  $\frac{3}{4}$  inch pine lumber; this is put inside of an empty Langstroth extracting super, and crowded to one end, leaving a  $\frac{1}{2}$  inch space at the other end of feeder, which will be the front end. Both super and feeder are nailed together with small nails for the time while feeding. Across the front end of feeder inside a thin board  $5 \times 10\frac{1}{2}$  inches is put in, leaving a  $\frac{3}{4}$  inch space between it (the partition) and end of feeder, also a  $\frac{3}{4}$  inch space is left under the bottom edge of the partition, which is closed by a strip of tin punched full of very small holes. The top edge of partition is up a  $\frac{3}{4}$  inch above top edge of feeder. On this partition a strip of wood two inches wide is nailed, covering the passage way for the bees. A second partition is put across the feeder about half way back, (a small space is left under it) making two apartments; the one next to passage way of bees, for sugar, the other for water. When ready to feed, raise front end of hive up one inch higher than the back end, leave the super cover on, only removing the cover of the bee escape hole, which is at the back end of super cover, put the feeder on the passage for the bees in the feeder over the back end of the hive. The same amount of sugar that the colony is short of stores should be put in the feeder, and a quarter as much water as there is sugar added, adding more water when

necessary. As little water as possible should be used. When the feeder is empty remove it, covering the bee escape hole in the super cover with the strip of wood that was removed when feeder was put on. The hives are placed four in a group, two facing east and two west, with backs together both summer and winter. As soon as a group of four hives are supplied with the necessary stores, they are lifted off their stand, and a packing case large enough for four hives is set on the stand. This case is  $36 \times 46$  inches inside and 2 feet deep at south side and  $2\frac{1}{2}$  feet deep at north side. Strips of wood 3 feet long run crosswise of cases for the hives to rest on, those under the front end are one inch deep, and for the back end 2 inches deep. Entrances to outside cases are  $2 \times 8$  inches. Put in the hives, place a bridge full width over the entrance to hive, pack underneath and around the sides, but none on top until about the first of October, when the strips of wood over the bee escape holes are removed, and pieces of cotton cloth substituted, fill in packing about half way up to the top, now lay in two flat hive covers in the centre of the case, leaving a hollow under them in the centre, fill case up to top and a waterproof cover over that, which could be covered with tar paper. For packing material I prefer forest leaves, but have never tried planer shavings. The entrance to hives are left open full size, but when cold weather comes a hive cover is leaned up in front of the entrances. When it snows shovel it on the hives over the entrances and all. About once a month the entrances are cleared of dead bees with a bent wire. In the spring the entrances are closed up to a  $\frac{1}{2}$  inch with a strip of pasteboard or a fold of paper, this the bees will remove. If you have the packing out replace the cotton cloth which is over the bee escape hole for a piece of board. Unpack about the first of June.

Ontario, Canada, April 22nd, 1896.

## Oxford Bee-Keepers.

The spring session of the Oxford Bee Keepers' Association was called to order by the president, Jno. Newton, at one p. m., May 29th.

The minutes of last session being disposed of, the president referred appropriately to the decease of our old and much respected member Dr. Duncan, of Embro. A letter of condolence to the bereaved friends was carried unanimously.

The spraying carried on throughout this section under the auspices of the Ontario Government was criticised as violating the