

bees for the past twenty years, with lots to spare, for those in need, as I never went into the business specially to make money. Having a farm of two hundred acres to attend to, about forty stocks was the limit in the best honey years, and my crop of honey averaged about one ton of extracted; I never did much in comb. In 1905 I attained my eightieth birthday, and concluded it was time to quit work of that kind; consequently I got two neighbors who had been trying to keep bees to take them on trial, and if a success, they were to pay what they were worth to them. They did very well the first year, and I got paid accordingly; but they gradually failed under their management, and died out. I kept two light stocks which I did not think were worth giving away, and they have done well ever since, and kept us in honey and bees up to present time, and some to spare to neighbors.

I had four stocks last winter, 1908, which all came out excellent in the spring, and gave 480 lbs. of fine extracted honey, beside throwing two first swarms late in June, the other two did not swarm at all.

I will now endeavor to explain how I succeeded in the management and care of bees:

In my early days, I erected a small bee-house for winter use, and it proved a failure; I next tried a couple of cellars with no better success, as the bees had to be removed too early in the spring. The first trouble was that they were demoralized and did not know their own home, consequently some of the colonies became over-stocked, while others were left in a weak state. Secondly, their natural instincts are to begin rearing young brood very early in spring, if they have plenty of honey and pollen; then the cold winds of April drive them into small clusters, and the brood is chilled and destroyed. Then comes the report of hundreds of stocks ruined by spring dwindling, which I consider one of the greatest evils in

profitable bee-keeping. I then concluded to try wintering them on their summer stands which has proved in my case very satisfactory. I made a case or outside cover for each hive as follows: say two feet wide by two feet six inches long; front end of box three feet five inches high; back end, three feet, to give sufficient pitch for cover or roof, which is composed of a light frame to fit neatly over the outside of box, and covered with galvanized iron, or any other material that is waterproof; the bottom, inch lumber nailed on solid, while the top cover remains loose, as it can be removed or hung on hinges and turned to one side or front. The bottom of box inside is covered with a sheet of tar paper, on which are placed two pieces of wood two inches square, and filled with chaff level with top of strips on which the hive is set. The bottom board is nailed on hive, and projects three inches in front, over which a bridge is placed for bee passage on a line with opening in front of box. The space between the hive and box is packed with wheat chaff or dry forest leaves level with top of hive, and left so summer and winter. I use the matting with which tea chests are covered, and find it superior to cotton, (as the bees never bite holes in it). When the supers and queen excluders are removed, the matting is placed over the combs on which a cushion of chaff is laid, and the box packed full of soft pea straw, with the bee entrance left open, full size, so that they can take a flight whenever the weather will permit. I have found this the only safe way of wintering bees without any spring dwindling, to profitable apiculture.

Another evil practice is the use of the honey board on the hive, especially in the winter; the moisture cannot escape through a board cover and is continually dripping back on the combs, causing them to mould, and to start dysentery in the bees. I find in removing the packing

from the top of the hive that it will be quite damp while the mat cushion and the combs are perfectly dry. Some time during April, when the bees are flying and the day is clear, I remove the top packing, lift the bees and combs by lifting the frames, and cleaning out the old honey, doing so I can see exactly where they are in, generally where the honey is, and carry them through the back sheet, filling the honey untouched, which I replace with a full sheet, and shift one or two of the frames that are partially filled with honey nearer the brood, and leave the bees will attend to their business. If I find one of the hives short of stores I give them more sheets; I have never fed on syrup for over thirty years, and commenced my present method when they are then left unswarming time, or until they are put on with the matting over the frames. In November, after the first swarm comes, the bees are all drawn out and a new colony is removed but one, consequently the swarms are not expected, and the stock is in fine condition for the winter. Only full sheets are used, and drawn combs are removed, and the bees are raised. In order to provide a place for the foundation wide in top if frame, and finish them with drone cells better than brood cells, and can be used for several years properly cared for; they are stronger than new combs, free of brood and pollen. The "Jones" frame solely for 14 inches deep by 11 inches measure. The hives were made out of any light material and