

"No. Do you think any such thing is necessary?"

"I think so. Have you never noticed after a cold snap in the fall, that there will be little clusters of bees from three to twenty, or more, dead between the combs outside the main cluster?"

"Yes, sometimes. What do you think makes this state of affairs?"

"I reason like this: On the first cold spell the cluster of bees is obliged to contract in order to maintain the necessary degree of heat required; and in doing so those occupying the outer ranges of comb, being in a sluggish state from the influence of the cold, fail to pass up and around the combs, quick enough to keep up with the receding cluster, hence are left to perish with the cold."

"Reasoning thus, what do you do?"

"To obviate this loss I have what I call 'winter-passageways' through the centre of the combs. You know that, in old box-hive times, when bees rarely, if ever, died in the winter, they used cross-sticks in the centre of the hive to give the bees an extra attachment for their combs."

"Yes."

"Well, the bees always left holes around these sticks, and that gave these outside bees a chance to draw up with the cluster, through these holes, and hence bees wintered better in those days. To make a movable-hive, something like this old box hive used to be, I make holes through the centre of the combs each fall, so that the bees can crawl through, and I have had my bees winter better than of yore."

"You have got on to the old idea of some 25 years ago, when the makers of hives used to put a curled shaving on a strip of tin long enough to bring the shaving about to the centre of the frame, when the upper end was fastened to the under side of the top-bar of the frame. But, so far as I know,

few, if any, of our most advanced apiarists use those things now."

"Why don't they use them?"

"Because they do not think them of any special advantage, nor believe that those little clusters of dead bees are of any value."

"Of no value? If they are of no value, what bees are of value, pray tell?"

"Bees that have vitality enough to go around the combs with the rest of the bees which go."

"Do you mean to say that the reason these bees are caught away from the main clusters in these little clusters of from three to twenty, is because they do not have vitality enough to winter over?"

"That is just what many of our beekeepers think."

"What reason have they for thinking so?"

"I do not know that I have ever asked others for their reasons; but my reason for so thinking is that, when this old idea was at its height, a quarter of a century ago, I was infatuated with it, and bored holes in the side of my hives, fixing a little door over the same, when every fall I would open these doors, as soon as all comb-building was through for the season, and before the bees formed their cluster for winter, and insert a square stick with a sharp point, and slowly work the stick through to the back side of the hive, when, after the bees had cleaned it out, I had a hole through every comb in the hive, just where I wanted it, right in the centre."

"Well, I declare! that was a novel way of doing it. And after this you think such a procedure of no value?"

"I do so think; for when the combs clusters of dead bees would be on the combs just the same, and I actually found clusters of them with the bees within less than half an inch of these holes."