

the summer season, but it will be well not to go the other extreme, and overdo the matter. There is a happy medium in this as in other things.

### Winter Losses.

- A. G. WILLOWS.

It is neither so pleasant writing nor reading of non-successes and losses as of successes, but it is often just as profitable to study the former as the latter. I will therefore give the readers of the C. B. J. an account of the management, or rather the mismanagement, of my bees during the past year, with the hope that the beginners in bee-keeping among them may be able to draw some profitable lessons therefrom. And here allow me to state that my excuse for neglecting the bees so much is ill-health, having been confined to bed for about three weeks, which included the time of bass-wood bloom. Since then I have not gained in strength, and most of the time have been able to do little more than, as the convalescent German expressed it, "walk a leetle 'round."

I moved the bees here from Carlingford, in Perth County, in May last, after fruit bloom had closed. They were not in very good condition, as I had left them while they were buried in snow, and they had little attention until after I got them here. Clover yielded just enough to keep up brood-rearing to its fullest extent; no surplus. This, of course, induced swarming, and on July 2nd, when I was taken ill, many of them had swarmed without commencing work in the supers, and most of the rest were preparing to swarm. After this time they had no attention. Fortunately queen and drone traps had been placed on most of the hives, so that few, if any swarms absconded. They could not leave, but being forcibly detained, they were in little humor for work, and few of them did good work in sections in the basswood flow, which commenced the second week in July. A few filled the sections that were on, but the flow was not good. When I got able to look over them again, I found some of the queens in the drone traps, with comb and brood, and, of course, no laying queen in the hive. If virgin queens were there they could not get out for fertilization. Others were

queenless, and altogether they were in poor shape for winter. In the beginning of October, I united the weak and queenless colonies and made sure that all had plenty of stores. There was fall flow enough for most of the brood-chambers to be filled with stores, but unfortunately some of them put in a supply of grape juice.

The season was open, with many days warm enough for flying until after New Years.

I did not get them packed until about the middle of January, when, having a young man staying with me, I procured some planer shavings and packed 35 out of 50 colonies. They had no opportunity of flying from that time until about the middle of March. There has now been warm weather enough to enable me to form an idea so far as possible without opening the hives, of their present condition.

Of the 35 colonies packed, 12 are dead, and of the 23 living, several appear to be very weak.

Out of the 15 colonies unpacked, 3 are dead and 2 or 3 weak.

On examining the combs of those that died, the stores in many of the cells near where the cluster had been were found to be bulged above the tops of the cells, and sour, showing the presence of fruit juice.

To sum up, the main causes of my loss were the following: Lack of attention during and after swarming; unsuitable stores; lack of protection, and in the case of those that were packed, late packing and poor packing material, the shavings being the coarsest planer shavings I ever saw. Lastly, I would draw attention to lessons indicated by this experience in packing. Of colonies packed about 35 per cent were dead. Of those not packed, 20 per cent are gone, with a difference in the condition of the living, I think, in favor of the latter about as great.

We can draw no conclusions from this against proper packing, but only against improper packing, done too late in the season. The material that was used would certainly to some extent prevent sudden changes being felt so quickly in the hive, but it would absorb little of the sun heat, and retain it but a short time. Then, being packed so late in the season, the bees were confined for a long time after it, without having the opportunity of a cleansing flight after being disturbed. The result indicates that they would have been better left undisturbed.

There were many days through the winter on which there was more or less