

(Continued from the April Number.)

### AN EASY METHOD OF MANAGING BEES, IN THE MOST PROFITABLE MANNER TO THEIR OWNER.

The above is the title of a neatly printed manual, which was lately presented to us by Mr. David Telfar, of Churchville, Home District. Mr. L. informs us that he has followed out in detail the directions of the author, and his efforts have been crowned with success.

If the Canadian farmers would turn their attention largely to the management of Bees, the article of honey would very shortly become a considerable item on our list of exports to England. Immense quantities of honey is imported yearly into the Mother Country from Holland and other continental countries, all of which might be supplied from this country if the people would only turn their attention to the business.

#### RULE III.

##### On Ventilating the Hives.

Graduate the bottom board and ventilator at pleasure by means of the button or otherwise, so as to give them more or less air, as circumstances may require.

**Remarks.**—Bees require more air in order to enable them to endure the heat of summer and the severity of winter, than at any other time. If they are kept out in the cold, they need as much air in the winter, as in the heat of summer. It is in a mild temperature only, that it is safe to keep them from the pure air. If placed below frost in a dry sand-bank, they seem to need scarcely more than is contained in their hive at the time they are buried, during the whole winter. If kept in a clean, dry cellar, the mouth so contracted as to keep out mice, give them enough. But if they are kept in the apiary, there should be a slow, imperceptible current of air constantly passing in at the bottom and off at the top through the ventilator, to let the excess of animal heat escape in summer, and also to throw off the vapor caused by the breath and other exhalations of the bees, which caused frost and ice in the hive in winter, and which is frequently the cause of the death of the bees.

#### RULE IV.

##### On Preventing Robberies.

At the moment it is observed that robbers are within, or about the hive, raise the bottom board so near the edge of the hive as to prevent the ingress or egress of the bees, and stop the mouth or common entrance and ventilator. At the same time, take care that a small space on all sides of the hive be left open, so as to afford them all the air they need. Open the mouth only at evening to let out the robbers, and close early in the morning before they renew their attack.

**Remarks.**—Bees have a peculiar propensity to rob each other, and every precaution necessary to prevent it should be exercised by the cultivator. Families in the same apiary are more likely to engage in this unlawful enterprise than any others, probably because they are located so near each other, and are more likely to learn their comparative strength. I never could discover any intimacy between colonies of the same apiary, except when they stood on the same bench; and then, all the social intercourse seems to subsist between the nearest neighbors only.

Bees are not likely to engage in warfare and rob each other, except in the spring and fall, and at other times in the season when food is not easily obtained from blossoms.

Bees do not often engage in robbery in the spring, unless it is in such hives as have had their combs broken by frost or otherwise, so as to cause the honey to drip down upon the bottom board. Much care should be exercised by the apiarian to see that all such hives are properly ventilated, and at the same time closed in such a manner as to prevent the entrance of robbers in the day time, until they have mended the breach, so as to stop the honey from running.

Clear water should be given them every day so long as they are kept in confinement.

I have known many good stocks to be lost in the spring by being robbed; and all for want of care. Bees rob each other when they can find but little else to do; they will rob at any time when fr-

has destroyed the flowers, or the weather is so cold as to prevent their collecting honey from them. Cold, chilly weather prevents flowers from yielding honey, without frost.

Bees need but little air at any time when they rob; and yet more is necessary for them when confined by compulsory means, than otherwise. When deprived of their liberty, they soon become restless, and use their best efforts to make their way out of the hive;—hence the importance of leaving a small space all around the bottom to admit air and to prevent their melling down, or use a screen bottom board, which is better.

#### RULE V.

##### On Equalizing Colonies.

Hive one swarm in the lower apartment of the hive; collect another swarm in a drawer, and insert the same in the chamber of the hive containing the first. Then if the swarms are small, collect another small swarm in another drawer, and insert the same in the chamber of the hive containing the first, by the side of the second. In case all the bees, from either of the drawers, mingle and go below with the first swarm, and leave the drawer empty, then it may be removed, and another small swarm added in the same manner.

**Remarks.**—It is of prime importance to every bee cultivator, that all his colonies be made as nearly equal in numbers and strength, as possible. Every experienced bee-master must be aware that small swarms are of little profit to their owner. Generally, in a few days after they are hived, they are gone;—no one can trace their steps; some suppose they have fled to the woods—others, that they were robbed; but after all, no one is able to give any satisfactory account of them. Some pieces of combs only are left, and perhaps myriads of worms and millers finished off the whole. Then the moth is supposed to be their destroyer, but the true history of the case is generally this:—The bees become discouraged, or disheartened, for want of numbers to constitute their colony, abandon their tenement, and join with their nearest neighbours, leaving their combs to the merciless depredations of the moth. They are sometimes robbed by the adjoining hives, and then the moths finished or destroy what is left.

When bees are collected in drawers for the purpose of equalizing colonies, by doubling, &c., they should be permitted to stand until evening before they are united, it being a more favorable time for them to become acquainted with each other by degrees, and the scent of the bees in the lower apartment will enter through the apertures during the night so much that there is a great degree of sameness in the peculiar smell of the two colonies, which takes off their animosity, they chance to have any.

Second swarms are generally about half as large as the first, and third swarms half as large as second ones.

Now if second swarms are doubtful, so as to make them equal in number with the first, the owner avails himself of the advantage of a strong colony, which will not be likely to become disheartened for want of numbers, nor overcome by robbers from stronger colonies.

It is far less trouble, and less expense, for the bee-owner to equalize his colonies, than to prepare hives and drawers of different sizes of fit colonies.

When colonies and hive are made as near alike as possible, many evils are avoided, and many advantages realized: every hive will fit a place in the apiary—every drawer a hive, and every bottom board and slide may in any case be used without mistakes.

Swarm may be doubled at any time before they become so located as to resume their former hostility, which will not be discovered but as they form a rational character and acquire rights of property. Bees are provided with a reservoir, or sack, to carry their provision in, and when they swarm, they go loaded with provision suited to their emergency, which takes off all their hostility towards each other; and until these sacks are emptied, they are not easily vexed, and as they are compelled to build combs before they can empty them, their contents are retained several days. I have doubled, at a fortnight's interval in swarming, with entire success. The operation should be performed within two or three days—at

the farthest four days. The sooner it is done, the less hazardous is the experiment.

As a general rule, second swarm only should be doubled. Third and fourth swarm should always have their Queens taken from them, and the bees returned to the parent stock, according to Rule 10.

#### RULE VI.

##### On Removing Honey.

Insert a slide under the drawer, so far as to cut off all communication between the lower apartment and the drawer. Now draw out the box containing the honey, with the slide that is next to it. Set the drawer on its window end, a little distance from the apiary, and remove the slide. Now supply the place of the drawer, thus removed, with an empty one, and draw the first inserted slide.

**Remarks.**—Care must be exercised in performing this operation. The apertures through the floor in the chamber must be kept closed by the slides during the process, so as to keep the bees from rushing up into the chamber when the box is drawn out. The operator must likewise see that the entrances into the drawer are kept covered with the slide, in such a manner as to prevent the escape of any of the bees, unless he is willing to be stung by them. If the bees are permitted to enter the chamber in very warm weather, they will be likely to hold the occupancy of it, and build comb there, which will change the hive into one no better than an old fashioned box.

I have succeeded best in expelling the bees from the drawer, by the following method, to wit:—Shut the windowblinds so as to darken one of the rooms in the dwelling-house—raise up one casement of a window—then carry the drawer and place the same on a table, or stand, by the window, on its light, or glass end, with the apertures towards the light. Now remove the slide, and step immediately back into the dark part of the room. The bees will soon learn their true condition, and will gradually leave the drawer, and return home to the parent stock; thus leaving the drawer and its contents for their owner; not however until they have sucked every drop of running honey, if there should chance to be any, which is not often the case, if their work is finished.

There are two cases in which the bees manifest some reluctance in leaving the drawer. The first is, when the combs are in an unfinished state—some of the cells not sealed over. The bees manifest a great desire to remain there, probably to make their stores more secure from robbers, by affixing caps to the uncovered cells, to prevent the effluvia of running honey, which is always its greatest temptation to robbers.

Bees manifest the greatest reluctance in leaving the drawer, when young broods are removed in it, which does not often occur, except in such drawers as have been used for feeding in the winter or early in the spring. When the Queen has deposited eggs in all the empty cells below, she sometimes enters the drawers; and if empty cells are found, she deposits eggs there also. In either case, it is better to return the drawer, which will be made perfect by them in a few days.

Bees never make honey, but extract it from such flowers and other substances as yield it without producing any change from its original state. Good honey is taken principally from white clover, orchards, sugar-naspe, bass, and other forest trees, while in blossom. Poor honey is extracted from buckwheat, and low land flowers, hence those who would save their good honey unadulterated by that which is poor, will remove it before the latter can be extracted.

Special care is necessary in storing drawers of honey, when removed from the care and protection of the bees, in order to preserve the honey from insects, particularly the ant. A chest, made perfectly tight, is a good store-house.

If the honey in the drawers is to be preserved for winter use, it should be kept in a room so warm as not to freeze. Frost cracks the combs, and the honey will drop as soon as warm weather commences. Drawers should be packed with their apertures up, for keeping or carrying to market. All Apianians who would make the most profit from their bees, should remove the honey as soon as the drawers are filled, and supply their places with empty ones. The bees will commence their