

## The Apiary.

### Management of the Apiary for June.

BY J. H. THOMAS.

The honey harvest commences with this month, and as May has been unfavorable, if it does not prove abundant, bees will not do well this season.

In this section we can hardly expect early swarms, unless it be from Italian stocks. Still, everything should be in readiness, old hives well cleaned, and new hives purchased or well made and on hand. Honey-boxes may now be given to all stocks. Pieces of comb may be fastened to the top of honey-box, as bees will enter a box far more readily if there is comb in it. Boxes for marketing should have glass ends; for home consumption a simple wooden box will do. It should not be over five inches deep. As soon as boxes are filled, they should be removed, and other boxes put on, or the honey removed and the same boxes returned. In the latter case a small piece of honey may be left in the box to induce the bees to commence work again. From the middle of June to the middle of July may be said to be the swarming season. All persons intending to use moveable comb hives should put their first swarms in them. Many persons often put a second swarm in a new hive to "try it;" it does not do well, and the hive is condemned. Second swarms frequently do ill in any hive. If two second swarms, or three or four third swarms are put together, they will do well. They may be united any time within a day or two after swarming. Such united stocks often do as well, or even better, than a first swarm. It is far better to have one good stock than two poor ones. If the bee-keeper can double his bees every year in Canada, he should be satisfied. With moveable comb hives, second swarms may be prevented by cutting out the queen cells. More honey may be obtained by keeping all the bees in the parent stock after the first swarm has issued.

It is often urged as an objection to moveable comb hives that it is difficult to get a swarm of bees into them. Such is the case with the Langstroth, Quinby, and many other comb hives, but with my hive the difficulty is entirely overcome by the dropping of the bottom board at the rear of the hive. In fact, it is one of the most convenient arrangements for introducing a swarm that can be invented. Set the hive on the table with the bottom-board dropped, and shake the bees out of your living dish on the table near the opening, and they will all enter in a few moments. For further particulars, see "Canadian Bee-keepers' Guide." With common box hives a similar plan should be adopted. Simply raise one side of the hive about two inches, putting under a stick or chip to hold it up, and turn down the bees as stated above. This is much better than shaking the bees into the hive, and then turning it over or shaking them on the table and turning the hive over them. Either way, bees are sure to be killed. Last season one man killed two queens by the operation. Remove all swarms to their stands soon after hiving, and keep them shaded, especially if in newly-painted hives. All swarms put in moveable comb hives of any description should be examined at the expiration of four or five days after hiving. Any inaccuracies in the combs, or inclination to build crooked, may then be corrected by pushing the comb to its proper place. It being warm and soft, no fear of breaking need be apprehended. If all bee keepers using moveable comb hives will adopt the above simple plan, they need never have any crooked combs in their stocks. It is not, as is too frequently supposed, a difficult task to remove the comb frames. Any person, even a lady, may remove them from my hive without difficulty by using a little smoke. If timid, put on a bee protector and a pair of sheepskin or India rubber gloves.

Often during the hot weather of this month, bees may be seen on the lighting board of a hive in large numbers blowing with their wings, while an unnatural roaring is heard in the hive. When such is the

case, they are too warm, and want more ventilation. Common hives should be raised up. The bottom board of my single-boarded hive may be dropped half an inch. The double-boarded hive being cooler, seldom requires any attention in that respect. When swarms issue and return again to the parent stock, it is well to examine carefully in front of the hive for the queen, as sometimes in attempting to fly she falls on the ground and is unable to rise again, or she may be defective in a wing and cannot fly. In such a case she would soon perish if not returned to the hive. Give your bees all the attention they require, and if the honey harvest is good, they will reward you well for your trouble. If bees in common hives hang out and refuse to swarm, drive them, leaving a few bees in the parent hive, which remove to a new stand, and put the swarm you have driven out on the old stand.

### Miller Traps, Comb Guides and Condensers.

To the Editor of THE CANADA FARMER:

SIR,—It is very evident that Mr. Thomas differs widely from myself as to the utility of the above-mentioned contrivances, but which of us is nearest right is a point which I hope those interested will seek to determine by carefully reviewing the articles upon the subject. I accept Mr. T.'s correction of my first quotation from him, and claim his pardon on the score that it was unintentional; at the same I will take the trouble of drawing the logical inference from the correction, that he believes the "fixings" in a hive useful in the hands of those who will attend to them. Mr. T.'s reply to my query "if the millers are so unceremoniously ejected by the bees," &c., is by no means satisfactory.

Since "it is not necessary for the miller," according to the theory advanced by Quinby some ten or twelve years since, "to enter a hive in order to infest a stock with her progeny," Mr. T. triumphantly asks "Of what use would Mr. H.'s miller trap be in such instances?" In his anxiety to ignore its utility, he says "of none whatever." Let us see. Says Quinby: "From the first of June till late in the fall, the moth may be found around our hives, active by night, but still in the day. The only object probably is to find a suitable place to deposit its eggs that the young may have food; if no proper and convenient place is found, why I suppose it will take up with such as it can find. Its eggs must be deposited somewhere, it may be in the cracks in the hive, in the dust at the bottom or outside, as near the entrance as they dare approach. The bees running over them may get one or more of these eggs attached to their feet or bodies, and carry them among the combs, where they may be left to hatch." I infer from this statement that if "a convenient place is found" inside, they will not be left about the entrance. This convenient place" my trap affords; and since the bees cannot get into it, where is the liability of the eggs being carried into the combs in this way? "Facts are stubborn things," but Mr. T. finds no difficulty in dealing with the fact that I found no grubs in the combs of my apiary last summer. He suggests ignorance or blindness, and passes on. How natural the idea of a supervisor arises under such circumstances, but his proposition is respectfully declined. I shall endeavour to give "more study to the nature and habits of the bee and bee moth," and hope to be able to manage my own apiary, and correctly report the success or failure of anything that I have introduced to the public. But Mr. T. has tested the trap. Was it of the same construction as mine? Unless Mr. T. is more careful in his experiments, he will not be a safe guide in the untrodden paths of apian science; for unless he can prove that there were no moths in the hive, either in the egg, grub, chrysalis or perfect state at the time of introducing the trap, his experiment proves nothing. This, of course, he cannot do. In regard to invention of the "wire cloth bottom," I contend that the statement in my former letter is correct. That Mr. Bennett patented a hive with the wire cloth bottom, I am well aware. This hive fell into "disrepute" because of its being built upon the colonizing system, a system at variance with the nature of the bee, and not because of the worthlessness of the bottom as Mr. T. represents. But we have not the whole

history of the wire cloth bottom in this hive. I have learned of four or five styles of hives, in which it is in use at the present time, two or three of which are patented, so that it has not fallen into "disrepute," and of course has not been "revived." Mr. T. thinks my quotation from Quinby does not favour my trap. There is this difference. In the case of the Langstroth and People's hive, the trap is inserted by the maker; in the other by the bee-keeper. He "asks that the bee-keeper who would take the trouble to save refuse comb, and lay it near the hive, would be the one out of fifty that would attend to it." But the bee-keeper who reads THE CANADA FARMER, and sends for a beehive, paying a dollar extra to get a miller trap attached would neglect it. To me, this looks very unreasonable. Mr. T. brings up an array of quotations against moth-proof hives. I quoted Quinby to support my position. Is then Quinby at variance with himself? No; recommending a Miller trap, and denouncing a moth-proof hive, are two very different things. I do not, and never did claim a moth-proof hive. What I do claim is an efficient miller trap.

In reference to comb guides, Mr. T. should have been satisfied with the quotations I gave from disinterested parties, as I said: "interested testimony pro or con is not to be relied on." Mr. T. instances "a properly constructed hive—adapted to the nature and habits of the bee," and says, that in such a hive "combs will be built straight without the guides." Again Mr. (H.) T. in my hearing at the London fair said that "it is the only hive upon the ground in which combs would be built straight." Are there any "exceptions" made to their building straight in these statements? In my remarks upon the "wedge shaped top piece," I should have written that "it was in use before he conceived the idea of getting up" the Thomas' hive, instead of "a hive." I "abandoned it for two reasons: 1st. I did not know at the time that Mr. T. was claiming that which the law does not allow him. 2nd. Further observations and study led me to believe that a medium sized guide (top piece) was better, as there is room enough upon either side of the slope of Mr. T.'s guide for the bees to attach their combs, thus rendering them more liable to build across. As to the necessity for the "frequent removal" of the comb guides, Mr. T. should know that very little propolis is used by the bees in the swarming season and for some time thereafter, there being, according to Quinby, "a hundred fold more used in August than in June." Mr. T. incorrectly represented me, in stating that I would not "think that person *compos mentis* who would ventilate a bee hive, instead of providing it with a condenser." I have never said a word against the proper ventilation of bee hives, but the contrary; and believe my arrangements for ventilation are not excelled. But I do protest against that ventilation in winter which allows a current of cold air to pass through the cluster of bees, reducing the temperature, and retarding the breeding. The object of ventilating the hive, and condensing the moisture, is to prevent the loss of bees in wintering. I showed how this loss occurred, and requested Mr. T. to "trace the analogy in the case of the occupants of a sleeping apartment." This he failed to do. But he considers my "remarks laughable indeed." "Philosophical indeed!" Nevertheless, I ask, do not the mass of bees in a hive give off exhalations? Is it not then an exhalating mass? But Mr. T. confounds the "mass" with the "exhalations." "Only think of a bee-keeper going around with a spoon to catch the exhaling mass (the stock of bees) as it drops from the hive!" I have just found something from the pen of Quinby bearing upon this matter, to which I beg Mr. T.'s attention.

"In cold weather, bees throw off moisture that lodges on the combs and sides of the hive, and causes mould. The patent vender is at hand with several specifics for getting rid of it." The most effectual that I have seen—Mr. Furlong's—is a hive with cross bars at the top to support the combs, and panes of glass set up like the roof of a house, in which the moisture condenses, and runs down into a trough of tin, which conducts it outside the hive. This hive is much more tolerable than the dividing hive, as this method of disposing of the moisture is preferable to the open holes. Were it not for the fact that the same result can be secured quite as effectually at far less expense, this hive might be desirable." Never having heard of it before, I know not what extra expense the arrangement entails. Quinby secures the "same result" by the use of a mat similar to the one I make, dispensing with the glass or metallic part of the arrangement. His only objection is on the score of expense. Mr. T. considers the "idea of a condenser in a hive, of all others the most unphilosophical and unsound," and condemns them for "creating a dampness," while Quinby considers a "condenser" the most effectual "patent arrangement" that he has seen for getting rid of it."

OSHAWA, 15th May, 1866,

A. N. HENRY.