The Canadian Bee Journal

Published Monthly

New Series Vol. 13. No 4 | BRANTFORD, CAN., APRIL, 1905 | Whole No. 482

ANNUAL MEETING ONTARIO BEE-KEEPERS' ASSOCIATION

(Address by A. E. Hoshal—Continued.)

We will now come back to the point where we have about three surplus cases on these, and where the first preparations for swarming are made. The first preparation I make for that is to clip the queens. I don't usually clip until the honey flow starts, about the 8th or 10th June. First of all, we quiet the bees with the smoker. We raise the hive up and shove it forward, lift it off and put it on a three-legged table, thus. I then smoke them at the bottom until I run the bees through this queen-excluding screen into the upper case, and I keep the smoker working half a minute or so like that. Lift up the case and turn over the honey board. If you don't find the queen there, look on the honey board. Take her up in your fingers and with scissors take off one of the wings sufficiently so that she cannot fly. Having done that, put her back in the under case again. You have driven the bees up into the upper case, and the queen in her attempt to get through is found on the bottom of the honey board. Occasionally she will be on the top of the frames, and once in a great while she will run down between them. The smoke down below will drive her up. She is clipped. That may seem quite an operation for some of you to do, but it is easier done than you imagine. Put the case back on the hive again and set it back. Having your queen clipped, you are ready for swarming. Another thing about this clipping business is this, some of you may have trouble in clipping your queens on account of the bees balling them. One of the important features about this is, when you return the queen to the colony you return her to an empy case, and by the time the bees return into the case everything is quiet, and it is seldom you will have a queen destroyed. That is the first preparation for swarming. In clipping when the flow is on there is a less percentage of loss of queens. If you are running for comb honey you will have about two or three cases on in handling the swarms. Your colony will be in two cases, or possibly three, when they cast their swarm. That is the case with me; I won't say it is so in all localities. In handling these bees we will presume we have got the queens clipped and they are ready for swarming. After the queens are clipped, and the swarming is coming on, the first thing to do is to see that the grass in front of your hives is cut down short. We will suppose underneath is the hive which has cast a

swarm. We must prepare a hive to receive it. There is first a bottom board. On that I place an empty case. On top of that we put a case of comb. If you haven't a frame of drawn comb have one filled with foundation. Then a cover. Now we will suppose the swarm in this hive is issuing. Provide yourself with a little cage and plug for the end of it. As your queens are clipped, they cannot fly. The swarm issues and you go to the front of your hive, and you examine the ground in front of it and you will find the queen there if she is out. You pick her up and put her into this cage and fasten her there and put her in your pocket, or lay her down where she will be safe, and you are master of the situation at once. The swarm will not go away without their queen. Now, as soon as we have caught that queen and the swarm is out of the hive you are ready for operations. You lift the upper cases off your hive and set them down anywhere. Take the brood case off and set it to one side. Take this other hive which you have prepared, place it on the stand where this one came off. If you have a honey board, put it on, or take the one off the other and put it on. Take the upper cases removed from the other hive that the bees have been working in, bees and all, and put them on the new hive. Cover up the parent colony, pull up two or three handfuls of grass and close that entrance, or else move the hive a little way off, so that the bees on returning will not go back. Now, your queen that you have got in the cage place at the entrance of the new hive, and in a few minutes the swarm will come back. When they start back seeking their old home the new hive is ready for them, and the queen is at the entrance. As soon as they have started in take the cage, remove the plug from it and let the queen run in with the bees, and the bees will go in and go to work. You leave them in that condition for two days, when you begin to again operate on them. You need this arrangement again. (Refers to table.) If you can lift your hive bodily upon this, so much the better. You quiet the bees with the smoker, as before, put the cover on the hive and lift it bodily on to the stand. You will remember that this lower apartment is simply an empty case. The reason why that is put on is, if you run your swarm into one of these single cases, the chances are they will leave it the day following. This lower case is simply put on to hold the bees till they are established. A double brood chamber is far too large. You won't get the results from it that you will from the single one. You blow a few puffs of smoke until the cluster has run up into the upper case. You can take your hand and pull out any little bit of comb that is built. Pick the hive up leaving the empty case, and put it down on its stand again. Put back these cases. If that colony of bees is ever going to do work, it is going to do it now. The one thing you will have to watch is to keep them supplied with cases. If the honey flow is good, and the swarm is strong, it will surprise you how fast they will fill them. The only thing you need to watch is, don't let them get honey-bound. In filling these cases in ordinary seasons with comb honey, when the honey flow is strong, about once a week you will have to add a case Sometimes it runs from five to six days and other times two weeks

The next operation is to look into the parent colony. It is going to cast a second swarm in about eight or ten days, and that is something we don't want. As soon as this new colony is settled I move the parent colony around. Some time during the week I will take it and move it aroun

again a little. You will understand that the parent colony contains the queen cells and when the first of those cells hatches out that parent colony is going to cast what is called a second swarm. Those cells will hatch sometimes in eight days, other times they will run ten or eleven days. If you have been at it quite awhile you can tell by the examination of the cells. For the beginner I recommend the following. On the seventh day I take the parent colony up and set it down on the opposite side of the hive That means that all the bees which have flown from that parent colony when they go to the field and come back in search of their home will return to the old stand. Their hive being gone they do the next best thing and unite with the colony near it. That takes out of the parent colony all the bees that can fly and it is done just at the time when the queen is being hatched. Consequently, with the queen hatching at that time, she has no bees that can fly by which she can form a swarm and take them off. On the other hand, if it is about eleven days they will gain sufficient strength in that time to cast a swarm again. So I give them another move. About the 10th or 11th day I take them up and put them where I want them.

Another factor in the manipulation of our yards comes in now; spring management. Begin it while the swarms are on. There are three elements necessary in order to have successful spring management. One is good queens. Another is plenty of stores and another is warmth, and I might add a fourth, let them alone. We provide for the good queens now. If any of your colonies lack good queens this is the time to remedy the defect. We will suppose you have a colony that has done extra good work and you want to breed from it. After it has cast a swarm you raise it up and you will find that queen cells have been built along the bottom bars. Just before they are ready to hatch you get a jack-knife and go along and nip them off and slip them in what we call the cell protectors. Those cells will hatch in a couple of days. You have some colonies you want to re-queen. You go to such colonies that have cast a swarm a day or two before, take a knife and knock off the queen cells, then take one of the protectors with a cell in it from your select colony and put a little pin through it cross-wise and shove it down between the combs and when that cell hatches there is your queen. I have raised queen cells in nurseries, artificially Some of the cells I have been doubtful about whether they were going to hatch or not. I take the little blade of my knife and split them down carefully, spring them open a little bit, look in and if they are all right close them up and stick them in the protectors, and put them in the hive and they will hatch. You can tell the age of them, too. You can pick an extra queen in the same way. If there are any of your young queens whose blood is not up to the mark and you want to introduce a superior strain that is the way to do it. If you want a good colony of bees, breed from the best and you will find it will pay.

Now, we will suppose the season is over, and we have got to the end of it. When these cases are finished, no matter whether comb or extracted honey, I recommend taking them off. For that purpose I use the Porter escape. That escape will clear any case of bees unless it has a queen or brood or is put on too late in the season, when it is cold.

Another thing, I want to draw your attention to is this. About the last of July, if your locality is like mine, you will get no more honey. When you take the honey away from your bees

in July they are in a starving condition from the system we have adopted. You must be careful, therefore, that you do not take it all away. Leave the unfinished case or lower case on to prevent starvation. Another way is with the double cases; you noticed in the spring we raised one up; the brood case became a surplus case; the honey in that case is unfit for market; it is only fit for feeding back to the bees again. Now is the time to use that honey. If you are in a place where you have a honey flow during August, have buckwheat, and so on, after these cases are all off there is no harm in simply adding another case and letting them fill it up. They may gather sufficient stores to run them through the winter. If they don't you can feed them later on. I prefer myself for wintering one case, but I very often use two. When September comes, if your colony is weak, confine it to one; if there is a good strong colony it will do no harm if you leave it on but for myself I would prefer keeping it as a surplus case.

The next is the preparation for winter. If I have any uniting to do I do it in July just as soon as the honey flow is over, at once. Don't wait. I simply do it by piling one hive on top of the other. I don't care whether the bees fight each other or not, it is brood I am after, not bees. I don't pick the strongest colonies to keep through the winter, but I pick colonies with the best blood. The old bees are of no particular use to you at that time of the year, but the brood is. The brood hatches and gives you your colony.

Now it is the middle of September, and we will say you are ready for the winter. Here is your hive, a double case one. That hive in order to go through the winter must not weigh less than fifty pounds in all, if it weighs more than that it is better.

Mr. Hall—Nothing less than 56.

Mr. Hoshal—I often winter on 50, but I prefer 55 or 60. With the single case they must not weigh less than 40 lbs, and as much more as you can make them. I have a pair of platform scales that I put on a wheelbarrow and take out to the yard. I come to this hive and put it on the scales and see what it weighs. I take my pencil and mark it on the hive, and so go over the whole yard. Now a single case, with bees, combs and all, weighs 25 pounds. Everything over that is honey. If they are lacking in stores, and we haven't the combs of filled honey to give them, it becomes necessary to feed them, and for that purpose we use a feeder like the following. The feed we use is syrup made from granulated sugar and water, one pound of granulated sugar and one quart of water, and bring them to a boil. Here is a board with a hole in it and a block to cover it. We take off the cover of the hive and put on the board. My feeder is made with a little piece of perforated tin on the top of a Gem jar. The jar is inverted over the hole. You perhaps may think this water in the jar will run out when inverted, but it will not. An important part of fall manipulation is the supplying of abundant stores and giving it in time.

Now the preparation for wintering outside. We come back to the wintering case. It fits the stand upon which the hive rests. Place the bottom board, pick up the hive and put it upon it, and pack underneath. That done, we put on a bridge, keeping the entrance from being closed, and the case slipped over. Snugly pack it all around the sides. You will notice that this hive cover has a hole in it. Here is another arrangement that has a hole through it and a piece of screen over one end. This tube is placed so that the opening in ft comes over the opening in the cover, and the end communicates with an opening in the side of the case.

There is your ventilator, and you put your packing right in through the whole thing. It is not to furnish pure air that we put that ventilator on; it is a matter of dryness. Where we use the single case we use this form of ventilator. When the spring arrives, along in March, as soon as it is warm weather, these ventilators are removed and the entrances closed up to about half an inch with the entrance blocks, because if at any time of the year robbers are going to be disastrous, it is in the early spring. As the season advances, and the bloom begins to come out, the bees become crowded, and you can spread those blocks, and as the season advances you can take them out entirely and let them go to the last of May or the first of June, until you come to the point where we started. In the spring leave your bees severely alone. Provide them with good queens in July and see they have abundant stores in September and that they are thoroughly packed and kept warm.

I have not gone into details in this; I have simply outlined this system of management. You will see it is complete from start to finish. I have described it for the benefit of those who may be starting. You notice the peculiarity of it. From start to finish we have manipulated our bees by means of cases, without removing the frames, and the various manipulations through the season can be carried out in the same way.

Mr. Craig—What kind of packing do you use?

Mr. Hoshal—Sawdust or chaff, or cut hay or dry leaves.

Mr. Byer—In the event of foul brood being prevalent in your district, would you have to go through every comb to look for the disease?

Mr. Hoshal—No, we don't. While these are intended to be used in the manipulation of cases, don't understand me that we cannot get these frames out at all. Where you want to examine a case of foul brood you have got to take the frame out to do it.

Mr. Dickinson—You recommended giving them a severe letting alone. I want to be on the watch for that foul brood all the time.

Mr. Hoshal—That was only in the spring, for spring management. That is up till the first June. I will tell you why. You will find that if you are in the habit of handling your queens, that a great many of your bees will be destroyed.

Mr. Evans—You spoke of your bees swarming and setting the old hive to one side. What is the matter with taking the old hive away at once.

Mr. Hoshal—At that time of the year the brood is hatching all the time, and during the time a considerable quantity of that brood will hatch, and the bees mature up to the flying point in their lives, and that queen can take off a swarm when she hatches. When you move the hive around there you drain it of all its flying bees at that time. It has got to raise a lot of bees before it can cast a swarm.

Mr. Heise—You recommend bringing the syrup to a boil for feeding. Is it not sufficient to know that the sugar is all dissolved?

Mr. Hoshal—Certainly. But I think, to make sure work of it, I would recommend boiling.

Mr. Newton—In producing comb honey, are they not apt to get some pollen in the section by using one story?

Mr. Hoshal—No.

Mr. Newton—You said you would sooner have full combs?

Mr. Hoshal—That is for extracted honey.

Mr. Newton—I only use those combs for extracted honey; for comb honey I use foundation straight. Would you not get pollen in there?

Mr. Hoshal—I haven't experienced

any. I hive my swarms on combs if I can get them at all, and there is the place where the pollen will be stored.

Mr. Holtermann—You don't make any distinction between combs you use in the brood chamber and for extracting?

Mr. Hoshal—I don't any more than this. Combs I have been using for the brood chamber I keep for that purpose because they become darkened and soiled.

Mr. Holmes—In the swarming season in removing the queen cells you tell us that you find the cells along the bottom bar, when you turn up your case in your system of management. Are we to understand that is an unbending rule?

Mr. Hoshal—There may be odd exceptions, but in nine cases out of ten that is the rule. If you want to be absolutely sure of that without a mistake you hadn't better trust to that, better turn your case upside down. I don't believe it is thoroughly appreciated amongst you the difference that it makes in results from your colonies, by having your brood chamber full of brood, and, moreover, having it shallow. The average distance of your brood from your surplus case, is about eight inches. With the shallow frame it would be an average distance of five inches. The nearer you can get your brood to your surplus case the better. Some might say: "When you hive your swarms, contract your hives down," but you won't get as good results because the average distance of your bees from the brood which is contracted is greater than in a case that is shallow.

Mr. Holtermann—Don't you find a very distinct tendency when you make your frame shallower, that the circle does not only work one way, but the other way, and it curtails the brood on the outer sides of the frame, when you get beyond a certain length and make them shallow?

Mr. Hoshal—Yes, it does.

Mr. McEvoy—Will Mr. Hoshal explain about letting off the steam at zero weather? Mr. Hall and I are in a quarrel about it.

Mr. Hoshal—I would say let it off, in simple words, without giving any reason.

Mr. Grainger—Do you have any packing in the top of your cases?

Mr. Hoshal—They are buried in the case.

Mr. Grainger—The idea I had speaking about the ventilator, was, wouldn't some chaff packing there affect that and still keep them warm?

Mr. Hoshal—I guess it would if you don't pack them too tight, but you must be careful to give them a vent.

Mr. Grainger—It is not so much the ventilation as keeping them dry.

Mr. Hoshal—That is the idea. Chaff will absorb moisture.

Mr. Pettit—I would think another point in connection with what Mr. Grainger has mentioned, is that the packing should not touch the cover of the outside case and the ventilator could draw through over this packing and there would not be the direct escape of steam.

Mr. Hoshal—I was one who lost heavily last winter in wintering. Now if you ask me how to winter outside I will tell you plainly that I don't know how. I will tell you some things I went through this last winter and I took occasion to find out. I have had a suspicion for a long while moisture in the hive very often, particulaly in cold weather, was detrimental to the good wintering of bees outside; that they had to be kept dry. I experimented along that line for five, six or seven years, and I could never find a winter suitable for experimenting. I used this ventilator, but I couldn't strike a winter that would put the thing to a test. During that time when I was packing there were some out-

siders that came into my yard and stole the idea from me and went away and fixed theirs up that way. Last fall I was in a little bit of a hurry and didn't put my ventilators on to try it. Some of the people who had been to my place and taken this idea, and had the ventilator on, their bees came through while mine went under. Mr. Jones, we will call him, had twenty colonies of bees. Out of those twenty he sold six or seven to another man, about half a mile away. This other man took them home and lost every one of them. They were shut up tight Mr. Jones who had the same bees, and had my ventilators on like this, using a Hedden hive which was rigged up, carried his through without a single loss.

Mr. Byer—Do you have felt next to the frames or boards.

Mr. Hoshal—I bore an opening.

Another thing, this man said he had to keep these ventilators open because they would freeze shut. I went to another man not half a mile from me and half of his bees went under and the other half came out. He had about seventeen colonies; he had ten in movable frame hives and the others were in common box hives, warped up with the sun, cracked open, and everything else. Everyone of his new hives went under. The old ones riddled and split by the sun and so on came through. Another man, not over five miles from me, with the Hedden hive and so on, never packed his bees at all. They were in the double case, set in the open, right in a fence corner with the honey board on and loose covers and they they came through in the very best condition. I wintered quite a percentage of my bees in the cellar, carrying out the same idea. Unfortunately last winter or near the spring the drain of the cellar froze so that during the night the cellar was flooded and submerged the lower row of hives right around. You would naturally suppose those bees would all come out dead. They didn't; they lived through the ordeal to my own surprise. The combs were thoroughly soaked when I went to take them out of the cellar, and I didn't expect to find one of them alive and was very much surprised to find half of them living. I put them outside, and they only survived about a week after they were set out. Another thing in this wintering question, if you will follow it up and look over those, colony after colony, that have gone under you will find that every one you look at, without an exception, will show signs of being wet inside, and that moisture never got there from the outside.

The discussion closed with a hearty vote of thanks to Mr. Hoshal for his very interesting and instructive address.

THE HONEY BUILDING AT THE INDUSTRIAL EXHIBITION

Editor Canadian Bee Journal:

No doubt the bee-keepers would like to know how their representative to the Toronto Industrial Exhibition is looking after their interests. To those who are interested I might say that I attended the meeting when the prize list was revised for 1905, and other business transacted in connection with the bee-keeping interests of the Industrial; also the meeting for the election of officers, etc.

It may not be generally known among the bee-keepers that the citizens of Toronto recently voted for the by-law to expend $300,000 in new buildings and improvements for the Exhibition. Among other improvements a new honey building was contemplated. It is not likely that we will get this

building this year, but when the new agricultural buildings are erected no doubt the interests of the bee-keepers in this respect will come in for due consideration. I may say that the chairman of the committee, ex-Ald. Frankland was most anxious to do all he could, and promised that he would see that the bee-keepers had a better building in which to exhibit their product. In fact the committee seemed most anxious to do all in their power to make this part of the Exhibition more attractive. In a short time the matter of new buildings will be brought up for consideration. I have been invited to attend that meeting, and as far as possible to make known to the committee the views of the bee-keepers. Now, as I consider this of great importance to the bee-keepers, I hope they will not leave me to fight the battle alone, but that they will give me, and the chairman of the committee all the assistance they can. They would like to have any suggestions the bee-keepers feel disposed to make, and I would urge those interested to endeavor to send to me their views on the matter, with any plans or suggestions they may have to make in regard to the plan and style of a building that would be suitable for the display of our product to the best advantage. If bee-keepers interested would kindly send in to me any suggestions that they have to make I will see that they are brought to the attention of the proper parties. If it is a matter which should be taken up by the association I think it would be a good idea for the executive committee to try if possible to agree on some plan of a building and let it be the unanimous choice of the bee-keepers. Some plan, backed up by the association, if at all practicable, and the cost within a reasonable limit, would no doubt stand a good chance of being adopted by the industrial board. Heretofore the bee-keepers have had no definite plan, but one and another at different times have gone to the Industrial association expressing their views, which were conflicting till they have almost ceased to pay any attention to them. What we want is a definite plan, backed up by the association.

Not only those who make a practice of exhibiting at the exhibition, but all bee-keepers, whether exhibitors ore not, should be interested in this, for anything that tends to bring the importance of honey, etc, before the public is an indirect benefit at least to all who are engaged in bee-keeping. Let all do what they can to make the honey building one of the prominent features of the Exhibition. Stock men, dairy men, florists, etc., get what they require by persistent effort and sticking at it. Why not the bee-keepers ? I would suggest we have a building with a room with accommodations for bee-keepers, a place where parcels could be left, etc. A sort of headquarters for the bee-keepers, where their interests might be discussed while they were in attendance at the Exhibition. This is only one thing, there are many others. Let us hear from you, either through the pages of this journal, or by letter. I will do my part at this end.

E. GRAINGER.

Toronto, March 6th.

Middlesex Bee-Keepers' Association.

The Spring meeting of the Middlesex Bee-Keepers' Association will be held in the City Hall, London, on Saturday, May 6, 1905.

E. T. BAINARD, Sec.

Brant County Bee-Keepers' Association

Brant County Association will meet in the Court House, Brantford, on Saturday afternoon, May 13th, at 2 o'clock. Visiting brethren will be cordially welcomed.

W. J. CRAIG, Sec.

EXPERIMENTS WITH FARM CROPS

The members of the Ontario Agricultural and Experimental Union are pleased to state that for 1905 they are prepared to distribute into every township of Ontario material for experiments with fodder crops, roots, grains, grasses, clovers and fertilizers. Upwards of 1,600 varieties of farm crops have been tested in the Experimental department of the Ontario Agricultural College, Guelph, for at least five years in succession. These consist of nearly all the Canadian sorts and several hundred new varieties, some of which have done exceedingly well in the carefully conducted experiments at the College and are now being distributed free of charge for co-operative experiments throughout Ontario. The following is the list of co-operative experiments in agriculture for 1905 :

No.	Experiments	Plots
1	Three varieties of oats.....	3
2	Two varieties of barley....	2
3	Two varieties of hulless barley..	2
4	Two varieties of spring wheat...	2
5	Two varieties of buckwheat....	2
6	Two varieties of field peas for Northern Ontario	2
7	Emmer and Spelt....	2
8	Two varieties of Soy, Soja, or Japanese beans....	2
9	Three varieties of husking corn.	3
10	Three varieties of mangolds....	3
11	Two varieties of sugar beets for feeding purposes	2
12	Three varieties of Swedish turnips	3
13	Kohl Rabi and two varieties of fall turnips	3
14	Parsnips and two varieties of carrots....	3
15	Three varieties of fodder or silage corn.....	3
16	Three varieties of millet	3
17	Three varieties of sorghum	3
18	Grass peas and two varieties of vetches.....	3
19	Two varieties of rape	2
20	Three varieties of clover	3
21	Sainfoin, Lucerne and Burnet ..	3
22	Seven varieties of grasses	7
23	Three varieties of field beans ..	3
24	Three varieties of sweet corn ..	3
25	Fertilizers with corn	6
26	Fertilizers with Swedist turnips.	6
27	Growing potatoes on the level and in hills...	2
28	Two varieties of early, medium, or late potatoes.....	2
29	Three grain mixtures for grain production	3
30	Planting corn in rows and in squares	2

The size of each plot in each of the first twenty-six experiments and of No. 29 is to be two rods long by one rod wide; in Nos. 27 and 28, one rod square, and in No. 30, four rods square (one-tenth of an acre.)

Each person in Ontario who wishes to join in the work may choose any ONE of the experiments for 1905, and apply for the same. The material will be furnished in the order in which the applications are received until the supply is exhausted. It might be well for each applicant to make a second choice for fear the first could not be granted. All material will be furnished entirely free of charge to each applicant, and the produce of the plots, will, of course, become the property of the person who conducts the experiment.

Ontario Agricultural College, Guelph,
March 17th, 1905.

C. A. ZAVITZ, Director.

HE STOPPED THE PAPER.

I've stopped my paper, yes I hev;
I didn't like to do it,
But the editor he got too smart,
And I allow he'll rue it.
I am a man as pays his debts,
And I won't be insulted,
So when an editor gits smart
I want to be consulted.
I took his paper 'leven years,
An' helped him all I could, sir,
An' when he comes to dunnin' me,
I didn't think he would, sir.
But that he did, an' you kin bet
It made me hot as thunder,
Says I, "I'll stop that sheet, I will,
If the cussed thing goes under!'"
I hunted up the measly whelp,
An' for his cunnin' caper,
I paid them 'leven years an' quit!
Yes, sir, I've stopped his paper.

THE CANADIAN BEE JOURNAL

Devoted to the Interests of Bee-keepers.

Published Monthly by

Brantford - - - Canada

Editor, W. J. Craig.

April, 1905.

EDITORIAL NOTES.

We are pleased to learn of the safe return of Mr and Mrs R H Smith, of St Thomas, and Mr J Alpaugh, of Galt, from Jamaica Have not yet heard of our friend, Mr. Arthur Laing. Mr. Smith will take up his usual department in the Journal next month.

✝

So far as we can learn from reports received bees are coming out in fairly good condition and with no serious losses. From our own yard would conclude that the consumption of stores has been greater than usual, spring opening so mild and brood-rearing going on so rapidly and extensively there may be "danger ahead" for colonies with limited stores. At any rate it would be well to look out for this.

✝

We would draw attention to Mr. Grainger's letter in this issue regarding the honey building at the Industrial Exhibition. To our mind none should be so competent to suggest what is required as the bee-keepers who have been exhibiting there for years. Pleased that there is a prospect of something going to be done for them. Mr. Grainger's idea of a "waiting-room" and general headquarters for bee-keeping visitors is an excellent one

✝

A new organization, to be known as "The Honey Producers' League," has recently been launched by a number of the leaders of the industry in the United States. Its object to be as follows :

"To create a larger demand for honey by popularizing its use among the consuming public through advertising in newspapers and magazines its great value as a food, and by such other methods as may be considered advisable by the executive board, also by publication of facts concerning the production of honey to counteract any misrepresentation of the same."

Mr. W. Z. Hutchinson, Flint, Mich., is the secretary, and George W. York, Chicago, treasurer and general manager.

✝

The committee on freight rates appointed at the last meeting of the Ontario Bee-keepers' Association expect to meet with the railway commissioners at an early date, to discuss and adjust, if possible, the freight rates on honey and other commodities that are of special interest to bee-keepers. A letter from the committee appeared in our last issue, asking for comments and suggestions regarding the rates, etc., that might assist the committee in laying their claims before the commission. We find that bees, beeswax and honey are at present classified as follows:

	L.C.L.	C.L.
Bees in hives (O.R.)	3-1	3
Beeswax	1	..
Honey in glass packed in cases....	1	4
Honey in cans, not boxed..	1	4
Honey in cans, boxed or crated	2	4
Honey in kegs or barrels .	2	4
Honey in comb, boxed (O.R.)	1	4

To a shipping point from here, say Winnipeg, the rates per cwt. at present are:

First-class (all rail)	$1.79
Second-class " "	1.25
Third-class " "	1.20
Fourth-class " "	.87
Fifth-class " "	.75

According to this, the freight on honey in 60-lb. cans, crated, or in kegs or barrels, when "less than carload," would be $1.52 per cwt.,—over 1½c a pound on the price of the honey when laid down in Winnipeg. Comparing the classification with that of other commodities bearing a similar risk, we find

	L.C.L.	C.L.
Syrup in pails, kegs or barrels	3	5
Syrup in tins, not boxed ...	2	4
Syrup, in tins, boxed	3	5

While there is, of course, some difference in the value of the two commodities there is no more risk in handling liquid honey in barrels or tins than corn syrup put up that way, and certainly much less when the honey is granulated. Beeswax is listed first-class, while paraffine wax is placed third-class in less than carload, and fifth-class in carload.

✢

We note that the Dominion Minister of Agriculture, in his reply to a deputation which waited upon him at Ottawa recently, declared himself in favor of placing express rates under the control of the railway commission as well as the freight rates. It is quite probable that the government had previously considered this matter and that we may look for it being put into effect before the close of the session.. Beekeepers should be prepared to take advantage of it.

✢

REPORTS ON WINTERING

Bees were taken out of winter quarters March 31, April 2 and 3. Three hundred and forty-nine of our own, and three hundred and four others. We lost six, and several more are no good, and were no good, in the Fall. Of the balance four perished, also no good when put in. Bees wintered well and clover looks well. J. H. Shaver lost none. Chris Edmondson lost about three per cent.

R. F. HOLTERMANN.

Brantford, Ont.

Some have lost quite heavily of those wintered outdoors; others have wintered without much loss. So far as my own is concerned. out of 95 colonies packed outdoors have lost none up to this date (March 30), and most of them seem to fly strong and healthy.

JACOB ALPAUGH.

Galt, Ont.

✢

Just arrived home from Jamaica this morning. The bees had been taken out of the cellar, with four colonies dead out of 100. Of those wintered outside at the out-yards there were seven dead out 150. I have not received many reports from the surrounding country, but as far as I have heard, they are favorable.

R. H. SMITH.

St. Thomas, Ont., March 29.

✢

Pleased to learn that bees have come through well in your vicinity. The same conditions exist here so far as I have been able to learn. My own are flying strong, but I have not opened a hive as yet to know condition of stores. We are having July weather; temperature 62 degrees at dark this evening.

F. J. MILLER.

London, Ont., March 29.

✢

Our bees, wintered outdoors, have come through in good condition. Very few dead, and the others strong and seem none the worse for their long confinement. From what I can learn from other bee-keepers in this locality, up to this date, the winter has been a favorable one for the bees.

DENIS NOLAN,

Newton Robinson, Ont., March 29.

✢

A Report From Ireland.

The winter so far being unusually mild vegetation is at least a month in advance. Stock are coming out in splendid order, but will want some looking after, as breeding has been well begun, in some few cases they have quite filled up the vacancy with comb after having the candy eaten.

W. MORONEY,

Co. Roscommon, Ireland.

The Advantages of Larger Hives

(R. F. Holtermann.)

In making soap, which is the more important, the fat or the alkali ? Some may say the fat, others the alkali, but can soap be made without either ingredient ? It cannot. The two, then, are of equal importance. If we apply this to the question sometimes brought out by bee-keepers, which, in bee-keeping, is of the greatest importance, the bee-keeper, the bees or the hive ? We will soon come to the conclusion that in bee-keeping all are of equal importance and all equally indispensable. If I were to deal with the question fully I should trace the development of the modern hive but space forbids. We have to-day two first great divisions, the movable frame hive and the hive in which the frames are not movable. The movable frame hive is again divided into two great divisions, one in which the brood chamber consists of two shallow or divisible parts. The latter has not had much headway but this does not imply that it is not good. Bee journals, be they right or wrong in what they may endorse, have a very great influence on the average bee-keeper. Leaders in bee-keeping have the same as the average bee-keeper, especially the one not a specialist, very largely allows someone else to do his thinking, in fact, the average man lays himself open to the suspicion that he imitates and acts on impulse rather than the result of carefully thought out reason. Just as the ladies wear hats and bonnets which are neither useful, comfortable nor convenient, and only some times ornamental. At the last Ontario Bee-Keepers association convention Messrs Hoshal and Miller treated the question of the divisible brood chamber hive in a fair way and although there was not time for those advocating another system to speak, I enjoyed hearing them. It is always interesting to hear an expert give an exposition upon a line where he is convinced he is right, and I enjoy it none the less if he opposes me.

I know of no hive which has all the desirable points, it is a matter of being able to make a wise choice, studying our conditions and choosing that which has the greatest number of good points for us. The Heddon hive certainly has some good points. But let me say, small hive men need not take the Heddon hive for an illustration; its divisible brood chamber is equal to ten-frame Langstroth hive, and were I ever to adopt the divisible brood chamber (which I do not expect) I would make its capacity equal to a twelve-frame Langstroth.

In treating our subject, let me say I am not a leader in this matter of large hives. Moses Quinby, L. C. Root, the Dadants, J. B. Hall and many others we respect and look to for apicultural light, have been advocates of large hives for many years back. I have been one of the "well nigh unconvertable" bee-keepers "York County Bee-Keeper" speaks about, and in the past an advocate of the eight-frame hive, and I can stand and look at the mire wherein I floundered and compare the two positions.

The twelve-frame hive or a large hive is not a necessity to the person who for any reason winters his bees badly, and whose stocks are weak when the honey flow begins, and who has with this condition only a short honey flow, to all others, however, in my estimation large hives would prove an advantage. The bee-keeper who generally winters well, who brings colonies out strong in the spring, or who, though a poor winterer, has a

prolonged honey flow, to such an one the large hive is a great boon, and very profitable. Again, a bee-keeper who at the end of a honey flow counts only his surplus and does not consider how much honey or how little the bees have for winter stores, such an one does not see the full benefit of a large hive.

A twelve-frame hive can have 50 per cent. more bees than an eight-frame, in fact, it can have even a larger number of contented bees because even with a number of supers on an eight-frame hive, owing to the contracted brood chamber the bees are more likely to get the swarming impulse, and added supers with the large hive will have more of a tendency to prevent swarming owing to its larger brood chamber. If one can handle the same number of bees in two hives and two manipulations than is done in other hives in three there is a distinct gain of time and energy. Two twelve-frame hives cost much less than three eight frame, an economy of investment. Again, in places where room is limited the same number of bees can be put on a much smaller ground space if in twelve-frome hives than eight frame. Even the small hive men delight to see a large rousing swarm and strong stocks they know that the best results are obtained from these stocks. I have a not far distant neighbor (on the fence somewhat about large hives) he is a great hand to have a colony on scales to see its gain from day to day, and quite often he reports that when the flow is about at its best "the hive swarmed and spoiled it." Intelligent small hive men act on the idea that the best results are obtained from stocks which hang together well, where they keep their bees comfortable and contented and keep down the desire to swarm, then their bees are doing best. They look for non-swarming strains (which they will never get in valuable bees), and non-swarming methods (which they can never get, and in the direction of which we can work only as we use larger hives, ventilation and shade, for I do not call artificial swarming non-swarming), and lament when their apiary goes to pieces just as the bees begin to work well in the supers. There are exceptions with some of those who want to produce fancy comb honey, but these are exceptions. There can be no case where bees swarm and forces are divided, and two broods maintained instead of one, where the bee-keeper is not a loser in honey during the next three weeks following, providing the honey flow lasts for three weeks thereafter or a part thereof. There may eventually, in case of a long season such as clover, basswood and buckwheat, be a gain, but the clover is the most certain flow, basswood less and buckwheat a very uncertain crop to bank on. Increase taken at what it can generally be bought for in the spring is better bought than made at the sacrifice of honey. In swarming the hive that swarms in the middle of clover is depopulated, so that it is extremely unlikely that it will, for that reason, do as well in any future flow as if it had been kept together. The new swarm appears to do exceptionally well for a time, largely or altogether because it has no brood to feed, and many forget that the stock from which it came is having its uncapped honey used up to feed the brood which formerly belonged to the new swarm. I can see no reason, and believe there is no reason, why bees, contented, not having the swarming impulse, in the old hive work with less energy than those in the new swarm. Another reason why the new swarm appears to do better is because there is less work in a properly prepared hive, and the bees in the new swarm are nearly all field bees, but the other hive has so many the less. The

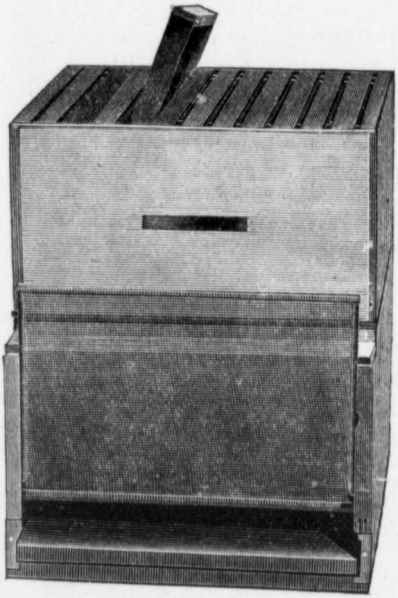
new stock, however, soon runs down, as there are no young bees added to it for at least three weeks. If the flow continues, and the queens deposit eggs, there will eventually be more bees in the two, but only in case of a prolonged honey flow will there be any gain in honey. Many a bee-keeper has lost his bees through excessive swarming, divided stocks and insufficient winter stores in such hives. By never having swarms (I call artificial division 'swarms') the colonies are always in best condition for surplus and the bee-keeper always has his dish right side up when it rains porridge. If bees are well wintered it is only in rare seasons that they can be held together unless they are in large hives with proper ventilation and lots of super room. When I think now of the time and energy and patience I have expended chasing swarms when there were other matters which urgently needed to be done (which is now so largely a thing of the past that the bees are left alone in the apiaries day after day) I feel well-night sufficiently punished for belonging to the well-nigh, but not altogether, "unconvertible" class. To shake swarms or otherwise break up the swarming impulse is better, but does not compare with keeping bees continually contentedly at work. We hear that there is no use in having a larger brood chamber than the queen can occupy. This is quite true, but the powers of queens is very much underestimated. Many queens now in 8-frame hives could as readily fill a 12-frame chamber, and if any cannot they should be replaced.

In two apiaries, one 12-frame hives the other 8-frame hives, side by side and otherwise receiving the same attention, there will in fall and spring be as few frames unoccupied in the 12-frame hives, as the eight, in fact there will be less unoccupied space in the 12-frame hives than the eight. Left to themselves there will be less queenlessness in the 12-frame hive for the same reason. **Breaking up by swarming in the bane of the specialist as well as the novice bee-keeper.** I am quite willing to admit that there will be more heavy lifting with the large hives but that is bound to be the case with a greater harvest. We never, in extracting, remove honey from the hive by supers. The super is left on and combs exchanged, and the honey taken out by combs. Large hives can easily be contracted, but small brood chambers cannot successfully be enlarged. The Langstroth frame is too deep for that. I feel that larger hives generally used would result in less winter losses, and more stability in bee-keeping. From a merely selfish standpoint this is no advantage to me.

My Own Hive.

Notices in Canadian papers having appeared that I have patented a hive, and having had letters asking for a description, I will try to briefly explain the hive which has been patented in Canada, and on which I have been awarded first prize as "the latest, best and most practical invention" at the Toronto Industrial Exhibition, and also the Maritime Province Exhibition, also a gold medal in France. I have also a patent on this hive in the United States. In the "British Bee Journal" within the last month I see a hive illustrated with some of my portico ideas. I have some ideas he has not, and he has one which I have not. His appears to be 1905 issue. My patent was issued May 24, 1904, and the application was in quite a while before that time. The patent covers a hive with a portico and a groove, or its equivalent, to enable the ready attachment of a double door, screen or queen-excluding metal, or the like. The double door is valuable in the spring or fall of the year; in fact, it makes double the most vulnerable part of the hive

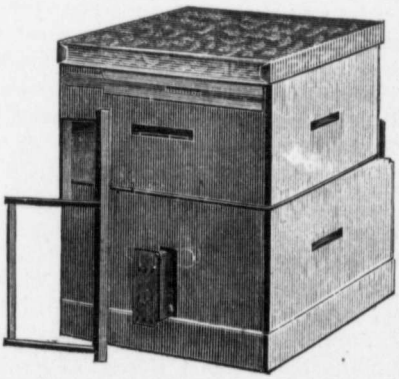
and excludes cold air. It also prevents the coaxing out of bees when the sun is bright but the wind and cold air makes it dangerous for them to take flight. The sun's rays are prevented from reaching the true entrance of the



The Holtermann 12 fr. hive, front view showing Portico and Screen

hive. Again, bees in the spring, after having had a cleansing fly, leave the hive largely for the purpose of getting water. By placing in the enclosed portico a section the cells filled with water, especially with a slight flavor of salt, the bees will be less inclined to leave the hive. A little wooden feeder would, of course, answer.

The screen serves a number of purposes. If the bees attempt to rob a stock, and before they are overcome, by sliding the screen into place access to the hive is barred and the attacked stock is isolated, yet has ventilation through the screen and can recover itself. If the robber bees have already gained entrance to the hive the screen must be raised occasionally to allow the strange bees confined to the hive to leave, or they might feed their own hive bees through the screen. Again, the entire apiary can be confined to their hives for a day or less when some operation is to take place during the robbing season, such as extracting, any bees that are left outside the hive after an operation will not rob, but cluster outside on the screen of their hive. If the day is hot the bees should be watered in the portico occasionally, especially if they are Italian bees, as these bees have when excited the characteristic (peculiar to them alone, as far as I know) of once in a very long while stinging one another to death in the portico. My attention was first drawn to this trait by Mr. Jacob Alpaugh of Galt, Ont. The screen can be used with great success in confining the bees to the hive and portico when they begin to swarm. As long as the queen is not out the bees which have escaped will act in the same way as if the queen had been clipped; that is, return, unless it unites with another



The Holtermann 12 fr. hive, back view showing Feeder.

swarm. In this case the bees cluster on the screen. After, the bees have returned to a normal condition the hive can be examined and shaken, or cells broken down; in fact, if shaken before the bees have emptied their honey sacks,

but after they have given up the idea of flying, they are in the best possible condition for shaking. The risk of an absconding swarm has been prevented, and the task and loss of time of chasing swarms into any place suited them, but perhaps not to the bee-keepers, has been obviated. For moving bees the screen is a great boon, and as stocks cease to fly, screens in a moment are dropped into place, the operation of closing is a very short one; this saves time when every moment counts; the bees can also be released very quickly. There is no use in saying this is not a safe way of confinig bees. Mr. Morley Pettit and myself have moved hundreds of colonies in this way many times, and in all kinds of weather and on wagons; never yet had a colony smothered, and I have had 12-frame hives which previously had two extracting supers, in moving crowded down to one, and moved them in early August without loss and have teamed them over forty miles. I first learned from Mr. Jacob Alpaugh, who is a very thorough bee-keeper, that bees when they can come out of the hive and into a portico do not feel as confined as when the regular entrance is barred. Again, with screen nailed against the entrance the excited bees crowd against the screen and stop ventilation. With the portico the bees when first moved generally rush out, and unless the weather is very warm often return to the combs and you see no bees in the portico, as they are hauled along the road. Again, a sheet of perforated metal can be used in the groove to prevent the queen leaving the hive during the absence of the bee-keeper, the "not-specialist" will find this an advantage and will save him during his absence many a swarm. By the addition of a bridge and cone between the perforated metal and the front board of the hive a cheap drone trap may be secured.

The Patent Feeder.

In the rear of the hive is an opening shown in the illustration, but which has since been slightly changed, but does not affect the patent, by means of which a feeder can be placed in the hive; it has its mouth through the side of the hive by means of which the feeder can be filled, examined as to amount of food and the like. The opening in the hive side (which does not require to be more than 2 in. x 7-8 in.) also answers another purpose to be described later. This feeder partially occupies the space which should be taken by a brood frame and the corner of the comb has to be cut out to allow room for the feeder. This cut out portion of the comb also answers another purpose, which will be given later, and this comb, winter or summer, remains in this position in the hive. In European countries stimulative feeding especially in early spring, and between the flows, when the bees are to build up, and before the main flow, is carried on much more extensively than in this country, and in this matter we might well take a lesson from our European brethren. The time when this feeding is most important is when it is too cold for the bees to fly out, when breeding is checked simply because not naturally stimulated, and when we would enjoy seeing them so stimulated. At this time the bees will not move from the cluster, food at the entrance or in a division board would be untouched, but this feeder is situated partially in the cluster and a little can be fed each day in the coldest weather.

The Swarm Detector.

When the season for stimulative feeding is passed we soon reach the swarming period. The expert is now busy and wants short cuts to do his work and be saved the need of remov-

ing covers, heavy supers, queen-excluders and frames to look for queen cells. The feeder is now removed, a wedge-shaped piece of wood put into the corner from which the feeder has been removed, the long side of the right angle lies on the floor bottom and the shorter side just reaches the opening in the hive end. Through the opening is inserted a straight piece of wood, the height corresponding with the width of the opening in the end of the hive, but the piece is cut on a bias. It rests on top of the angling piece of wood, resting on the hive bottom. These parts partially fit into the imperfect comb. When the bees wish to build queen cells by this method they have a convenient and inviting place right about the centre of the brood chamber, and a place, by means of the withdrawal of the straight piece, where in a moment the hive can be examined for cells. To the novice and the expert alike this is a great advantage. If the cells are there they may be in other parts. if not there they will not be found in other parts as far as I know, unless the bees are superseding the queen. Let me say here, if other combs have holes in them half-way or so between the top and bottom bar and near the centre, this plan may fail and is not safe. Such should not be, and I have no remedy in this particular for those who do not do as I do, use full sheets of foundation or reject combs imperfect. Unless this is done the swarm detector is of no use.

Some have already asked to add these patented devices to the hives already in use. This can, of course, be arranged, and of course the system can be used on any sized hive. As some are under the impression that an individual can make for their own use a patented article, and I have been asked this question, let me say they cannot unless specially permitted by the owner. If a patent alowed such there would not be much use in a patent.

Brantford, Ont.

NOTES AND COMMENTS

By a York County Bee-Keeper

Producing Comb Honey Without Separators.

Quite recently the editor of the "American Bee Journal" asked for opinions from the "experts" as to the feasibility of producing marketable sections without the use of separators. The majority of answers were decidedly in the negative. Commenting on this in the "American Bee Journal," page 213, Mr. Gill of Colorado wonders if it is possible that these "experts" are not aware that tons of comb honey go to market every year that have never been near a separator. Mr. Gill himself produces part of his crop in this condition every year, and says he is undecided as to whether he will produce it all in that manner in the future. The reason is that some markets that sell all by weight demand the old style because such sections average more than those produced with separators. Personally was under the impression that nearly all comb honey was now produced with separators, and Mr. Gill's article is valuable, if for no other reason, as an exemplification of the old saying, that one-half the world does not know what the other half is doing. In connection with this subject, another correspondent in the "American Bee Journal" takes the radical view, that light-weight sections are the chief cause of the small demand for comb honey, and he strongly advises bee-keepers to use a larger section, that will hold a full pound. While we cannot all see alike, this argument has always appeared to me as unreasonable as to demand that eggs be sold by the pound instead of by the dozen. The correspondent referred to even imputes

dishonest intentions on the part of the producer who sells a section weighing less than 16 ounces. Don't know how it is over in Uncle Sam's domains, but on this side of the line quotations are always so much a dozen, and I dare say very few consumers imagine they are buying by the pound, so I fail to see anything dishonest in the transaction. Lest some might say that I am suffering with a twinge of conscience, will say that I do not produce comb honey, so am not directly interested in the matter.

Rendering Beeswax.

Two splendid articles, one by Mr. Dadant in the "American Bee Journal," and another by Mr. Townsend in the "Review," have recently been given to the fraternity on the rather commonplace but necessary subject of rendering wax. Mr .Dadant says that even if you use a wax press, the combs should first be broken up and thoroughly soaked in water before melting them. Wonder if it is really necessary? Have never done so, and imagined that I was getting all the wax. With an authority like Dadant saying that soaking is necessary, am inclined to think that I have been mistaken, and will try the method advocated next time I have occasion to use the press. Mr. Townsend uses a press similar to the Hatch-Gemmell, only he uses two slatted racks and two pieces of burlap, one above the other, cider-mill fashion. One would think that the pressure would not be as effective as with one layer enclosed inside of the form, as in the Hatch-Gemmell, but here again Mr. Townsend's experience proves that his plan is all right. Mr. Dadant cautions against applying too much pressure at one time on the press, a "turn now and then" being all that is required. After one has used a press a few times he will admit the wisdom of this advice. Mr. Dadant says "don't melt the wax." and Mr. Townsend "don't boil," so we greenhorns can split the difference and be reasonably sure of good results. By the way, every bee-keeper should have some kind of a wax press. Any one who has combs to render into wax will find that the press will pay for itself in short order.

Midwinter Flights for Bees.

Editor Root, of "Gleanings," has for some time been championing the plan of giving cellar-wintered bees a midwinter flight and returning them to the cellar again. Doolittle quite pertinently remarks that in York state and other localities we hardly ever have a day during winter that is fit for bees to fly. Mr. Root, commenting on Doolittle's article, admits that in such cases the plan is not practical, but thinks that it is not as necessary as in localities like Medina, Ohio, where they have days through the winter that the temperature goes up to 60 or 70. One would wonder why it is necessary to cellar the bees at all where they have these conditions. Is it possible that the milder climate of the central States is not as conducive to good wintering as is the severe winters of Ontario and places of the same latitude? Just here would ask the question, Is it necessary for outdoor-wintered bees to have a midwinter flight? My limited experience says decidedly No. When I think of how I used to scan the sky during January and February, hoping against hope that we would get a day so that 'the poor bees could get a fly," such an answer seems inconsistent even to myself. Nevertheless, facts are stubborn things, and when I recollect that for four years our bees have every winter been confined from early November till nearly April 1st, and have invariably wintered as well as when they had midwinter flights, I am forced to believe that such flights are unnnecessary. It has always been a puzzle to me to see reports from apiarists pretty well south complaining of disastrous

results if their bees were confined for six or eight weeks, when bees in the northern localities endure such confinement from 18 to 20 weeks without any ill results. Surely it must be accounted for by the difference in nature of honey used for winter stores. During these four last winters, two of them very severe, have successfully wintered one colony in a single-walled hive with no protection except a super on top filled with dry absorbents. The colony has averaged me 100 pounds each year of clover honey, and it is in a hive much bigger (therefore colder?) than an 8-frame Langstroth. Speaking of hives, some time when I am in a humorous vein and feel like making "Canadian Bee Journal" readers laugh, will tell you what a lot of my hives are like.

Does Freezing Kill Bees?

Just at present considerable is being said in the different journals both pro and con on this subject.

A correspondent in "Gleanings" gives conclusive evidence that cold alone will not kill bees. He states that in February, 1904, one morning he found a colony out of stores and frozen so stiff that they would make a noise like some hard substances when dropped on the floor, the mercury at the time being 5 below zero. When brought into a warm room the frost formed on their bodies. After being well warmed and fed they were put on sealed combs of honey and placed in the cellar, and the colony came through in good condition, giving a good account of itself during the honey harvest. Think we can safely say that cold kills bees only indirectly, by keeping them from shifting for fresh food supplies when that within the cluster's reach is exhausted. We wonder how long bees would stay in the frozen state as in case cited before it would be impossible to bring them to activity again. We found, early in March, two columns in precisely the same condition as the bees mentioned and since reading this accout have thought that I possibly might have saved them if I had gone about it properly.

Position of Hive Entrance.

Am afraid "Novice" is again doomed to disappointment if he expects any enlightenment from your humble scribe on the above subject. Believe I stated at the time that I had little faith in the plan, but said anyone could try a few hives and prove the matter for themselves.

If memory serves me right, am indebted for the note to "American Bee-Keeper," the item in question being translated by Adrian Getaz. Nothing was said as to where the entrances were, but as extracted honey is produced almost exclusively in Germany, presume that the exact place of entrance would cut no figure. Last season I ran short of extracting supers, and having some single walled hives with bottoms fast I simply knocked these bottoms off and used the bodies as supers without closing the entrances. In this case the upper entrance was right immediately above brood chamber. While I never thought of such a thing as increasing the honey yield directly in this way. I imagined the extra ventilation would discourage swarming, and I don't think that one colony thus treated did swarm. However, "one swallow don't make a summer," and for ought I know those same swarms treated the same might all swarm this season. No danger of chilling brood in a colony ready for the supers.

"Hardscrabbles" Dire Threat.

With trembling hands we endeavor to make some explanations re that editorial of friend Hill's which you, Mr. Editor, have taken from American Bee-Keeper. In our remarks regarding "rights of subscribers," did not even say "American Bee-Keeper," and

thought that statements were so guarded that no journal could reasonably construe them as personalities. As to "making mistakes," certainly we do, in fact sometimes think that when we don't we are an exception.

However, in the particular instance referred to, think I am entitled to some commiseration, as in a previous issue of the Canadian Bee Journal I gave proper credit to author and publisher of article in question. While in my second reference to the subject I am made to say "A.B.J."; it surely is a typographical error as all readers of C. B. J. would see in the copied article that you, Mr. Editor, gave credit to proper journal.

The funny part of the mix-up is that Editor Hill accuses me of crediting the article to "A. B. K." Surely there are "mistakes" all round.

We keep a "light burning in our room," not from choice, but for the accommodation of a young chap who has lately taken up lodgings with us, and who has not as yet learned the impropriety of doing most of his "talking" after 10 p.m.

Hardscrabble will please take the hint and delay his visit till a more opportune time, if he wishes to catch me unawares and give me a "raise" worth the trouble of travelling through space from Florida to Canada.

York County, Ont.

WINTERING QUEENS IN SWARTHMORE MATING BOXES, WITH LITTLE OVER HALF A PINT OF BEES TO EACH BOX.

For years the northern queen breeders have been hunting for a plan to winter over extra queens in an economical way, in order that they might enter the market and compete with the southern breeders in the early-queen trade. It is in spring that demand for queens is heavy, and owing to the northerners' inability to furnish queens before the month of June, prices naturally range quite high, and many a queenless colony has suffered because of the inadequate supply of queens in early spring.

If the honey-producer could winter a number of extra queens to supply winter losses at just the right time, many a good colony might be saved, which would mean at the close of the season so much more honey for market.

I have successfully wintered queens in Swarthmore mating boxes, with less than a pint of bees to each queen, and have, I believe, solved the problem of early queen traffic for the northern breeder.

It is surprising how well these little clusters of bees withstand the cold and blow of our severe northern latitude—the rate of death seems much less in proportion to the strong standard colony—but being in compact cluster directly on full combs of select honey, I suppose they have every chance. Where the full colony may become separated, these little clusters are closely confined in a given space.

I have not found it necessary to even cellar them. I, of course, provide shelter from the wind and storm, either by placing the boxes inside a standard hive body with a tight roof (four to a hive) and a flight hole on each side, or inside a shed or small house, with flight holes bored through the boarding.

In making up these wintering boxes I take up two or three cupfuls of young bees, as explained in my book, "Baby Nuclei," and just before winter actually arrives I give each box two fat combs of good honey; do this on a warm day to give the bees chance to settle as they like upon the combs. Do not disturb them again until spring, when they should be examined and supplied with more honey if needed, by changing the comb containing the least brood for one of honey.

To prevent any possibility of the queens wandering away from the cluster, place a piece of queen-excluding metal over the flight hole on the inside. A three-quarter-inch flight hole is none too large for wintering queens in Swarthmore mating boxes.

F. L. PRATT.

Swarthmore Pa., March 15, 1905.