

The Canadian Bee Journal

Published Monthly

New Series
Vol 14, No. 6

BRANTFORD, CAN., JUNE, 1906

Whole No
475

NOTES AND COMMENTS

By J. L. Byer.

Systematic Re-queening.

Will it pay the bee-keeper to destroy queens over two years old, or is it best policy to leave the matter to the bees? Doolittle, Dadant and others have placed themselves on record as in favor of leaving the matter of supercedure to the bees' "judgment," and the late Editor Hutchinson has expressed himself in like manner. Yet, in the face of such formidable testimony, the writer is forced to the conclusion that from the way his bees act, he would certainly pay him to be more systematic in the matter of re-queening. After clipping queens and generally overhauling all colonies, I find an actual count that out of 270 odd colonies just 34 are either queenless or had drone layers. Of these 34 I happen to know that 32 gave good brood for the last season. Of the remaining two, one was poor last season and the other was bought from a dealer in September. This spring she was queenless. Last spring my loss by the same causes was about 10%. Of course, it should be borne in mind that I have had practically no swarming during the past two seasons. It certainly appears quite plausible

to assume that if those 34 colonies had young queens at their head this spring, that they would be a much better-paying proposition than is the case in their present condition. However, as I had no other winter losses, if there had been no queenlessness, would have had no empty hives for possible swarms. Seriously speaking, though, this matter of re-queening is easier spoken of than practised, if you have little swarming and happen to live in a locality with no fall flow. It is an easy matter to keep track of age of queens when clipping is practised, but a much harder job to catch old queens about the time you would like to dispose of them. Whenever a swarm issues headed by a queen two years old or over, I make it a point to see that she never enters the hive again. As already intimated, during past two years have had little chance for such work.

Wintering of Nuclei.

Some time ago we mentioned the fact of having 20 nuclei in winter quarters, vaguely hinting that said "quarters" were of a questionable nature. They were put under an ordinary basement barn, in a room entirely surrounded by straw to keep out the light, and, judging by conditions, when bees were taken out, the straw kept out the cold as well as the light, as quite a large percentage of the bees had left the hives and perished. However, 17 were taken out

with some bees alive, and although a few dwindled out entirely, all the young queens were saved.

Some one says, "You might have known better." Of course I should, but as "fools rush in where angels fear to tread," we have at least the consolation of being able to give our experience for the benefit of other would-be experimenters. It is a question whether if, with the best system of wintering, it will pay to winter nuclei; consumption of stores is always heavy in proportion to number of bees, to say nothing of large amount of work they require to build them up—time that could be more profitably spent in some other direction. To be sure, if one has some extra choice queens that he wishes to carry over, that puts a different aspect on the situation.

What Causes Spring Dwindling?

A dozen persons would probably give as many different answers to the query. As we have had our first real experience in the matter this spring, naturally we are quite interested in the subject. On the first of April the home yard was very strong with bees. Three weeks afterwards the majority of colonies had barely enough bees to cover the brood. No diarrhoea or dampness in hives, combs clean and sweet. The old bees just seemed to go all at once. Just three miles in a direct line from the home yard is the Cashel apiary. Out of 100 colonies there, ten were queenless. Of the remaining 90, on 20th May only two had as low as four large combs of brood. As there is no fall flow at all at the Cashel yard, such a difference seems hard to explain. What makes the thing more inexplicable, 20 colonies were moved from the home yard last fall to another location, and they are all in fair condition. If I was to make a guess as to cause of the disaster,

could only attribute it to the fact that bees in home yard have a long way to go for what little early spring feed is within reach, and also to the fact that they had to fly about one-quarter mile for water needed for brood-rearing. But after allowing for these things, I remember that they had to do the same things other seasons, so "what caused the bees to spring, dwindle?" After such a humiliating confession regarding condition of my bees, needless to say, it will be regarded as presumption for any one to come around about 1st of August with the question, "How many pounds per colony this year?"

Saving Combs of Honey for Spring Use.

No better advice was ever given either to beginners or old-stagers than is the counsel of Mr. Adams in April "Canadian Bee Journal" regarding the handiness of some sealed combs for spring use. Early this spring bees seemed so heavy with honey that I doubted if I would use what combs of honey I had on hand. Steady cold, windy weather set in, and one by one combs disappeared, and to-day (May 26th) just wish I had as many as was on hand in the early spring. In fact, unless fruit bloom yields considerable a goodly number of bees in this locality will starve unless fed between now and clover bloom.

Markham, Ont.

TYPOGRAPHICAL ERRORS.

Say, Mr. Editor, who is guilty of making me call the "septum" of comb foundation "septane" twice in the first paragraph of my May notes?—E.A.

[That printer's devil, that printer's devil again, sure, friend Byer. We were very busy and could not watch him closely. Sorry, but our readers will pardon.—Ed.]

FINDING

"Is this Mr. I
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FINDING QUEENS ETC.

"Is this Mr. Doolittle?"

"Yes. What may I call you?"

"My name is Miller. I live in Pennsylvania, and I came to see you about finding queens, and to have a little talk with you about how I can manage my bees during the swarming season. But how it rains!"

"Yes, we are having lots of rain again this spring, and, what is worse for the bees, lots of cold; been but very few days since the bees were set from the cellar that they could fly, and it is now May 14."

"Then you are worse off than we are, for our season has been about an average one thus far. I have been trying to find my queens to clip them, but do not have good success. Can't you tell me how to find queens? I am a beginner with the bees, and take "Gleanings." It seems to me if you could only tell me how to find a queen as plainly as you tell about other things in your 'Conversations' I could find a queen at once."

"Well, it is hard work, often, for the expert to find a black queen, but with all of the other races there is not much trouble, and especially with the Italians. If you jar the hive too much, or use too much smoke, so that you set the bees to running, it will be very difficult to find the queen of any race. Why it is more difficult to find a black queen is because black bees have a greater habit of running and stampeding off the combs than any other bee that I know of; and why it is easier to find an Italian queen is that her color is generally different from the darker bees, and also because it takes much abuse to start these bees so they

will appear anything but natural on the combs."

"Well, I guess part of my trouble was that I jarred the hive too much. I use the Danzenbaker hive, and the end sticks and springs seem to stick in the hive as if they grew there."

"Your bees may use lots of propolis, thus causing things to stick. But if this is the case, you will have less trouble the next time you open the hives. Where things are badly glued in any hive, it is best, in opening the hive the first time in the spring, to pry all the fixtures loose, then close the hive for an hour or two, when by using care you can open it up, almost without a jar or any disturbance to the bees."

"That is something I had not thought about, but I know it is so, now you mention it, for the next time I opened the hives I did not have so much trouble."

"It is always best to take an empty hive or a light box of the same size of the hive with you when you go to find queens, as it helps very much in the matter, giving you a chance to look the combs over twice, nearly or quite as quickly as you would once, did you have no empty hive or box along in which to set each frame in order, as you take them from the hive."

"That is right; tell me just how you do it."

"Having your lighted smoker, empty box or hive, and a stool or box of convenient height for a seat, go to your hive and open it as carefully as possible. Having the hive open, you are next to put down your seat so you can sit with your back to the sun, this allowing the sun to shine on your work and at the same time keeping your eyes in the dark, so that you can see things twice as well as you would under other circumstances. Now carefully remove the first frame from the

hive on the side next to you, and hastily look it over for the queen. If she is not seen, set this comb in your comb-box, putting it on the farthest side of the box from you."

"Why should I put it over there instead of next to me, as it was in the hive,"

"So that, when you come to putting the combs back in the hive, you can look them over for the queen, should you not find her the first time over, with the same chance of finding her that you had at first. Having the first frame in the box, lift the second one from the hive; but instead of first looking on the frame you are now lifting, glance at the side of the frame next to you, still remaining in the hive. If you do not see her there, then look on the side of the frame you have in your hands, that is, away from you."

"What is that for?"

"As a rule, the first thing a queen will do, when the strong sunlight strikes the comb she is on, is to run around to the dark side of the comb, and as soon as you lift the second comb from the hive, there is enough empty room so that the sunlight can strike on the combs, and you see the whole of the 'face' side of the comb next to you. If the queen is on this sunlit side of that comb, you will see her very easily as she starts on her way to go around to the dark side of the comb, when you will at once set the frame you have in your hands in the box, and pick up the frame she is on before she can have time to leave it. If you do not see her, you may know that she is on the opposite side of the frame you are holding in your hands, or else in the hive."

"Ah! I begin to see."

"After you have gotten started in this way it is of no use to look at the side of the comb next to you, after you have taken that frame in your hand,

Simply look on the side of the comb next to you which remains in the hive, as soon as you raise each frame; and if you do not see the queen, then look on the opposite side of the frame you are holding in your hand, setting each in the box, one after the other as they come from the hive, putting the first one in on the side of the box furthest from you, and setting the next one up to it, and so on, till you find the queen or all of the combs are out of the hive and in the box."

"That is simple."

"Yes; and if you failed to find the queen, and do not see her on the sides of the hive after all the frames are out, turn the box of combs and bees that the sun will strike on the combs the same as it did when they were in the hive, and commence to put them back in the hive from the box, looking at them in the same way for the queen that you did before, you having just as good a chance to find her this time over as you did at first."

"What proportion of the queens hunted for do you find in this way?"

"I find 19 out of every 20 looked for before the combs are all in the box; and the twentieth one before the combs are all back in the hive again."

"What! don't you ever miss finding any queen?"

"Perhaps once in two or three hundred such hunts I fail to find the queen. But it is a rare thing to fail, and I can generally find a queen much sooner than I have been telling you this. The knowing how to have the light just right, and that the queen will always be between the 'dark' sides of the combs, will help all to find queens quicker and easier than they have been doing if they have paid no attention to this matter."

"Well, I thank you very much, but before I go I wish to ask you about turning the parent colony one way and

the other after in 'Gleanings'

"Oh! that preventing a

"I don't care I want to know

"All right, put an empty hive the swarms putting the parent colony in. When parent colony a little back is in, allowing five or six days up and carry only to stand, causes all the the swarm, and colony that though but one, when swarming, an only one colony spring."

"But I do not want to let them once, then put on the old state of the parent swarm, just a hatch out, so then when all parent hive are

"In that case, will be, at the from the time to set the parent other side of about the same the hive the swarms, and si will put all the same as if you hive several ro ways more set on the other and so keep on

the other after swarming, as you spoke of in 'Gleanings,' p. 521."

"Oh! that is the Heddon plan of preventing after-swarms."

"I don't care a fig whose plan it is. I want to know about it."

"All right. When a colony swarms, put an empty hive in its place and hive the swarm into this empty hive, putting the supers from the old or parent colony over the hive the swarm is in. When all are settled, place the parent colony about a foot away and a little back from the hive the swarm is in, allowing it to remain thus for five or six days, when you will pick it up and carry it where you wish a colony to stand, and leave it there. This causes all the flying bees to return to the swarm, and so weakens the parent colony that they will destroy all queens but one, which prevents all after-swarming, and gives an increase of only one colony for each old one in the spring."

"But I do not want any increase. I want to let my bees swarm naturally once, then put the swarm in a new hive on the old stand, and get all the bees of the parent colony in with the new swarm, just as fast as I can, as they hatch out, so I will have no increase; then when all are out I can put the parent hive away."

"In that case all you will have to do will be, at the end of five or six days from the time when the swarm issued, to set the parent colony over on the other side of the hive, setting it in about the same position relative to the hive the swarm is in that it occupied before this last moving. This will put all the flying bees in with the swarm, and stop after-swarming, the same as if you had carried the parent hive several rods away. In five or six days more set this parent colony back on the other side of the hive again, and so keep on till all the brood has

emerged, at which time you will shake all the bees off their combs in front of the hive containing the swarm, smoking the swarm at the entrance so they will not kill these young bees you are now shaking in."

"What about the queen-cells? Shall I cut these off?"

"The bees will tend to this matter, and destroy all but one of these cells or the queens which emerge from them. This is the part the plan was invented for, mainly, as it does away with all hunting for queen-cells."

"But what about the one queen they allow to remain?"

"Unless you have a choice in the queens (the one with the swarm and the one that the parent colony raises), you need pay no attention to the matter. One of them will be killed after the bees run into the swarm. As a rule, however, it might pay to hunt out the old queen and kill her a day or two before you are to shake the bees off their combs, providing you are sure the young one is laying, when the young one will be mistress of the now one colony."

"I see. Good-bye."

"Just a moment. What are you going to do with the beeless combs?"

"Store them away for future use."

"You know you will have to fumigate them or the larvae of the wax-moth will spoil them."

"I had not thought of that; but now I know I will."—"Conversations With Doolittle," in "Gleanings in Bee Culture."

Use petrolatum or vaseline, which are one and the same thing, instead of butter, for anointing the fingers for handling brood-frames, etc. There is no rancidity about petrolatum (petrolatum jelly), and it is much cheaper and nicer than butter. It effectually prevents the hands from being all smeared up with propolis.—"Gleanings."

HONEY CAKES OR HONEY GINGER BREAD—RECIPE FOR MAKING.

Editor C. B. J.

Dear Sir,—We read in Holy Scripture that the manna with which the Hebrew people were fed in the wilderness during forty years, was according to the taste of everybody and was like to "flour with honey." One naturally regrets that the recipe of such a good thing should not have been handed down to us. However, the bee-keeper may easily have something similar, for, flour and honey, which are the substance of the heavenly pattern, are the only necessary constituents of honey, cakes, and these the bee-keeper may always have. It is a mistake to think that buckwheat honey is required, as has been stated in some bee journals. I make use of best clover honey without any difficulty. Honey cakes, if properly made, may be said also to be according to everybody's taste, and are sometimes more useful than pure honey itself, for strange enough, there are some persons who are unable to bear the taste of honey in its natural form, whilst I have not seen any one who would not relish honey-cakes. I know even some to whom the doctor has forbidden the use of sweets, and on whom honey cakes produce a good effect. From personal experience, I am of opinion that honey cakes would advantageously take the place of many drugs, and are much to be recommended to sick persons who suffer from a weak stomach, or who have but little appetite, for being so light, and at the same time so highly substantial, they are easily digested without fatiguing the patient. One never gets weary of eating them day after day, as is often the case with pure honey. These advantages are enough to wish that the way of making them should be known in every bee-keeper's home. Honey cakes should not be eaten hurriedly, but allowed a sufficient time to

ooze away, so to say, in the mouth. When newly made they are very light and dry. Some will find them too dry, but they will improve with age, and if left in the open, will quickly absorb moisture which will make them soft.

Now, the following is the way to proceed in making them. I generally take forty or fifty pounds of honey at a time and as much flour, so that they may last for many months. But for the sake of beginners I must give lower figures. Take then 3 lbs. honey, 3 lbs. flour, ½ oz powdered ammonia, a small teaspoonful of ground cinnamon, half-teaspoonful of ground cloves, 6 oz. orange peel cut very small. The four last-mentioned mentioned ingredients are not essential, but they improve the taste. Ammonia is necessary. To those who would object to it, I may explain that it does not remain in the cake, but evaporates during the baking process, its function being to raise the dough.

Directions—Pour the honey in a copper or enamelled pan, and set on a stove, or quick fire. When it boils, draw it aside and remove the scum. Then pour the honey into the vessel in which the paste is to be made; leave it to cool; then add flour and mix it up well. This is the remote preparation, and the paste may be left in that condition for weeks and months without fear of deterioration. The proximate preparation is made on the day on which the cake is baked, and consists in adding the other ingredients, when the paste is worked thoroughly up again. The ammonia must first be placed in a cup, pour on it a few drops of cold water and stir it well, so as to form a thick paste, then mix it up with the rest. Then take a piece of the paste, roll it out into a cake, not over ¼ inch thick, and cut up into convenient sizes as desired. This done, put cakes on a flat tin (which must be greased beforehand) and bake from twelve to fifteen minutes in a hot oven.—Br. Columban, St. Mary's Abbey, Buckfast, Devon, England.

BEE

By Geo.

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BEES ON THE FARM

By Geo. W. Adams, Rowley, Mass.

After many years of practical experience, and knowing the farmer, his needs and opportunities as I do, this subject appeals to me as one of considerable importance.

There are few fields of profitable labor unworked in these busy days. Only last evening I noticed a heavily leaded advertisement for cast-off preserve tins, and the country side is scoured daily in search of bits of rag or metal. Profit from small things, utilization of waste is the cry, yet the farmer, the most prudent and frugal of our citizens almost entirely fails to seize the opportunity of taking at least a dollar an hour for a little time, to say nothing of the delicious and healthful food which he might so easily place upon his table through bee-keeping.

Now, this is a "condition not a theory." Not one farmer in a hundred has ever tried it, yet the few I have persuaded to take it up, none have failed, and none will.

I have been sharply criticized by some apiarists for "inviting so many into the business." They feared competition. A moment's consideration will show there is no danger of this. The increased use of honey will help, not hurt the market. Make the use of honey as general as it was 100 years ago, and the supply would not equal the demand, and, besides, I do not advise the farmer to start an apiary. I tell him plainly that every colony above five is a damage to him. Up to that number their care will not interfere with his regular work, neither will he need appliances and material the purchase of which will for a time

impair his per cent. of profit. Under this number he will not be likely to be troubled by thousand and one things in the way of complications, entomological and otherwise, that always come to the bee-master.

Here is the plan: An investment that taken one year with another will pay 100 per cent. net profit, and as no dealer or supply manufacturer has, or ever tried, to get a collar on me, I can and shall say just what I mean.

First, buy a good book on the bee and I cannot recommend "Langstroth revised by Dadant," too highly—it fits every place and is as interesting as a novel—then subscribe for The American Bee-Keeper, you will find it a great help and it will keep you "up to date." Read your books carefully and then decide on the kind of hive adapted to your locality. I assume you will produce section honey. Buy the best, I don't care what they cost if the workmanship and material are there. We are planning on 100 per cent. returns, not on a fixed sum, and you must have lots of experience before you can use a poor hive properly, and then you will know better than to try.

While I find the eight-frame the best for my apiary, I should be inclined to advise the ten-frame size for the farmer, as they winter more safely, and he will not lift, carry, or "tier up" enough to make the extra weight of any consequence.

In the matter of outer case, or chaff hive, there is the question of the amount of money you care to invest; anyone can make an outer case from old boxes, but the saving is not great and is often at the expense of the looks of the little apiary, which should be placed very near the house and be an ornament rather than a disfigurement. Also remember that it costs less than nothing to keep hives well covered with good lead paint.

Now buy a smoker, veil and gloves, the latter merely to prevent nervousness in the first work you do, after becoming accustomed to your bees put the gloves away for use in an emergency only, in ordinary work they are never needed.

You should also have a drone trap and learn its use in swarming. You will notice the outfit is not costly, and there is not a patented article in it. The patent on the drone trap, I am told has expired. I mention this to show the simplicity and cheapness of the stock in trade, not to advise making any of the appliances.

Now take a large piece of chalk and write upon the shop door, "I will try no experiments the first year;" and stick to that promise.

Next, you are ready for your bees, and two colonies will make a good beginning. Two, because one can help the other and save it should it get into bad condition from any cause except infectious disease.

It will be cheaper to start with two swarms rather than two colonies, and as your knowledge develops with the swarm, and as the examination of a swarm is less difficult than of a colony, and as a swarm stands moving better, and is less irritated thereby, it would be my choice for a beginner. The returns the first year will, however be as a rule, much less. In beginning be sure that every frame is movable, combs flat, free from drone cells and brace combs, and keep them so. Always have every frame so it can easily be taken out and examined.

You will do well to buy your bees of a bee master. He will show you the interior of the hive, instruct you how to open and examine it, will give you valuable information as to the time to put on and take off your supers, and points on the requirements and conditions of your locality. He will probably charge you more than a

farmer would and the goods will be worth more, but remember he is doing profitably many things (like the use of shallow hives) that it will not pay you to imitate. Study simplicity, and have absolute uniformity in hives and fixtures.

Learn to know your bees, go among them with slow and gentle movements, wearing when possible, light-colored clothing. Always use a little smoke and much common sense in handling them. Give the little people one hundredth the care you would give the same money in hens, remembering that the hen lives only to destroy and chuckles with glee over every successful effort to injure your garden, while the bee wears her little wings to tatters in her untiring effort to protect your harvest.

As to the best kind of bee, I assume that every practical farmer knows the value of well bred, gentle stock.

I have not touched upon the great benefit to the crops owing to the fertilization by the bee—it is more than equal to the profit from the honey, and is a subject of great importance. —"American Bee-Keeper."

Composition of Nectar—A controversy has been for some time going on in l'Apiculteur regarding the elimination of superfluous water in the nectar as gathered from flowers by bees, some maintaining that having hives on scales give false results. M. B. Spoerer reviews the controversy, and states that nectar, as collected by the bees, contains an excess of water, which they have to get rid of. He points out that in twelve kilos of nectar there are three kilos of water. When this has been converted into honey and evaporated to three kilos of solids there only remains one kilo of water as a constituent.

If a book bores you it's an easy matter to shut it up, but when a man bores you—well, that's different.

DYSE]

Translations
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article on the
of Hamburg.

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DYSENTERY IN BEES.

Translations From German Bee Journals, by Jacob Haberer, Zurich, Ont.

"Praxis Bienenzucht" contains a long article on the subject by Dr. Fellemus of Hamburg. He says that the first cause of this distemper is thirst, the second is poor ventilation, and the third neglect on the part of the bee-keeper. The amount of water in honey varies according to the season. In a dry season it will contain only from sixteen to eighteen per cent. water, in a wet season the average will run from twenty-one to twenty-three per cent. In wintering, honey of the former consistency, will cause thirst much sooner than the latter. If a winter follows with variable temperature the bees will be more restless than in an even temperature, and this restlessness increases thirst. He tells of his experiments along this line and recommends sprinkling the bees with lukewarm water as a remedy. Speaking of poor ventilation as a cause of dysentery, he blames too much packing, and the leaving of too small an entrance, thus shutting out the pure air, which he considers as essential for bees as for any other living creature. Some top or rear ventilation is necessary. About winter flights, the writer says the general belief is that the first cleansing flight will prevent thirst and dysentery, the latter may sometimes be the case but not always the former, if the ground is frozen. On the first bright day they will take flight, cleanse themselves in the air, and then drop down to the ground for a drink, here a great many will find their death; they will get chilled and will not be able to rise again. If the bees were watered in their hive this would not occur. They would not fly, but would fly back directly to their hive again.

Curing Fertile Workers.

"Leipziger Bienenzeltung" — Most bee-keepers know that it does not pay to treat fertile workers, but in certain instances it may be done successfully. Follow their nature as nearly as possible. The fertile worker colony knows that its condition is contrary to nature, they constantly prepare to raise a queen, they build queen cells, supply these cells with royal jelly even if they do not contain larvae, their whole energy is used to produce a queen. If you want to be successful in treating this condition you will have to follow their impulse—never give them a sealed cell, as they want to build their own, nor a queen, they want to raise her themselves, but give them an unsealed cell with a young larvae, and they will accept and attend to it. A young queen will be hatched and your colony saved.

(From the same)—"Expert bee-keepers in Switzerland say that no large apiary should be conducted without a hive on the scale. This will tell you when to add combs or foundation, to feed or to extract, and will keep you informed on many other conditions in the apiary."

(From the Same)—"Black Bees—In German, French, Swiss and Belgium Bee Journals, the old adherence to the black bee is quite noticeable still; whenever a change is wanted it is more to improve the black bee than to introduce new races, and to accomplish this is the aim at the present time, "and this is alright," remarks the British Bee Journal."

(From the Same)—"Produce More Honey:—More honey to sell is what we want. Wherever a grocery is opened we find artificial honey, and in any hotel you will notice artificial honey on the table for breakfast, and the waiter will tell you that the guests like it better than pure honey. It would be well to put the word "honey" under legal protection."

THE CANADIAN BEE JOURNAL

Devoted to the Interests of Bee-keepers.

Published Monthly by

Gould, Shapley & Muir Co., Ltd
Brantford - - - Canada

Editor, W. J. Craig.

Brantford, June, 1906.

EDITORIAL NOTES.

The O.B.K.A. executive are making early preparation for the annual convention. The committee met in London on May 4th. Secretary Couse promises a comfortable and commodious meeting place, and the following among the good things appear on the program: "Spring Management," by Mr. James Storer, Lindsay; "Fall Management," by Mr. Denis Nolan, Newton Robinson; "Wintering Repositories," by Mr. Wm. Couse, Streetsville; "Bee-keeping as an Occupation for Women," by Miss M. Trevorrow, Meadowvale; "The Production of Comb Honey," by Hr. W. H. Bowen, Niagara Falls; "How Many Colonies May be Profitable, Kept in One Locality," by George E. Saunders, Hornby; paper on selected subject, by Mr. Alpine MacGregor, Inglewood; addresses by Hon. Nelson Montieth, Minister of Agriculture; American guests and others. Discussion on apiary appliances, introducing queens, marketing of honey, etc. The convention will be held in Toronto on Wednesday, Thursday and Friday of the week of Fruit, Honey and Vegetable Show; probably the second week in November.

We had the pleasure of attending the Middlesex County Association meeting in London on May 5th last. There was a fair representation of members and a number of visitors, among the latter Mr. H. G. Sibbald, Claude, Ont., President of the O. B. K. A., and Mr. Wm.

Couse, Streetsville, Secretary O.B.K.A. Reports on wintering showed considerable loss among cellar-wintered bees. Those packed outdoors came through in good condition generally.

Mr. Alexander's system of helping weak colonies by placing them over strong ones, with a queen-excluder between, came up in discussion, and was favorably spoken of by a few who had tried it. Some instances of one of the queens being killed was attributed to the possibility of the queens attacking one another through the openings of the queen-excluder. Mr. Bainard, Secretary of the Association, advises the use of two queen-excluders, with a bee-space between, to prevent this. When the colonies are separated again the strong colony is removed to a new stand and the weak one set in its place, thus giving the weaker the benefit of the field bees from the strong hive. The plan should be an excellent one, if it works out as proposed. The two queens are laying at the same time, and the weaker colony derives the benefit of the warmth and bees from the stronger and builds up rapidly.

The Association expressed their approval of the amended Foul Brood Act.



The revised Apicultural and Arts Act may probably necessitate some changes in the constitution and by-laws of the Ontario Bee-keepers' Association.

The Act provides that the membership fee of each Association shall be decided by by-law.

The constitution and by-laws and any alterations therein must be approved by the Minister of Agriculture.

The number of directors, their representation of certain districts or classes of members and their mode of selection shall be determined by by-law.

The Minister may appoint auditors. Members who have paid up for the ensuing year can vote at the annual meeting, but the Association may de-

termine, by by-clection of Directors, to be paid at least at the annual meeting

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Lanark Co.

Bees are hold we only look f is killed out co

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Clover has bee ce. The frost he ground. B best, and the c crowned the cli to keep them farmers have ye grass for them. friends, both be re more fortun

Prescott Co.

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termine, by by-law, that to vote in election of Directors membership must be paid at least one week before the annual meeting.

Red and alsike clovers fared badly; scarcely any left in this locality. White clover has come through in fair condition and is beginning to bloom. Basswood is going to bloom very good, in fact a good promise, but you know there has been little or no honey from that source for several years lately. Abundance of bloom; abundance of showers.

Lanark Co.

Bees are holding their own now, and we only look for light crop as clover is killed out considerable.

Wm. Couse.

Peel Co.

The clover wintered well here, but there is not nearly so much as there has been during the last few years. Bees are in good condition and with favorable weather prospects are good for a fair crop.

Dennis Nolan.

Simcoe Co.

Clover has been badly killed by sheet ice. The frost went very deep into the ground. Bees wintered not the best, and the cold, backward spring crowned the climax; have to feed yet to keep them from starving; many farmers have yet to feed their cows, no grass for them. Hope my western friends, both bee-keepers and farmers, are more fortunate along these lines.

W. J. Brown.

Prescott Co.

Clover I regret to report is a perfect failure, our clover in this district has all been winter killed, also many meadows that were sown with timothy had to be plowed up, and re-sown with grain or Hungarian grass, so that the present prospects are not very encouraging. Our bees are in better condition than I have ever had them for big crop. I have tried the method suggested by Mr. Darling of placing weak colonies on top of very strong ones, also of placing two strong colonies,

one on top of the other, with an extra brood chamber for the top queen, every frame is full of brood and bees. I think Mr. Darling's plan is excellent for building up weak colonies. We are now feeding, after the fruit bloom, in hopes of new clover or basswood, or anything else that Providence may send our way.

John Flxter.

Central Experimental Farm, Ottawa.

The prize list of the Canadian National Exhibition, to be held in Toronto, Ont., August 27 to September 10, which is now being distributed, contains many changes compared with last year. In nearly every department there is a material increase in the premiums. In the horse department classes have been added for Welsh, Shetland and Hackney ponies, and the prizes in the first section of the breeding classes have in several instances been doubled. It has also been decided to award the premiums in the trials of speed on the three-heat plan, each heat to be considered a completed contest and the money to be divided according to the place won in each heat. The Dominion Short Horn Association, having increased their grant for prizes to \$2,000, the exhibition management have responded with a like amount, so that there is considerable expansion also in the cattle department. In the sheep division wether sections have been added to each breed of sheep. In this connection it might be mentioned that the management are making arrangements that will enable sheep to be judged under cover. In the poultry department a number of sections have been added, and the list has been increased by an extra number of specials. Several changes have been made in the dairy department, and the building is to be improved by cold storage. In the floral division a prize is added for the best and most original floral design. Several sections recommended by the Ontario Bee-keepers' Association have been added to the honey classes. Several sections have also been added to the women's and children's departments. The total increase all round amounts to close upon \$4,000, which means that the aggregate sum given in premiums by the Canadian National Exhibition is approaching the \$50,000 mark. Entries are set to close on August 4.

ANNUAL MEETING ONTARIO
BEE-KEEPERS' ASSOCIATION

Question—Do you find any trouble with the bees building queen cells while the queen is in another part?

Mr. Saunders—Yes, I have that to contend with, but I make it a point to handle those frames and rake the queen cells off.

Mr. Holtermann—There is a point that I admit I am very weak on. When the hive is in that condition, taking out the brood and putting in these combs or foundation, I do not succeed in having them filled with brood, and I don't want to divide up my brood chamber in that way.

Mr. Dickinson—I would suggest that you take out a frame out of a colony you want to hive with queen cells on.

Mr. Holtermann—We don't want to divide them up.

Mr. Pettit—We want to keep them all together in the hive without swarming. I have had fair success in putting foundation into the brood chamber, but I don't like to put in more than one sheet of foundation at a time.

The President—How often do you visit your yard?

Mr. Pettit—Once a week.

Mr. Holtermann—We are now dealing where the stock wants to swarm and you want to prevent swarming. When I reach the condition when there is a likelihood of swarming then I put a sheet in so as to prevent any swarming impulse. If your supers are not crowded that may prevent it, but if they are crowded I haven't been very successful.

Mr. Chrysler—I notice that people wait until the bees have the swarming impulse, and then they start to do something. Why can't we do some-

thing before that time comes? We wait until the disease gets started.

Mr. Holtermann—We want to keep our bees together as long as we can and not do anything we don't need to do, and when the cups are there it is time to act.

Mr. Pettit—If plenty of room and ventilation and shade are given for taking extracted honey, we don't find more than 25% of them at the outside wanting to swarm. I use Langstroth hives.

Mr. Alpaugh—I may say that I had a lot of experience in trying to break up a brood nest in order to keep it from swarming, and I find that taking a sheet in the centre is one of the worst things you can do. It will cause it to swarm, as the queen seems to be shut off. When I want to break up the nest I find to keep the brood together is much better. If you want to add anything, do it outside. If you want to add anything in the centre give clean old comb that the queen will accept at once. Next to that would be three or four starters. I find that the bees don't seem to want to swarm and leave the starters, but they will begin to build on the starters. But it is very hard to say what is best to be done. I wanted to ask Mr. Nolan if he finds from four to six inches of packing necessary?

Mr. Nolan—I think with regard to that, perhaps four inches of packing would be enough, provided it is good packing, but perhaps some people might use four inches, and it would not be good packing. Sawdust is no very good packing. We generally use chaff. Planer's shavings are good, but it is almost impossible to get them in country places. Leaves I don't know anything about. With regard to the swarming, the plan that I have tried to practise we found most satisfactory in some ways; that is, to move the brood from the brood nest

when you find the colony ready to swarm. I don't want to take medicine, and we don't want to divide the colony until we are ready to swarm.

super room and I don't think you can't do any thing but take them up and give them a new way. When you find them ready to build queen cells you can treat them by rearing a new brood.

I prefer removing the queen during the larval stages. It is better to do this in the larval stage than after the honey is stored. If you have a drawn comb in the brood chamber full sheets of foundation are not satisfactory. I think it is better to put them in between the combs towards the entrance. If you have empty combs, put them there. There isn't the brood in there because if you place the queen inside the queen is not there, and the bees will not accept them, and the bees will not accept honey in the brood chamber at the outside.

Member—How do you pack to entice his supers?

Mr. Holtermann—

I have had a piece of tin on the

back of the brood chamber and

it is very important to

the supers in order

to get the stocks operate.

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when you find the colony is preparing
to swarm. I don't think it is neces-
sary to take medicine until you are
sick, and we don't care to draw from
the colony until we find they are pre-
paring to swarm. Give them lots of
super room and keep them cool. If
you can't do any better, keep the cov-
ers up and give them ventilation that
way. When you find they have begun
to build queen cells, that is the time
to treat them by removing some of the
brood.

I prefer removing the brood in the
larval stages. It is not the brood that
is in the larval stage that is going to
eat the honey. If you have them, put
the drawn comb in the brood chamber,
but full sheets of foundation work very
satisfactorily. I think it is better to
put them in between the combs. Put
them towards the centre. In putting in
empty combs, put them in the centre.
There isn't the brood at the outside,
because if you place the brood on the
inside the queen is more likely to lay
them, and the bees are less likely to
eat honey in the centre of the hives
than at the outsides.

Member—How does Mr. Holtermann
utilize his supers?

Mr. Holtermann—In the back of the
hive I have had up to this year a
sheet of tin on the rear side, just to
slide it backward and forward. It is
very important to have ventilators in
the supers in order to prevent swarm-
ing. I will tell you the way I think
the stocks operate. We know that as
the bees come up to full strength in the
brood chamber it isn't a time to put
in your supers. Now instead of giving
the brood to the weak stock, I would
give it to the next strongest, and
that way equalize without any loss

of honey-gathering bees, because in a
8-frame or 10-frame hive there is a
strong honey-gathering force, and when you
fill them you have lost nothing
of your honey-gathering force, and go

on in that way until you have got them
all filled up. That is the way I get
my increase. I try to have laying
queens ready. I leave a nucleus and
leave enough young bees, and the
young bees will adhere to these, and I
would build up full stocks again. I
try to build up in that way, and keep
all my honey force ready for honey-
gathering, and in this way I think
we get good results.

Mr. Byer—What I had to say was
much along the line of Mr. Holter-
mann's remarks. In Mr. Nolan's pa-
per it was mentioned about equaliz-
ing stocks on the second visit. In my
experience I find that a dangerous
practice. I find it far better to leave
the colonies intact as much as pos-
sible. If I have an extremely strong
colony it is an excellent thing, but it
is a lot of work. I have been in the
habit of adding an extra story, but if
I used a single hive I would put it
underneath, and I would allow the
queen the full run of those combs, and
I build up my colonies at the begin-
ning of the flow, so that we have our
honey bees ready when the flow comes
on. If the weather turns cold you will
have some chilled brood.

Mr. Holtermann—That is a strong
point. In building up your next strong-
est colony you run no danger.

Mr. Byers—Don't you find a danger
of having a strong colony swarm right
in the honey time?

Mr. Holtermann—Not if you take
them in time,

Mr. Hirschiser—Quite a number of
years ago—I think it was at a meeting
of the Canadian Bee-keepers, I advo-
cated something like Mr. Holtermann
says, but a good many of the old bee-
keepers thought that wasn't a good
plan. They thought it was better to
equalize by giving to the weaker col-
onies.

Mr. Holtermann—I don't claim these
are my own ideas. I pick up a thought
here and a thought there.

Mr. Hirschler—There is one point that Mr. Holtermann didn't bring out, and that was in building up the medium colonies instead of the weakest. Supposing you have a good queen in a weak colony and the season comes along, and there is not enough bees in there to take care of the brood that that queen naturally produces, so that in that case we actually gain in the apiary by taking a frame from that weak colony and taking it to a strong colony that can take care of it, and it leaves that colony we have taken that frame from in better condition. I find I can build up an apiary in bad condition by taking from the very weak and building up the medium, because we give that good queen in the weak colony a much better opportunity.

Mr. Saunders—What do you mean by sufficient super room?

Mr. Holtermann—Well, there is a point that I see in the prevention of swarming. A queen will lay and there is a certain amount of increase going on, and if you have a limited worker force in proportion to your brood chamber, then the worker bees are not dying off nearly as rapidly as the increase is going on, but as you increase your working force the proportion of dying bees is greater than with the more limited brood chamber, and you can get that condition where your brood is going on at a certain rate, and if the two balance one another as nearly as possible you can then control the swarming to a certain extent.

Mr. Saunders—How much does each super hold in honey?

Mr. Hirschler—About 80 pounds.

Mr. Holtermann—We don't extract till the close of the honey season, as in that way you don't give the bees the same violent stop as you do by taking out the honey every now and then.

Mr. Dickinson—I take no honey when the honey season is on except from

the second super, and I endeavor to have that taken off when it is ripe.

Mr. Armstrong—I think that is a good point that has been brought out. I have tried that myself. I used to think just as soon as a super is ready off it must come. I used to think that but that disturbs my colony of bees and it won't do the work it would. If you place a super with no honey in it it doesn't disturb them, and you don't stop the working force at all.

Mr. Lowey—I like to leave the honey just as long as possible for the sake of the honey. Even comb honey, I favor leaving it as long as possible. It is a better flavor.

Mr. Whiteside—It seems to me there could be some convenient way of diagnosing a hive that would save a lot of trouble. We must go over 60 or 70 hives a day, and if we raise the cover on one and see cups, and raise another and see them there, that should be all we would need to see. If we could get in a way of diagnosing the yard and looking at one or two would save a lazy fellow like me a lot of trouble. I think we can tell pretty near the condition of a hive by looking at one or two combs.

Mr. Holtermann—If you have a spot that is near the centre of the brood chamber and you look at that spot that brood is all right, but in an ordinary hive you simply look on one or two combs, I find it is a mistake. The President—I see Mr. Bowen of Niagara Falls, and perhaps you would say a word or two on the subject.

Mr. Bowen—Mr. President, of course controlling swarming in comb honey and extracted honey is an entirely different thing. I run only a small portion of my apiary for extracted honey, perhaps ten or fifteen per cent of the number of colonies. I was under the impression that you extracted

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Mr. Holtermann—

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The President—V
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the discussion,

I endeavor to honey men had no swarms. This year I didn't have a sign of swarming. I think that is a had a good crop. My average between when brought out comb and extracted was between \$0 self. I used to and 100 pounds per colony, and four- a super is ready-fifths of that or more, was comb ed to think that honey. I ran some of my best colonies colony of bees for extracted honey this year and they ork it would. I didn't swarm. I built them up four ith no honey in supers and four brood chambers in an n, and you don't eight-frame Langstroth, a regular e at all. Langstroth frame, and these hives

to leave the honey would be full of bees but there would be no swarming. There are some of ble for the sake of them that are pretty nearly pure Ital- comb honey, an, but most of them are a cross, ng as possible. aybrids, a greater percentage of Ital-

seems to me that I know how to prevent swarming. I nient way of diagn can't do it unless I divide them up ould save a lot artificially. That is the only way. go over 60 or I don't do anything particularly. Give we raise the cover them ventilation. I have a large ps, and raise the entrance, and I give no ventilation in there, that should be back at all, neither top ventilation ed to see. If I or back ventilation. My apiary y of diagnosing stands in an orchard under large at one or two the trees, but some I left for extract- flow like me a lot honey are in the sun. The flow ran e can tell pretty about five weeks this year but it of a hive by look doesn't do that always.

combs. Mr. Holtermann—You have a very

If you have of the locality.

the centre of the President—Is there much time you look at the between the fruit and the clover that all right, but in between the fruit and the clover that here is no honey coming in?

simply look on ed Mr. Bowen—Usually about two id it is a mistake eeks. After the bloom there is noth- I see Mr. Bow but the clover.

and perhaps The President—If the fruit bloom or two on the sags along till the clover then they

are pretty hard to hold.

President, of cou Mr. Bowen—This year there was just ing in comb honey e enough between the fruit bloom ey is an entirely d the clover flow for them to use up in only a small p the honey they had in the hive. In apiary for extrac t I was contemplating feeding.

at fifteen per ce The President—We have been very colonies. I was ased with Mr. Nolan's paper n that you extrac the discussion, and we would like

to continue, but we must pass on to the next item on the program.

I will now call upon Mr. R. Lowey of Cherry Valley, to read his paper on "The Production and Care of Comb Honey."

In the production of comb honey colonies must be strong in bees and brood at the beginning of clover bloom. As soon as the first blossoms appear put on one super of clean or new sections filled with thin super foundation and with separators. As soon as this is about half-filled, if well covered with bees, put another super under the first; when these are about filled, and prospects are still good for some days, put a third super on top of these. When well started in this last super, the first two will likely be ready to take off, after which, if prospects are good for a continued flow, put another under; if likely to close before both are finished, and bees need room put it on top. Should there still be prospects of continued flow from clover or basswood, continue as before—put a third on top. I do not think it advisable to put more than three supers on at any one time.

Thus far it is assumed that bees have not swarmed. Where they swarm—and usually 50 to 75 per cent will do so in producing comb honey—hive them, two and sometimes more, swarms together on four drawn combs or full sheets of foundation; fill up the balance of the hive with dummies on the old stand, first putting the supers from the old hive on the new, with a queen-excluder under. Turn the old hive around and set it a little way back. In the evening turn it around and set it alongside the swarm on the right hand side. If increase is desired, move to a new stand the sixth day and they will seldom swarm again during the season. In about three weeks examine them to see if they have a laying queen; if so, and quite

strong in bees and prospects are good for a fall flow, give them an extracting super with four or five combs; fill up the super with dummies, and they will, if the season is good, give quite a little surplus. Give the queen room below for brood.

Where increase is not desired, in about two weeks after the swarms are hived, fill up the hives with the bees and brood from the colonies that have swarmed within seven days, first cutting out all queen cells. If there are still more colonies than you want double up by shaking all the bees from any number of colonies into one, with a young laying queen, until they are strong in bees. You can then give them a super of sections or extracting combs as you wish. Place the remaining combs of brood and honey in extracting supers over the colonies weakest in bees you have in the yard. The young bees hatching will strengthen them, and any honey stored in them, or already in, will come good for feeding in fall or spring.

As soon as all or nearly all, the sections in each super are capped they should be removed from the hive by raising up and putting a board with a bee-escape under for a few hours—not more than about 12 hours—when most of the bees will have gone out. The supers should then be carried into a room with hone window, to which any remaining bees will fly, when the window may be opened, and the bees will return to their homes. Any bits of comb on the bottom of the supers should be scraped off.

Now, as to the care of comb honey: The supers should be piled up as high as convenient, say about 15 high, outside on the ground, with an empty super under. Place in a dish on top a few tablespoonfuls of bisulphide of carbon. Cover up tight for about 12 hours, and it will be safe from any damage from the wax-moth.

The honey should then be carried into a warm, dry room, and piled so the air can circulate through it for two or three weeks, or until you are ready to clean it up and pack for market.

Mr. Pettit—Mr. Chairman and Gentlemen: I have been very pleased with Mr. Lowey's paper. He has given us quite a full description of the method of taking comb-honey in almost every respect, and it tallies with the method which is commonly used. Mr. Lowey mentions using dummies in taking extracted honey. I can't see any use in that because I like to get as much room in the brood chambers as possible. Then in putting on section we find in many cases where they are very strong it becomes necessary to put on two supers. Mr. Lowey only puts on one. That is a point that is important because there are many colonies that are so strong that if we put on only one they will not go up at first.

Mr. Lowey—I sometimes put on two myself. I spoke of the dummies with reference to colonies that have swarmed and are weak.

Mr. Pettit—In the matter of putting on the third super Mr. Lowey puts it on top. That is all right where it is near the end of the flow. Of course you want to get the third super on before the others are entirely finished and of course the work is stopped in the other ones, until the last one put on is in that stage; the idea is to give them room to work. "Swarming hives for comb honey on drawn combs." That is one opinion which I would like to differ very strongly. I have tried this and in every case where I tried it in a short time we find the queen cells ready for swarming. I think it was Mr. Sibbald who mentioned in one of our conventions, the hiving swarms in this order, first starters, next full sheets of foundation, and drawn combs as a last

sort. In taking a different method to putting together, that swarms are not of the main comb honey is before they are to be. I don't know much more for that in my experience honey and extracted honey, I am more anxious to get together in taking rule, they swarm work done in breaks them up a very difficult and get any kind

Mr. Pettit—O when in the section make that all and a queen excluded is as impossible

Mr. Lowey—V but we find the loaded bees go with them as w

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sort. In taking extracted honey it is a different matter. Then with regard to putting two or more swarms together, that is a good point if your swarms are not very strong, and one of the main difficulties in taking comb honey is that we get swarms before they are as strong as they should be. I don't know that there is very much more for me to mention, except that in my experience of taking comb honey and extracted honey every year I am more and more in favor of extracted honey, for this reason, that it is impossible to hold your stock together in taking comb honey. As a rule, they swarm before there is much work done in the sections, and this breaks them up, and in out-yards it is a very difficult matter to control them and get any kind of results.

Mr. Pettit—Of course as to the pollen in the sections it is very easy to make that all right. We use a comb and a queen excluder. The queen excluder is as important as the comb.

Mr. Lowey—We use queen excluders, but we find them useless. The pollen-loaded bees go through just as quick with them as without them.

Mr. Armstrong—Is it necessary to fumigate the comb honey?

Mr. Hall—Sometimes very necessary.

Mr. Armstrong—Is it necessary to fumigate it as soon as you take it off? And if it has never been exposed you never need to fumigate.

Mr. Lowey—I have had comb honey where there was no pollen, and there were these little floury spots, and I think that if you wait too long the damage wouldn't like honey to go out with it will be done.

Mr. Hutchinson—I made an experiment along the same lines as Mr. Lowey spoke of in his paper. I had a swarm on drawn comb, and I connected the brood nest to about six frames, I tried another on comb founda-

tion, and I tried another on starters, and I went over them again alternately until I had six or seven swarms each way, and the prospects were so poor with those that were hived on the drawn combs that I quit it. They filled them up so quickly, and after they got that done they seemed to think that they had the job completed, while the ones that were working on the comb foundation were piling the honey up. Then I kept on till about the end of the season and hived about 15 on starters and combs. There wasn't very much difference between those, but what difference there was was in favor of the starters. When you hive a swarm that way and contract the brood nest they have got to build comb. There is a lot of honey coming in, and they go right up to the super and start in it, and you will have a brood nest that is a brood nest and supers that are full of comb honey. I tried that for several years, and I satisfied myself that it was better to have starters.

On the subject of pollen, when I put the supers over from the old colony to the swarm, and those combs had honey in them, they didn't put any pollen in them, but when they were empty combs then they put the pollen up above. That is how it worked out with me. About the moth trouble. I never had to fumigate any comb honey and never have seen a moth. Without the pollen there is no trouble with the moths.

Mr. Pettit—Mr. President, I have had experience with producing and handling comb honey for 15 years, and have drawn out a good many sections, and have never had any complaints from the buyers that there were moths. I would like to ask Mr. Hutchinson if he found any difference in the hives with the foundation and those with the combs in the fall.

Mr. Hutchinson—I weighed the

combs and the colonies, and, I can't give the reason, but the ones that had the starters weighed the most.

Mr. Holtermann—And the least number of bees?

Mr. Hutchinson—I don't know about that.

The President—You will understand that Mr. Hutchinson was after comb honey, not after increase.

Mr. Hall—But we can't get it in old shape and Mr. Hutchinson does.

Mr. Angulsh—Mr. President, it is honey we are after, and I think we can get as much out of comb honey if we handle it right. My practice is the same as Mr. Hutchinson's—hiving on starters and working for comb honey. I raise comb honey. At one time I quit the comb honey, but I have gone back to it again. I have no trouble with the moths. If you keep out the pollen you will have no moths.

Mr. Smith—In Mr. Hutchinson's experiments, does he try to get a brood nest that would have to be melted up in the fall? My experience is that we have to replace those combs if we want combs fit for the next season.

Mr. Hutchinson—We get some drawn comb. My theory of the matter is that so long as the queen can follow the comb builders, or keep up with them, all right, but if the brood nest is so large, and they don't get it filled with comb, and she comes back while they are building on the outside, or if the queen is old and she doesn't lay fast enough, the combs will be imperfect: that is the way it works out; but a young queen and a good swarm and hived on Langstroth combs, and you will get as nice combs as you will get anywhere.

Mr. Smith—I think we have a larger amount of drone comb when the flow is lighter.

Mr. Sibbald—My idea is that if we get cool days and the bees go down below, and get out of the supers al-

together, and build drone combs, but when we have regular warm days we get them up in the sections.

QUERIES and ANSWERS

Question:

1. How are queens raised?
2. How are they mated, and how are they kept till needed?
3. Have you to have a nursery.

I should like very much to be able to raise my own queens. I believe we should re-queen more than we do.

I. H. Walton, Peterboro, Ont.

Answer:

There is no better time to raise queens than during a honey flow or in the swarming season. Good queens can be raised by removing the queen and all unsealed brood from a strong colony, and within twelve hours afterwards giving them a comb or preparing cells containing larvae not more than three days old from the stock you wish to breed from. If honey is not coming in freely the colony should be fed.

In about ten days the colony can be divided into nuclei with a queen cell left in each, and any surplus cells may be placed in nuclei or queenless colonies previously prepared, and if the weather is fine the queens will fly and be mated and will be found laying within a few days.

Another plan is to cut out the sealed queen cells and put them into a nursery to hatch, and afterwards liberate them in queenless colonies or nuclei to be mated.

R. H. S.

We all may learn to hold a pen
When we are very young.
But he's the cleverest of men
Who learns to hold his tongue.

—Catholic Standard

BEE-KEEPING

Italian

Editor C. B. J.

Dear Sir,—I have a valuable paper on a small scale, information from some of the best

I commence a Black colony in toba for \$10, a I now have s but one, or Ita nologists. So fa mate not well i the seasons a changeable.

Bees will be commence to b May the we ain all month, nearly all the f e a good mon et that everyt urn brown wit old bee-keepers means to their ay be a beauti October and No ill be flying up er working on When the bee arly all the o e young bees l duced the fence them after a eather, the old eir usefulness ere better to re mber the colon wnter.

Colonies put in last of Novem about losing a y little stores. here. They v ans will be w using a small p

BEE-KEEPING IN BRITISH COLUMBIA.

Italian vs. Black Bee, Etc.

Editor C. B. J.:

Dear Sir,—Being a reader of your valuable paper, and a bee-keeper on a small scale, I thought a little information from the West would interest some of the bee-keepers in the East.

I commenced bee-keeping with a Black colony purchased from Manitoba for \$10, and paid \$5 for express. I now have six colonies, all Italians but one, or Italians crossed with Carpatholans. So far I have found the climate not well suited for bee-keeping—the seasons are too long and too changeable.

Bees will be flying in February and commence to breed. Perhaps in April or May the weather will turn cold and rain all month, and the bees will miss nearly all the fruit bloom. June may be a good month, then July turn so hot that everything will dry up and turn brown with the heat of the sun. All bee-keepers will realize what this means to their surplus. September may be a beautiful month, and perhaps October and November, and the bees will be flying up until first of December working on the fall flowers.

When the bees are flying so late nearly all the old bees are dead and the young bees left to winter. I have noticed the fences with bees sticking to them after a last fly before cold weather, the old bees thinking that their usefulness was gone, and they were better to remain out and not encumber the colony with their remains in winter.

Colonies put into the cellar strong last of November will come through without losing a dozen bees and using very little stores. Black bees are no use here. They will be idle while the Italians will be working; they will be using a small piece of brood an inch

square while the Italians will have one or two combs partly full; the Italians will be out an hour earlier and an hour later. Black bees make excellent stay-at-home people and watch a chance to rob some work colony.

T. S. GILL.

East Kootenay, B.C., May 29, 1906.

[Glad to hear from you, friend Gill, although your report of bee-keeping in the West is not very encouraging. Your experiences with the Blacks would go to prove that they are not well suited to your climate or location, but you will remember that there are good and poor strains of Black, just as there are good and poor Italians. One of the colonies that we had the best results from in honey-gathering last season was a thoroughbred Black, and we would not mind if we had a few hundred colonies like it this season. Personally, have considerable sympathy for the old race; they have scarcely been fairly treated. Had as much care been taken in their selection and breeding as has been with the Italians, their character and reputation would probably be every whit as good.—Ed.]

SOME HONEY CURES AND RECIPES.

D. M. M. in the British Bee Journal, gives the following very interesting list of honey cures and recipes which might be profitably entered in the bee-keeper's housewife's recipe album:

Many bee-books give a few recipes for using honey as an ingredient of food, etc., and a very few mention it as a means of curing some of the many ills that human flesh is heir to. I have purposely abstained from digging into these books, but have picked up a few items at odd times, which I have grouped together without method, and now submit to Journal readers. I think this feature of honey production should be much more extensively dealt with than it is. In fact,

I fear it is being gradually neglected. Hereabout it is believed to cure sore throat, chilblains, chapped lips, bad sores or ulcers, burns, scalds, rough, cracked hands, and many other minor ills; while as an ingredient in the preparation of cakes, drinks, etc., its use is extensively believed in and advocated.

Honey Shoe Blacking—Add lamp to inferior honey to such an extent as will allow the mass to be well stirred. Warm until softened and put in boxes. This preserves its gloss for a long time, prevents cracking, and preserves and softens the shoe leather.

Honey in Infant's Food—At first the child had half milk and half honey, liquified with water. Then four parts milk, one part honey, with a little water. The child grew strong and plump and never had a single pain, while it slept soundly the whole night long.

Preserves—Use two parts gooseberry jelly to one of cheap honey. Boil on slow fire for half an hour. Skim off any froth. If carefully put up the jelly will keep fresh for a very long time.

Honey for the Brain Worker—A well-known author, acting on the advice of his doctor uses honey largely, and has amply proved by experience that in doing heavy brain work there is nothing better for the system than honey.

Honey Drops—Mix one-third cupful of extracted honey, teaspoonful butter, an egg well beaten, small cup flour, add some baking powder and a pinch of salt. Drop from a spoon on a tin and bake in an oven.

Insomnia—When troubled with sleeplessness, rise and take a spoonful or two of honey, and sleep soon comes. For one troubled with this trying affliction, a light supper of bread, honey, and milk will be found soothing.

Honey Tea-Cake—Use one teacupful

extracted honey, half cupful thick sour cream, two eggs, half teacupful of butter, two cups of flour, small half teaspoonful of soda, one cream of tartar. Bake in oven until ready, and serve, if possible, while still warm.

Summer Drink—Take six gallons of water, 10 pounds of honey, and the white of three eggs. Boil one hour, and then add some cinnamon and ginger. When cold, add a spoonful of yeast. Stir the compound well and lay past for a day, when it will be ready for use.

Honey Lemonade—Proceed as in making ordinary lemonade, but use honey instead of sugar. The flavor will be found much improved, and the effect very refreshing.

Honey for Dyspepsia—Take a glass of boiling water and stir in it four tablespoonfuls of honey. Drink while hot, just before retiring to bed. It will promote sound sleep, good digestion, free action of the liver and kidneys, and cure nervousness.

Honey Salve—As a cure for boils and carbuncles, mix together pure honey and oil, making it into a stiff paste; spread on a cloth and lay on the sore, renewing every 12 hours.

A good freckle cure is the following: Eight ounces of extracted honey, two ounces of glycerine, two ounces of alcohol, six drachms of citric acid, and 15 drops of the essence of ambergris.

A Cure for Asthma—In a medical work I find it recorded that a doctor ate some ounces of honey every day for two years, and got entirely free of his asthma. Before this he had tried every known cure without securing relief.

Honey Massage—Take the yolks of two eggs, two ounces of ground blanched almonds, two ounces of almond oil, and four ounces of extracted honey, and make a paste, which rub on hands, arms, and face.