

THE
CANADIAN
BEE JOURNAL

Vol. 18, No. 8. AUGUST 1910 \$1.00 Per Annum



PUBLISHED BY
THE HURLEY PRINTING COMPANY.
BRANTFORD, CANADA.

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National Bee-Keepers' Association

(Organized in 1870.)

Objects.

1. To promote the interests of bee-keepers
2. To protect and defend its members in their lawful rights as to keeping bees.
3. To enforce laws against the adulteration of honey.

Membership Dues.

One dollar a year.

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Are you a member? If not, why not send the annual dues of \$1.00 at once to Treas. France, or to the office of the American Bee Journal, 136 W. Superior St., Chicago, Ill.? It will be forwarded promptly to the Treasurer, and a receipt mailed to you by him. It is the desire of the officers to increase the membership to 5000 by the end of 1910. Every progressive bee-keeper should be a member of this, the greatest bee-keepers' organization in America.

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The Canadian Bee Journal

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The Canadian Bee Journal

Brantford, Canada

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Nothing is more acceptable as a gift at any season than a good Fountain Pen. The above illustrates a pen that is fully guaranteed to us and that we can therefore warrant to give satisfaction to any one receiving it from us. We are giving it free to all new subscribers to the Canadian Bee Journal who remit us \$1.35 for one year; and to all old subscribers who send us a two year renewal for \$2.00 in advance.

The Canadian Bee Journal

BRANTFORD, CANADA

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JAS. J. H

Vol. 18, No. 8.

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Next month will be ing for winter stores. to one part of water syrup for winter food. that the addition of tary. We have never granulation.

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It is to be hoped that honey will this year be tional Exhibition, Toronto be in attendance on Pr to meet a number of friends. The sale of h increasing. This exhibi did opportunity of kee public.

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August, 1910

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CANADA

The Canadian Bee Journal

PUBLISHED MONTHLY

JAS. J. HURLEY, EDITOR, BRANTFORD, ONTARIO, CANADA

Vol. 18, No. 8.

AUGUST, 1910

Whole No. 546

Hives with exhausted queens should be furnished with new laying queens this month.

* * *

The rains during July and August have very materially effected the late flow of honey. White clover and sweet clover have been yielding right along up to the opening of buckwheat.

* * *

Next month will be the month of feeding for winter stores. Two parts of sugar to one part of water makes a splendid syrup for winter food. We do not think that the addition of tartaric acid is necessary. We have never had difficulty from granulation.

* * *

It is to be hoped that a good display of honey will this year be made at the National Exhibition, Toronto. We expect to be in attendance on Press Day, and hope to meet a number of our bee-keeping friends. The sale of honey is constantly increasing. This exhibition offers a splendid opportunity of keeping it before the public.

* * *

We have to express our thanks to the editor of the Irish Bee Journal, Rev. J. G. Digges, for a copy of the last revised edition of *The Practical Bee Guide—a Manual of Modern Bee-Keeping*. The book is a fine production of the typographical art, and is a credit alike to its author and publisher. It is one of the most practical and up-to-date publications on the science of apiculture that we have read. It is a perfect encyclopædia of bee

knowledge, and no bee-keeper can have read the last word on bee-keeping who has not perused its pages. Copies may be procured at this office. Paper covers, 75c.; cloth, \$1.00.

* * *

The Honey Crop Committee Report will be found in this issue. It is to be hoped that the bee-keepers will try as far as possible to realize the prices there set forth. It is a pity that we could not present it sooner. In future it ought, if possible, to be arranged to have the report ready the latter end of July. We could then arrange to have it appear in the July issue. Mr. Hodgetts has mailed all members of the Association a copy of the report. The members, therefore, will not suffer by the lateness of its appearance in the C.B.J. There are, however, a large number of C.B.J. readers who are not members of the Association, and it is to these that the report would be particularly helpful. We trust that this matter may be arranged next year.

* * *

Here is something new. At least it is new to us. Have any of you been aware of it before? A tablespoonful of glycerine to one gallon of honey will prevent it from granulating! Stir it a little and it will be found perfectly soluble. No need to boil or heat your honey hereafter for the purpose of preventing its solidification. This addition to the honey can in no way injure it. When you have a customer who wants his honey to remain in a liquid state, here's your remedy. We have this on the authority of a first-class chemist, who has sold honey in his drug store, and

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has by this means kept it in liquid form for ready sale. We cannot remember of having read this in any bee literature. But we do remember of discussions upon the question of granulation and how to prevent it. Heating the honey was the only remedy proposed. But this was objectionable owing to the discoloration of the honey. Here is a simple remedy within the reach of everybody. It is surprising what glycerine will do in this respect. In our own business we can mix ruling inks with glycerine—and lo they are transformed into copying inks. It is absolutely safe. You need have no fear in trying it.

* * *

The editor of the American Bee Journal has very kindly sent us the following. The explanation is eminently satisfactory; in fact, we regret having referred to the matter at all:

"On page 199 of the Canadian Bee Journal is quoted an item from the American Bee Journal, which ends by saying: 'Possibly the friction between these two Canuck leaders may throw a spark of light on this vexed question.' Of this you say: 'It is a veiled insinuation that our objection to the twelve-frame hive is not sincere, and taken merely to be opposed to Mr. Holtermann.'

"Please believe me that there was not the slightest thought of any want of sincerity on your part, or of any lack of friendliness between yourself and Mr. Holtermann. The whole trouble comes from the unfortunate use of that word 'friction.' There is no excuse for its use except ignorance, which a little study of the dictionary would have dispelled.

What was really meant was a conflict of views with no unfriendly feeling, and the desire was sincere that a discussion of the matter would bring light.

"You intimate a desire to know the 'opinion' held in this quarter as to the twelve-frame hive. That's just it. That opinion is so little matured that it was hoped that a Canadian discussion would help to mature it. But the opinion of an eight-frame hive is that no one should use it who does not give very close attention to his bees. Even for one who gives

closest attention, a ten-frame hive is better for extracted honey, and possibly for comb honey.

"Now if you will forgive the ignorance of the past, you may rest assured that no more friction shall be engendered by a wrong use of the word 'friction' in the future.

"THE OFFENDING EDITOR."

Questions and Answers

BY THE EDITOR

Did He Have Foul Brood?

A friend presented me with a copy of your July number and I was interested to find the article "Disinfection of Hives," as I had some years ago a very hard fight with foul brood for several years, but without success so far as to make a complete cure of even a single hive. I commence on the McEvoy principle and not only did I follow it out faithfully, but I even went so far as to repeat it twice in succession with a number of hives, and even so far as to give the bees barely time to store up for the winter, and then on examination in October found them spotted with foul brood.

One season I left about 60 pounds of foul brood honey in a board and batten building safely locked up as I thought, combs and all, for future treatment, and while absent for a few days of hot weather, the boards warped and let the bees take away all the honey. And with all my horrible anticipations for the coming spring no evil came of it, for there was no greater proportion of my bees affected than any of the other seasons. If the disease is propagated through the honey I was not able to prove it. I found it necessary to destroy all the bee products and boil the frames and, of course the wax; piled up the empty hives and burned straw in them, scorching the wood slightly. There was no bad results from using these hives in another apiary.

A peculiar thing. brood is the fact that show every day of hive may be doomed. inspector came over bees one day and though I had fought several years, and about wiped out that same and more comfortable hive as you discover

Weston, Ont.

[We are of the c have American foul tor did not know his Foul brood germs a honey. This fact is all doubt. They can, by excessive heat.]

A Good Winter

Could you give a d of a good wintering c ter a few bees outside experience. I had twelve 10-frame Lan clamp or case close to each of four different smaller case, holding convenient. In a h prominent beekeeper understood him to sa of Claude, had a very holding four hives—t —do you know anyt would you think of th

[Bees can be winte kind of a case, or box the rain and keeps the packing should be at inches at the bottom, six inches at the top a of the hive where the bees to pass in and more than three inch more would do no har

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EDITOR

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A peculiar thing that I found in foul brood is the fact that it does not always show every day of the week, though a hive may be doomed. As an instance the inspector came over and examined my bees one day and declared them clean, though I had fought the disease for several years, and about the last fifteen were wiped out that same season. It is better and more comfortable to destroy each hive as you discover the disease.

J. J. DALTON.

Weston, Ont.

[We are of the opinion you did not have American foul brood. Your inspector did not know his business very well. Foul brood germs are conveyed by the honey. This fact is established beyond all doubt. They can, however, be killed by excessive heat.]

A Good Wintering Case?

Could you give a description in C.B.J. of a good wintering case. I have to winter a few bees outside, and have had no experience. I had thought of putting twelve 10-frame Langstroth hives in a clamp or case close together, three facing each of four different ways, but perhaps a smaller case, holding less would be more convenient. In a hurried chat with a prominent beekeeper a few days ago, I understood him to say that Mr. Sibbald of Claude, had a very fine wintering case holding four hives—two facing each way—do you know anything of it? What would you think of the dozen clamp?

NOVICE.

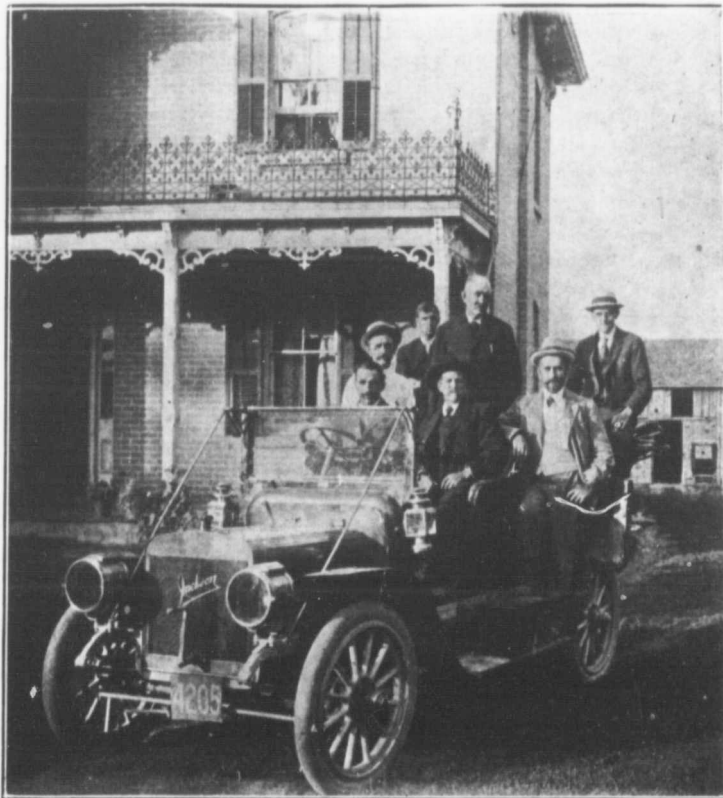
[Bees can be wintered outside in any kind of a case, or box, provided it sheds the rain and keeps the packing dry. The packing should be at least three to four inches at the bottom, and not less than six inches at the top and sides. The front of the hive where the bridge is placed for the bees to pass in and out, need not have more than three inches of packing, but more would do no harm. We would not

advise the packing of more than four in a case (or clamp as it is sometimes called); our choice is to have only two. One in a case is the ideal method. When looking after your bees in the spring you can examine one without disturbing the others. We have noticed however, that each beekeeper will work out his own pet plan, the kind of case, and how many there should be in a case. Anything from a drygoods box of ample size to a well-made case will answer the purpose, if sufficient packing is given, and the same be kept dry. Forest leaves are good packing. Very fine planer shavings are also good packing. Being of wood and containing large quantities of air they will take up the moisture that escapes from the bees, thus keeping them dry, while at the same time the heat is not conducted far from the bees. When this bed of shavings is once heated it remains heated all winter. Tar paper makes good roofing, but is only good for one season. Asphalt roofing is much superior and more lasting. Mr. Balmer of Burlington, has a splendid winter case. It is automatic and adjustable. The sides and roof are all collapsible. These are removed in the spring and the hives are left just where they are, the bottom serving as a platform for the bees during the summer. If you are about to build permanent winter cases you might do worse than follow his example. We do not know what kind of winter case Mr. Sibbald uses, but we have no doubt he will have a good one. Bear in mind, however, that a costly case is not necessary. One other suggestion occurs to us, and which we would strongly recommend: Make your winter case deep enough to allow a super to be placed on the hive in the early spring before being removed from the packing, and without in any way interfering with your cover. If you do this you can put a super on a strong colony as early as it may need it some time before fruit bloom, cover it up, and keep it

from all wind, rain and cold or stormy weather. Your bees will be like "a bug in a rug," and will go on breeding with ample room till the opening of the clover flow, when they may be taken from the case and the hive given a second super. The use of this super will also be found very useful in the spring for feeding purposes.—Ed.]

NOTHING BUT A MILLION.

Nothing but an attendance of a million will satisfy the management of the Canadian National Exhibition this year. And with the Grenadier Guards band, aeroplanes, Model Military Camp, the greatest fireworks programme ever prepared and a hundred other special attractions they should get what they've long been after.



Mr. Balmer, of Burlington, made his promised second visit in his auto, to the home of the Editor. The above picture is the result of Mr. White's manipulation of the camera. In the front seat is Mr. Balmer, who is hatless, and Mr. Shaver of Cainsville. On the step in the foreground is Mr. J. W. Clark, of Cainsville, while your humble servant is on the steps on the opposite side. Mr. McEvoy is standing at the rear with one of his sons at each side. And last, but not least, is Mr. White, whom you must see with your mind's eye at the camera.

When we hurriedly for the July issue of the Editor's ideas on expected to be criticized for a foot-note at the end of the article printed. But instead of holding a whole "leg" in which the writer indulges in absurd opinions, of his ideas about feeding use of metaphors—but enumerate all the fail they are so vividly presented to the utter writer.

In all seriousness over the article in question I am very sorry for two places for having taken a quote from a private letter as I did, without first to allow me to do so usually never do—in fact other instance unless article where I also quoted bald. It was done without matter any thought, as I am sure the writer think the quotation was take an unfair advantage. With this explanation I believe that Mr. Adams at this time; in fact, I for he is too good-natured motives on the part of such were given, and thought never entered second place it is up to Mr. Hurley for "at from his letter, although had been given correct would have been done, mentioned. Mr. H.

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SPRING FEEDING.

A. Further Installment on this Interesting Subject.

Indexed

J. L. Byer.

When we hurriedly wrote off that stuff for the July issue of the Journal, knowing the Editor's ideas on the subject, we fully expected to be criticized by him, and looked for a foot-note to be pinned on at the end of the article when it was printed. But instead of a foot-note, behold a whole "leg" instead, was added, in which the writer is accused of holding absurd opinions, of being "mixed" as to his ideas about feeding bees, and in the use of metaphors—but why continued to enumerate all the failings ascribed, when they are so vividly portrayed before the public to the utter humiliation of the writer.

In all seriousness though, in reading over the article in question, I am genuinely sorry for two things. In the first place for having taken the liberty to quote from a private letter of Mr. Adams, as I did, without first asking his consent to allow me to do so—something I usually never do—in fact, cannot recall another instance unless it be in the same article where I also quote from Mr. S'bbald. It was done without giving the matter any thought, and I trust Mr. Adams knows the writer well enough to not think the quotation was given in order to take an unfair advantage of him in any way. With this explanation I hope and believe that Mr. Adams will excuse me this time; in fact, I know that he will for he is too good-natured to ascribe any ill motives on the part of any one, even if such were given, and in this case such a thought never entered our mind. In the second place it is up to me to apologize to Mr. Hurley for "attempting" to quote from his letter, although if the quotation had been given correctly, no great harm would have been done, as no names were mentioned.. Mr. Hurley is correct in

surmising that I was quoting from memory, for although the letter was on my "desk," it was "pigeon-holed," and I did not take the trouble to look it up when writing. A fairly good memory and a lazy streak in my make-up, explains such a way of doing; but I want to say most emphatically, that I did **not forget** the words "every other day," and if they were not in the copy, then I inadvertently typed the statement that I did, not noticing the miserable error that was being made by the omission of the three words. The idea of feeding a quart jar of syrup as I have it, is certainly obscure, and it is not to be wondered at that the Editor accuses me of holding absurd opinions on other matters, after such a glaring example as that. In common with Mr. Adams I can only rely on Mr. Hurley's good nature in dealing with such an atrocious blunder, and the least thing I can think of doing by way of making the amende honorable, is to assure him that if he will come and spend a few days with me, that we will "feed" him on the best we have, although being somewhat of a temperance crank, cannot promise anything "stimulating"—in fact, do not believe he would partake if offered anything of that nature anyway.

Now just a few words as to that "leg" already referred to. In the first place we know the difference between feeding to prevent starvation, and feeding to stimulate the queen to keep on laying eggs when otherwise she would be doing nothing, according to the ideas of the pro-stimulative feeders, if I dare use such a term. Numbers of the latter persuasion of beekeepers have often stated that they would sooner feed syrup regularly than to have any quantity of honey to speak of in the brood nests. We fed this spring to prevent starvation, and incidentally at the same time we had an opportunity to test the ideas of syrup feeders as to the stimulative effects, as compared with our ideas as to bees having a supply of honey

during a long spell of bad weather with no feeding being done at all. The results were overwhelmingly in favor of the colonies with honey stores—any harm in chronicling the result as we honestly found it? As to ways of feeding, although the Editor condemns the outdoor method, I know a lot of first-class men who prefer the practice—in fact Mr. C. D. House recommended it, if I mistake not at a convention held in Toronto not so long ago. Certain it is I saw no such trouble as the Editor describes, and a few minutes after the feed was taken up everything would be quiet in the yard and no more bees were worn out than if the bees had been fed in the hives, as the yards are both sheltered by a hedge and scarcely a bee raised outside of it at time of feeding.

Now, as to the bees going after pollen, which the Editor describes as an "absurdity," let me say that whatever the condition in Brant County our bees were short of this article. Be it remembered that our bees were not "weak," as is usually understood by the term, for in going over every colony, out of the nearly 300, not more than 20 were found that had as many as three combs without brood; and be it remembered also, my hives are a good deal larger than eight-frame Langstroth. The trouble as stated was that just at the opening of the clover the field bees were scarce, but after a few days the hives were boiling over with bees—too late for the only real flow that we had from the clover. As to the "stimulating" effect of feeding syrup with the total absence of honey in the hives, this is a free country and all can do as they like, but personally will bank every time on the abundance of sealed stores in the hives in early spring, and let the other fellow turn on the sugar syrup. No harm in that position is there? And if, unfortunately, we should again run across another spring like the last one, and our bees should run out of stores, we too will

feed, not to stimulate but to prevent starvation. The Editor's advice to readers to feed their bees this spring was sound, and I cannot see wherein I hinted otherwise in the article in question—indeed, without such feeding thousands of colonies would have starved. To feed colonies that had honey on hand—well that is another question and the one in which I was dealing with; in fact I was comparing results from colonies that had honey and were not fed, with those that had no honey and had to be fed. That's all.

In the discussion of all these kindred matters, it is well to remember that all can exercise the prerogative of doing as they think best, and I have often been surprised at the attitude of some when size of hives and other like questions are under discussion. Actually some seem to think they have a grievance when they cannot get the other fellow to see and do as they do, whereas they fail to realize the fact that all cannot see alike—indeed, it would be a misfortune in many instances if such a thing was possible.

Before concluding this rambling letter let me tell the readers that after all our mistakes in methods of feeding, or of not feeding, we are glad to say that we have enough honey to sweeten our porridge for another year—in fact in only two previous years have we had much more honey, but it is only fair to qualify the latter statement by saying that he have more bees than formerly.

With hives boiling over with bees and a very large acreage of buckwheat coming into bloom, we are on the eve of (writing this July 26) preparing to go for a week's trip on the Georgian Bay. As the buckwheat will not be in full force for another ten days, and little honey will be coming in, we will leave them and let them go without feeding, even if they do starve the brood, for lack of "stimulative" syrup. Joking aside, there is just as much danger of bees with a dash of Carniolan blood in them, starving their

brood with honey during a spell of bad spring, as there is days when no honey from the fields. Has such a strain of bees wise? If so I would them as I feel sure th mistaken in supposi Carniolans when they

[If business will p tainly accept your invi to the water wagon city, therefore, aqua ficiently stimulating, c heart-to-heart talk on ever, you feed us as s your bees last spring, with a shabby idea of there now, you are wa in mind the fact that l side over the feeding e have no misgivings.

We appreciate the s to our remarks last m that you have misinte of our argument. Our bative only insofar as your opinion of feeding was our only motive. idea is "absurd" we tl English that expresses out in any way transgr ities of debate. There your letter, neither to Mr. Adams or anyone in debate must not be personal offence or moti tion. If it is, then the find himself in a false p

In his reply Mr. Byer

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brood with honey present in the hives during a spell of bad weather in the spring, as there is during the next few days when no honey will be coming in from the fields. Has anyone ever tried such a strain of bees and found otherwise? If so I would be glad to hear from them as I feel sure they must have been mistaken in supposing that they had Carniolans when they had something else.

[If business will permit we will certainly accept your invitation. We belong to the water wagon crowd in our own city, therefore, aqua pura will be sufficiently stimulating, coupled with a good heart-to-heart talk on bee lo.e. If, however, you feed us as sparingly as you fed your bees last spring, we will go away with a shabby idea of your hospitality—so there now, you are warned! But having in mind the fact that Mrs. Byer will preside over the feeding end of our visit, we have no misgivings.

We appreciate the spirit of your reply to our remarks last month, but we think that you have misinterpreted the spirit of our argument. Our argument was combative only insofar as it went to prove your opinion of feeding erroneous. This was our only motive. When we say an idea is "absurd" we think we are using English that expresses our thought without in any way transgressing the amenities of debate. There was no offence in your letter, neither to the writer, or to Mr. Adams or anyone else. Earnestness in debate must not be confounded with personal offence or motives in that direction. If it is, then the writer will often find himself in a false position.

In his reply Mr. Byer says:

"We fed this spring to prevent starvation, and incidentally at the same time we had an opportunity to test the ideas of syrup feeders as to the stimulative effects as compared with our own ideas as to bees having a supply of honey during a long spell of bad weather with no feeding

done at all. These results were overwhelmingly in favor of the colonies with honey stores—any harm in chronicling the result as we honestly found it?"

Friend Byer, there was no harm. On the contrary there was positive good, both to you and to our readers, in thus provoking a good discussion upon a very important subject. But we think we should have failed in our duty to our readers if we had not attempted to point out wherein you failed in your experiments this spring. We endeavored to do this, and pointed out that we thought you were reaching hasty conclusions. We think we can demonstrate this conclusively. You fed 100 pounds of sugar every three days to 170 hives. Now 100 pounds of sugar is 16 hundred ounces. Sixteen hundred ounces to 170 hives is about 9 ounces per hive every three days—or **three ounces per hive per day!** That was not enough feed to compensate for the wear and tear upon the bees during the excitement to which you aroused them. Of what good was three ounces of sugar per day to hives with a large quantity of larvæ to feed? We think your feeding failed because you did not feed enough! Remember you were feeding these bees to prevent starvation! And then you immediately condemn feeding because the colonies did not do as well as those that had food enough to carry them through! We quite agree with you that colonies which had food enough to bring them through would have been better without feeding than those which did not have the requisite amount of food, and to which so little was fed. Here is the point at which we take issue with each other strongly,—not in ill feeling, but with the altruistic purpose of reaching the truth in this matter. Now, sir, on the results of the above three ounces of sugar per day, you make the statement above, which we re-quote,—this time in black face type: "**The results were overwhelmingly in favor of the colonies with**

honey stores—any harm in chronicling the result as we honestly found it?"

Again we say "no harm!" Nor is there any doubt as to the honesty of your conclusions for which we have every respect, but we beg respectfully to submit our equally honest conclusions, that **the results were an overwhelming evidence that you had fed too little.** We are quite satisfied that Mr. Byer is too bright and progressive a man to allow this matter to be settled in his own mind without giving it a further test next spring. Our duty is now performed. Feeding this spring was a most important matter. This Mr. Byer admits. We urged it. If it had been neglected what would have been the result? We honestly felt that Mr. Byer's letter would mislead many beekeepers if it passed unchallenged. We have enjoyed the debate thus far, and have said our last word. It is Mr. Byer's privilege to close the discussion next month, and we hope to hear from him. Especially is this the case since we have analyzed the amount fed.—Ed.]

M. A. A. Ferrier Gives His Experience.

I got time this evening to look over the July number of the C. B. J. and became very much interested in the discussion on spring stimulative feeding; so much so that I thought I would spare the time to give you my own experience,—and that experience is that for this locality, at any rate, spring stimulative feeding is a delusion and a snare. I used Alexander feeders under my colonies for a number of springs—started using them on the 1st of May and used them up to clover bloom, feeding a pint of syrup every night, and after all the fussing and feeding I have invariably found that a colony that came out in spring loaded with stores, and left alone, is the colony that gives the big surplus every time.

Feed them in the fall from the 1st to

the 15th of September, till they are so heavy you hate to have to carry them into the cellar, and then leave them severely alone till fruit bloom, and you can cut out the spring feeding and be a long way ahead.

I have repeatedly seen colonies come out in the spring so heavy that I would say to myself, "Well, I'll have to make room there before fruit bloom," but every time those solid frames of stores will turn into solid frames of brood, and you know what that means when the clover flow opens.

But this last spring was a corker. Was busy about some other work and was not watching the bees very closely for a few days, when one rainy afternoon about the 7th or 8th of June, when they had not been able to get out for a few days, it suddenly struck me that some of them might be getting short of stores, so took a walk through the home yard, and lo at the entrances of two or three colonies were plain indications of starvation. I chucked around the feed in a hurry and liked it for the outyards. At one yard I found one big, strong ten-frame colony completely gone and a number of others on the verge of the brink. However, all's well that ends well. Three or four days later they were fairly falling over each other rolling in the clover, and despite the fact that I had no help, except my wife to hive the swarms at the home yard, which is run for comb honey, have managed to secure an average of 125 lbs. per colony extracted honey and think I lost 25 lbs. per colony more in the basswood flow through not being able to make room quick enough. Just a word as to size of hives. Have used the 8, 9, 10 and 12-frame Langstroth, and my preference is decidedly in favor of the 10-frame size for extracted honey. I use the 8-frame for comb honey, but next season intend to try a few of the 10-frame for that also, and have a suspicion they will prove all

A. A. FERRIER.

[Thanks. We are your testimony. confirms the position in the matter of f

A Voice from B.

We have in B. honey flow from all best I remember. colonies stored 40 clover honey. One (July 1st) stored 37 How is that for B. My observation i (page 291, July, 19: the old bees drop after heavy feeding bees) always in a sl of sight, in spring heavy honey flow, there is sudden st

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HONEY CROP COM

Parli
Toronto

The Honey Exchar Ontario Beekeepers' the Secretary's office 2nd. Reports were points throughout the ing 23,582 hives of 60% over last year. vince were well reprs mittee was thus able ate figures as to crop

It was found that no old honey left on all reports indicated suggested by the com The average productio honey is 58.3 pounds 59.1 last year. Wh centre and western p where the bulk of th

[Thanks. We are very glad to receive your testimony. Your experience but confirms the position we took this spring in the matter of feeding.—Ed.]

A Voice from B. C. Agrees with Mr. Byer.

We have in B. C. this year a fine honey flow from alsike clover; one of the best I remember. One of my strongest colonies stored 400 pounds extracted clover honey. One day, the same colony (July 1st) stored 37 pounds clover honey. How is that for B. C.?

My observation is that of Mr. Byer, (page 291, July, 1910) "when all at once the old bees dropped." I always find after heavy feeding the bees (the old bees) always in a short time dropped out of sight, in spring or in fall, or after heavy honey flow, and any time when there is sudden stop.

BEGINNER.

Indexed

HONEY CROP COMMITTEE'S REPORT

Parliament Buildings,
Toronto, August 3rd, 1910.

The Honey Exchange Committee of the Ontario Beekeepers' Association met at the Secretary's office yesterday, August 2nd. Reports were received from 450 points throughout the province, representing 23,582 hives of bees, an increase of 60% over last year. All parts of the province were well represented and the committee was thus able to get very accurate figures as to crop conditions.

It was found that there was practically no old honey left on the market and that all reports indicated that the 1909 prices suggested by the committee were realized. The average production per colony of light honey is 58.3 pounds as compared with 59.1 last year. While the crop in the centre and western part of the province, where the bulk of the marketable honey

is produced, is lower considerably than last year's there is a much larger crop in the eastern counties, which has kept up the average.

After considering the reports carefully the committee would recommend the following prices for the year.

No. 1 Light Extracted (wholesale), 10 to 11c. per lb.

No. 1 Light Extracted (retail) 12½ to 15c. per lb.

No. 1 Comb (wholesale) \$1.80 to \$2.25 per dozen.

No. 2 Comb (wholesale) \$1.50 to \$1.75 per dozen.

The Committee find that large quantities of extracted honey have already been sold by Peel County beekeepers at 10½c., car lots, f.o.b. shipping point for the western markets. In view of the decrease in the crop and the firm prices of fruit, the committee believe that the above prices should be realized and would suggest that beekeepers hold part of their honey for later delivery unless present prices are satisfactory. We would again suggest that the local demand, which is increasing, should be especially looked after.

A later report will be issued to cover Buckwheat honey.

Yours very truly,

William Couse, Streetsville.

W. J. Craig, Brantford.

H. G. Sibbald, Claude.

Morley Pettit, Guelph.

P. W. Hodgetts, Secretary.

AIRSHIPS AT THE FAIR.

Negotiations are under way that will give patrons of the Canadian National Exhibition an opportunity of seeing the newest airship and the most daring aeronauts go through their bird-like performance. All that is needed is calm weather. For an airship balks at a breeze and the boldest aeronauts quail before a baulking airship.

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CANADIAN BEE-KEEPERS

(No. 1, continued from July)

Only those who have been with Mr. McEvoy at extracting time are able to gauge his success as a bee-keeper. We were visiting the other day a bee-keeper of long experience, whose yield per hive, though his yard was located in what is perhaps the finest bee district in Canada, was only a fraction of that obtained by McEvoy. Great tracts of alsike; bush growing bass in quantity, wide stretches of lucerne that at the present moment are richly purple, contribute to the harvest of this bee-keeper. The Woodburn apiaries on the other hand are situated in the very centre of a village, and in a neighborhood that could only be classed as fair from the point of view of the bee-man. The fact is that McEvoy's methods of dealing with bees are what a horticulturist would call "intensive." We have worked side by side with some of the most skilled maraichers of Paris, and can appreciate the knowledge applied and the care exercised by our Woodburn apiarist in the sister industry. Each small portion of the season has its own peculiar operation and delay means dislocation in the cycle of the bee-year. To extract the maximum amount of wealth from Nature's storehouse by means of his craft, requires in addition to skill and knowledge the application of loving labor and that without regard to commercial economy.

Mr. McEvoy's chief object—in fact his sole aim right from the time when the main honey flow has ceased—is to get all his stocks at their greatest strength for the beginning of the next clover flow. Various means are employed to accomplish this end. The chief are the yearly re-queening of every stock, proper and timely preparations for wintering, and spring feeding. The bulk of his queens are of his own raising, and in breeding them, he is careful that only large and well fed larvæ

shall arrive at maturity. The gentleness of his bees testifies to the care exercised in the selection of the queen-mothers—and shall we also say, king-fathers—for he tolerates drones only in those colonies possessing characteristics desirable for perpetuation. This wholesale re-queening takes place as soon after the honey flow as possible, and finishes before the late feeding commences. It will be seen hereafter, when we describe the forcing process the queens have to undergo, how necessary it is that they should not be retained longer than one season. One of his methods of raising queens may be mentioned and commended on account of its simplicity. Briefly it is as follows. The queen of each hive having been destroyed, after eight days a selection of the consequent queen cells is made, those in colonies that have proved themselves during the past season at all unworthy being entirely discarded. The other colonies are permitted to retain one good queen-cell each, and those hives in which all the queen cells were destroyed are given a spare cell. For wintering, Mr. McEvoy endeavors to arrange matters so that absolute quiet and rest shall prevail all through the off season. He does not desire brood rearing to take place during the winter, and he effectually prevents this by feeding the bees so that they fill and cap practically every cell in the combs before the end of September. This rapid feeding is effected by means of a modification of the Miller type of feeder, and in two instalments. The first lot of syrup is put on the hives while the queens are yet laying, and the feeding is completed only when every cell of the brood nest is filled with honey. In spite of these precautions, there will sometimes be stocks that in the very depth of winter, evince symptoms of restlessness. Such stocks will have more air given them. All McEvoy's hives are wintered upon their summer stands. They possess covers that

permit of the hives to be thoroughly packed with straw. We mention that the hives are moved, thus keeping them cool in summer as well as in winter.

The foregoing procedure is altogether orthodox and must be conceded to be eminently successful. Beekeepers who have attempted to be entire-

ly successful in their beekeeping. Now we approach the question of wintering. It has given rise to some of the most interesting columns of this Journal. We refer to spring feeding. Perhaps we may be permitted to give our experience in this matter, especially as we have seen Mr. McEvoy's co-incident success. It is generally admitted that wintering proceeds at the same rate as the amount of available food. The word "available" as used here, although there may be sealed stores in a hive, they generally do not use such stores. The stoppage of the supply of food, but rather will the bees rear brood. In the view of the bee, spring is devoted to first joyousness, early flowers—a plenty, of promise, of abundance. The trees and orchards from barrenness of sweets on the one hand, and the delusion. But the period of fruit bloom is short, and of famine. The tiny bees cannot enable it to overcome the meaning of what is winter. The accumulation of centuries has not yet learned to guard against the uncertainty that characterize the spring months, therefore, to provide that which nature

permit of the hives themselves being generously packed with leaves. We may here mention that the covers are never removed, thus keeping the hives cool in summer as well as warm and snug in winter.

The foregoing plan of wintering is not altogether orthodox. Nevertheless, it must be conceded that the results are eminently successful, and the many bee-keepers who have adopted the method appear to be entirely satisfied.

Now we approach the subject that has given rise to some controversy in the columns of this Journal from time to time. We refer to spring management, and perhaps we may be permitted here to state our experience in regard to the matter, especially as we know that Mr. McEvoy's coincides with our own. It is generally admitted that brood-rearing proceeds at the same rate as the supply of **available** food. We emphasize the word "available" as we have found that although there may be abundance of sealed stores in a hive, yet the bees generally do not use such during a temporary stoppage of the supply of nectar from outside, but rather will cease feeding and rear brood. From the point of view of the bee, spring is the time devoted to first joyous labors among the early flowers—a period of increasing plenty, of promise, of future exceeding abundance. The transformation of the orchards from barren deserts into vast regions of sweets only serves to enhance the delusion. But the all too short period of fruit bloom is succeeded by a season of famine. The tiny brain of the bee does not enable it to comprehend the true meaning of what is very often a real disaster. The accumulated experience of centuries has not yet taught the bee to guard against the unpropitious spells that characterize the spring season. It remains, therefore, for the bee-keeper to provide that which nature in her unkind

moods withholds. In every-day language, therefore, we maintain that he must **feed**. He naturally feeds to the bees those stores first that are already in the hives—the capped honey or syrup, remaining over from the winter. These lacking or finished, further supplies must be given and in such a way as to simulate the natural flow. We believe that it is better to give just such a quantity as will enable the bees to feed the brood properly, and not more. Brood rearing should proceed regularly and steadily, and this can only be ensured by seeing that the supply of food—either natural or artificial—is obtained without intermission. The watchful bee-keeper will thus in a measure stimulate the bees at such times when there is danger of their going back.

Another question that has given rise to debate is the size of the brood chamber. We imagine, however, that the real point at issue is whether the extension of the brood nest in the spring is better made laterally or vertically. McEvoy is well known as an ardent advocate of a medium-sized hive, and an exponent of the art of what is called "brood-lifting." This method of extending the brood-nest is the most notable feature of McEvoy's system of management. It enables him to force the queens to lay at high pressure, and at the same time gives him almost absolute control over swarming. It also places in his hand a reserve of easily accessible hatching brood, useful for very many purposes. We will describe this brood lifting in McEvoy's own words. "When the right time comes to "put on supers, I lift up a comb of brood "into the supers and keep the queen ex- "cluders off, so as to give the queens a "chance to go up, and as soon as the "supers are pretty well filled with brood, "I shake the queen below and put on the "queen-excluders. When the time ar- "rives to put on the second supers, I lift "two combs of brood above the queen ex-

"cluders, putting two empty combs in the "brood chambers. Every time the supers are extracted, two combs of brood "are lifted above the queen-excluders and "replaced by empty combs in the brood "chamber." Thus each super will contain

making artificial swarms, an operation which Mr. McEvoy describes as follows:

"In making artificial swarms I collect eight of the best combs of brood from the supers and a comb that has been three days in my best colony, and after I put the



Mr. McEvoy and His Family.

amongst its combs two frames of well-fed, hatching brood, whilst in the brood chamber the queen has always a clear field for her operations. The capped brood in the supers may be used for

comb of **hatching eggs** in the centre of these eight combs of **hatching brood**, I go to my strongest colony and lift it off its stand and then place the hive of super brood and comb of hatching eggs on the

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stand where the strong hive of bees stood. I then shake about a quart of bees in front of this hive of brood, being careful not to shake the queen off. I then move the hive of bees and queen to a new stand. The field bees will return to the old stand where the eight combs full of hatching brood and one comb of hatching eggs are. This makes one of the most powerful nuclei ever made, and the bees having only one comb of larvæ to be fed,

By this system I boom both stands of bees into powerful colonies and secure a big crop at the same time."

We have presented in these pages several photographs of Mr. McEvoy and his family, and we are sure our readers will be glad to learn that the veteran is as hale and hearty as he was in the days when he travelled so much amongst them helping and encouraging by his cheerful and good natured words.



Mr. McEvoy and His Sons Amid the Bee Hives.

will feed it the best that has ever been fed and thus with hundreds of bees hatching every hour, puts this colony in the very best condition to put abundance of royal jelly in every queen cell thus producing the best queens, I put frames of hatching brood taken from supers on this one rearing the queens, and also frames of brood on the old colony that I moved away.

FOUL BROOD QUESTIONS ANSWERED.

William McEvoy.

1. How would you treat colonies found with foul brood at this season of the year? Everything would depend upon the condition I found them in at this date. Where the colonies are strong in bees and

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are not badly diseased, they will have a large quantity of **sound** brood in them now, and all this brood should be allowed to hatch out where it is, and in an evening in October when the brood is hatched, take all the combs out of these foul brood colonies and give them enough of **all sealed** combs to winter on. This is a short cut and one of the most profitable ways of curing diseased colonies ever given, and at the same time it puts the colonies in better condition to winter we'll than any ever tested.

Some may ask if this fall method of curing with sealed stores will cure in every case. Yes, it will, if the sealed combs are taken from sound colonies, and all the cells in the combs are sealed, not one case in a million can fail.

But some will say that it will be impossible to get all sealed combs. Oh, my, no; such combs can be very easily gotten by feeding the sound colonies until the bees **seal the outside combs right down to the bottom of the frames; a thing that all bees will soon do, if fed enough**, and the feeding is done about the last week in August or first of September, when the weather is warm.

In the evening when all the bees in an apiary are at rest is the best time to do the feeding.

Where any colonies are found to be bad with foul brood at this date, and are **weak** in bees, they require very prompt treatment, and should get it at once. In the evening shake the bees of two or more weak colonies into one, and after removing all the combs, give the bees comb foundation starters, and after these have been four days in the hives, take them out and put in full sheets of foundation, and then the cure will be complete. If no honey is coming in feed plenty of sugar syrup to take the place of a honey flow and then the bees will make the foundation into combs at a rapid rate. Some may ask if it will pay to double up weak

colonies and feed them through a cleansing process. Yes it will. All the combs taken out of the brood chamber of the colonies that had foul brood, and the combs made out of the starters during the four days must be made into wax or burned.

2. Will hives be safe to use again, that foul brood has been in, without boiling.

Yes, perfectly safe, because it is impossible for any empty hive to give the disease.

To boil the empty hives and then neglect to boil the feet of all the bees that walked over the foul broody combs would be straining at a gnat and then swallowing a saw mill. I have always used the empty hives without any disinfecting.

3. Can combs that have had foul brood matter in them be made safe to use again. No, positively no.

WELL DONE, MISS WOOD!

This report ought to make some of us fellows who think we "know it all" sit up and think:

The bees have done well this season in these parts. I have taken about 130 lbs. of light honey from each colony, and they are working on the buckwheat and sweet clover now.

MISS JANET WOOD.

Campbellford, Ont.

CAN'T STOP THEM.

Seems to be impossible to stop those Canadian Exhibition people. The Guards Band were forbidden to leave England. The Grenadier Guards Band is coming to the Canadian National. The Royal Canadian Dragoons were ordered to give no more musical rides and yet they will give their musical ride at the Canadian National.

August, 1910

Indexed BLACK

The following found interesting. Selwyn to the best of our readers should "surd" in our reply consider it a favor if We publish the letter consent. It may please who may be the future-afflicted Ed.

Ot

I am in trouble European black brood). Can you give me information as to how to brood 60 to 70 colonies and less affected. The matter in most cases to deal with it, but the brood badly. I find that colonies on to clean brood is O. K. and affected. The question is what to do with holding diseased brood it up over strong until the brood, as much has hatched. I find an Italian colony and putting a queen then a super holding that if supers holding stacked above, the new brood in the have now a number bodies) filled with diseased brood, but which a strong Italian color all healthy brood to have been partially bees and hold a good there are still quite a them, which have the liquid brownish and liquid (no sign of ropi

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Indexed BLACK BROOD.

The following correspondence will be found interesting. We advised Mr. Selwyn to the best of our ability. If any of our readers should see anything "absurd" in our reply to him, we will consider it a favor if they will point it out. We publish the letters with Mr. Selwyn's consent. It may prove of benefit to others who may be now or at any time in the future afflicted with this disease.—Ed.

Ottawa, July 15, 1910.

I am in trouble in my apiary, having European black brood (not American foul brood). Can you give me some information as to how to best combat it? I have 60 to 70 colonies and they are all more or less affected. The Italian colonies appear in most cases to nearly hold their own with it, but the black colonies suffer badly. I find that by shaking the colonies on to clean frames that the new brood is O. K. and a cure seems to be effected. The question that is bothering me, is what to do with the brood frames holding diseased brood. I have been stacking it up over strong Italian colonies, until the brood, as much of it as is healthy, has hatched. I find that even after shaking an Italian colony on to clean frames and putting a queen excluder above and then a super holding frames of honey, that if supers holding diseased frames are stacked above, the disease will show in the new brood in the clean frames. I have now a number of supers (or hive bodies) filled with frames which held diseased brood, but which have been above a strong Italian colony long enough for all healthy brood to hatch. These frames have been partially cleaned up by the bees and hold a good deal of honey but there are still quite a number of cells in them, which have the decayed larvae in a liquid brownish and bad smelling condition (no sign of ropiness about it as is

said to be the case with American foul brood). What would you advise me to do with such frames, as I have a good many of them? I am told that the bees carrying the honey out of these clean hives will not spread the disease, but "I hae me douts," and wish particularly to know what your opinion and experience has been on this point. It would look certainly as if the honey did **not** carry the disease, as when shaken on to clean frames or foundation, the bees must leave more or less honey in their sacs and, as far as I can see, the new brood in such hives is quite healthy. I also want to know whether such frames could be used another year for **extracting frames only**, and if the bees would then complete the cleaning up process without the danger of again spreading the disease.

I must apologize for writing you at such length, but am anxious to get the best advice possible.

Yours faithfully,
 PERCY H. SELWYN,

P. S.—I am as fast as possible re-queening all black hives with young Italian queens, but I notice the brood, from old black queens, after shaking, is healthy.

Brantford, July 27, 1910.

Mr. Percy H. Selwyn,
 Geological Survey,
 Ottawa, Ont.:

Dear Sir,—I beg to acknowledge your favor of July 15th. I regret very much owing to circumstances beyond my control, not replying sooner, as I know such a case as yours is urgent. Black brood is said not to be a germ disease. It is believed by some to be brought about by brood that is starved or chilled, but the fact is, very little is known of it. It can be cured in two ways: 1st, by the McEvoy method of treating ordinary foul brood, which, however, appears to me to involve a waste and loss that does not seem to be necessary with this disease.

The secret of the disease seems to lie in the fact that something is given to the brood which causes it to sicken and die. The second method is to kill the queen or remove her, and leave the colony queenless for twenty-seven days, then giving the colony a queen cell or a virgin queen. The philosophy of this seems to lie in the fact that in order to clean out the disease, brood rearing must stop until all the unhatched brood has hatched out, and the bees given time to clean house before they have a chance of feeding new larvæ. In this way the bees can remove the disease themselves. It was thought that the difficulty lay with the queen; she was killed. The secret of the cure lay in the fact that all brood rearing was stopped until the bees had a chance to clean out all the cells. I would, therefore not advise you to destroy your queens. You can save your queens by the following method. Take a frame of capped brood with adhering bees and introduce your queen to this frame, which, of course, must be clean. The bees from which the queen has been taken are to be left queenless. Examine them in six or seven days and break down all queen cells that they may make. This will prevent their raising a queen too soon. Leave the hive queenless until about the 20th day, when give them a queen cell. You will find that during the period of queenlessness they will have cleaned up everything. By this method you will not need to sacrifice any of your combs. This is known as the Alexander method of curing black brood. You say that after shaking an Italian colony on to clean frames and stacking supers of diseased combs above with a queen excluder between, the disease will show on the new brood in the clean frames. This is true. Now if you had not put those supers on top of those clean frames, your new brood chamber would have gone on O. K.; while if the diseased combs and

bees had been left without a queen and all brood rearing had stopped, they would have removed all the disease before the new queen started laying. There is no chance of cleaning up a diseased colony while brood rearing is going on, even though they may be separated by an excluder. The statement that you have made proves what I have said in the foregoing, that by shaking you can start a new nucleus and save the life of your queen. The hive will be ready to receive the old bees after they have been queenless long enough to clean house. You can double up the old bees after the lapse of twenty-seven days with the old queens in their new quarters; or you can give the bees new queens, thus saving all your combs, and making considerable increase. This is about all the assistance I can give you, as it is the only known method of treating the disease successfully. I wish to say, however, that the writer has had no practical experience with the disease, and his knowledge of it is gathered only from a close reading of the writings of others who have had it. The experience of Dr. Miller last year is entirely in accord with the above directions—at least I think so. He modified the Alexander system somewhat, and, I believe, proved conclusively that the cure lay not in destroying the old queen and getting a new one, but in the entire stoppage of brood rearing until the bees had cleaned it all out and polished up their cells. If you would write Mr. McEvoy at Woodburn, Ont., or Mr. Pettit at the Guelph Agricultural College, they would give you valuable advice. Mr. Pettit, I believe, has had some experience with it, and he may be able to give you valuable assistance; and I know that he would cheerfully do it. If, however, you follow the above plan, I have no doubt you can effect a cure. I deeply regret that I could not answer your letter sooner, as every day now counts as very

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honey. In neither h

valuable in the work that you have before you. If you find in applying the cure that owing to the lateness of the season the bees are not able to gather any honey, you can accomplish good results by feeding them from the top a little each day or say a quart jar of syrup every other day. The syrup should be thin and made of equal parts of sugar and water.

JAS. J. HURLEY.

Ottawa, July 29, 1910.

Dear Sir,—I have just read with pleasure yours of the 27th inst., and am, indeed much obliged to you for the kind interest you have taken in the subject about which I wrote you. I am pleased to say that my son Harley and I are getting the better of the disease in a most satisfactory manner along much the same lines as you recommend. We are doing away, however, with all black colonies by the introduction of laying Italian queens (recently mated) at the time of shaking into clean hives containing clean drawn out combs or full sheets of foundation. One point which may interest you is this: That two of our Italian queens have been able to keep brood rearing going in about 12 frames out of 16, with a queen excluder above and then 5 extracting bodies filled with hatching brood in a more or less diseased condition stacked above each hive. This diseased brood was put over the two hives early in June and as a result of so much hatching brood above, in addition to that of prolific queens below, the hives got remarkably strong in bees during the whole of the honey flow from clover, raspberry and basswood. We yesterday decided to investigate them and found every frame above perfectly clean and nearly the whole of them filled with honey mostly capped over and ready to be extracted. I should judge that the two hives will give close on 400 lbs. of honey. In neither hive, below the ex-

cluders, could I detect any sign of bad brood, and there were thousands of young bees just hatched or hatching. The apiary, (in which I am greatly interested on account of a long standing love of bees), is really my son's, and he intends to go in for apiculture on a larger scale. I may say that the two queens, whose progeny have shown such marked qualifications as regards resistance of foul brood, are mother and daughter. The mother I got from the Ham & Nott Co., through W. J. Craig, last summer, and the daughter I raised last August. The bees are very yellow, three-banded Italians, and great workers, but savage to a degree, and smoke, after they once get going, has little effect on them. I often wonder if they have Cyprian blood in them. We are re-queening all the 70 hives in the apiary with Italian queens of this season's raising.

I went with Harley yesterday to an apiary in Templeton back from Gatineau Point, and found the disease rampant in nearly every hive examined, and many of the parent stocks queenless. The apiary belongs to a farmer named Hugh McLatchie and consists of 60 or 70 colonies. I now know how we got the disease as we bought a few colonies from him in the spring, although at the time I could see nothing wrong with the brood, but if diseased at that time, and I presume it was, we certainly did our best to spread it by taking frames from strong hives to build up those not so strong.

I trust you will excuse me writing at such length, and again thanking you.

Yours faithfully,
PERCY H. SELWYN.

They're building a new \$5,000 grand stand for the Grenadier Guards band at the Canadian National Exhibition Grounds, Toronto.

CANADIAN NATIONAL EXHIBITION.

Honey and Apiarian Products.

Entry Fee: 25 cents each entry.

All exhibits in this department to be in place and arranged by Monday evening, August 29th.

All Exhibitors must be bona fide bee-keepers.

The prizes are awarded only for the quantity of honey specified in the various sections, and no two members of the same family will be awarded prizes in the same section.

Exhibitors must not change their exhibits after the judges have given their awards

Exhibitors selling honey during the Exhibition will not be allowed to make any removal from their regular exhibit, but may have a special supply on hand from which the honey sold may be taken.

In the solicitation of customers no unseemly noise will be permitted.

Comb honey must be exhibited in natural form, paper or any other trimming not allowed.

Exhibits in this department will be judged by points.

Class 272

| Sec. | 1st | 2nd | 3rd | 4th |
|--|-----|-----|-----|-----|
| 1. Best and most attractive display of 50 lbs of extracted granulated Clover Honey, in glass, 50 points for quality, 50 points for display | \$5 | \$4 | \$2 | \$1 |
| 2. Best and most attractive display of 50 lbs of extracted granulated Linden Honey, in glass, 50 points for quality, 50 points for display | 5 | 4 | 2 | 1 |
| 3. Best display (Clover, Linden, Buckwheat or Thistle) of 300 of liquid extracted honey, not less than 150 lbs., must be in glass, quality to count 50 points, display 50 points | 18 | 12 | 8 | 5 |
| 4. Best 300 lbs. (Clover, Linden, Buckwheat or Thistle) of Comb Honey in sections, quality to count 50 points, display 50 | 20 | 15 | 10 | 6 |
| 5. Best 24 sections of Comb Honey (any variety' quality to be considered, clean sections and best filled | 6 | 4 | 3 | 2 |
| 6. Best 100 lbs. of extracted liquid Linden Honey, in glass. Display to count | 7 | 5 | 3 | 2 |
| 7. Best 100 lbs. of extracted liquid Clover Honey, in glass. Display to count | 7 | 5 | 3 | 2 |
| 8. Best 100 lbs of extracted liquid, A. O. V. in glass. Display to count | 7 | 5 | 3 | 2 |
| 9. Best display of 100 lbs. of extracted liquid Honey, and kind, display to count 80 points | 7 | 5 | 3 | .. |
| 10. Best 20 lbs. of extracted liquid Clover Honey, in glass | 4 | 3 | 2 | 1 |
| 11. Best 20 lbs. of extracted liquid Linden Honey, in glass | 4 | 3 | 2 | 1 |

Indexed

12. Best 20 lbs glass
13. Best display suitable to be occupied high ..
14. Best and more than 10
15. Best 10 lbs given t
16. Best exhibit comb of
17. Best exhibit comb of
18. To the Exhibition tive display

The prize in

Indexed

Mr. H. Race
 All exhibits in m. August 15th.
 All exhibitors The prizes awarded in various sections and the same section.
 Exhibitors must not change their awards.
 Exhibitors selling any removal from hand, from which In the solicitation Comb honey is trimming not allowed.
 Exhibits in this

Class 190.

- Section
1. Best and most attractive Granulated quality, 50
 2. Best 24 sections quality to be considered, clean sections and best filled
 3. Best 100 lbs. of extracted liquid Honey, and kind, display to count 80 points
 4. Best 20 lbs. of

| | | | | |
|---|----|--------|--------|-------------|
| 12. Best 20 lbs. of extracted liquid Buckwheat Honey in glass | 4 | 3 | 2 | 1 |
| 13. Best display of 200 lbs. Comb and extracted honey suitable for <u>grocer's window</u> or counter, space to be occupied not to exceed 6 feet square by 4 feet high | 10 | 7 | 4 | 2 |
| 14. Best and most attractive display of beeswax, not less than 10 lbs. | 4 | 3 | 2 | 1 |
| 15. Best 10 lbs. Beeswax, soft, bright yellow wax to be given the preference | 4 | 3 | 2 | 1 |
| 16. Best exhibit of Italian bees, with queen, in single <u>comb</u> observatory hive | 7 | 5 | 3 | .. |
| 17. Best exhibit, any other variety, with queen, in single <u>comb</u> observatory hive | 7 | 5 | 3 | .. |
| 18. To the Exhibitor making the best and most attractive display | 25 | Bronze | Silver | Medal Medal |

The prize in section 18 is given by the Ontario Bee-Keepers' Association.

VANCOUVER EXHIBITION.

Honey and Apiarian Products.

Mr. H. Racer kindly sends us the following :

All exhibits in this department to be in place and arranged by 10 o'clock a. m. August 15th.

All exhibitors must be bona-fide bee-keepers.

The prizes are awarded only for the quantity of honey specified in the various sections and no two members of the same family will be awarded prizes in the same section.

Exhibitors must not change their exhibits after the Judges have given their awards.

Exhibitors selling honey during the exhibition will not be allowed to make any removal, from their regular exhibits, but may have a special supply at hand, from which the honey sold could be taken.

In the solicitation of customers no unseemly noise will be permitted.

Comb honey must be exhibited in natural form, paper or any other trimming not allowed.

Exhibits in this department will be judged by points.

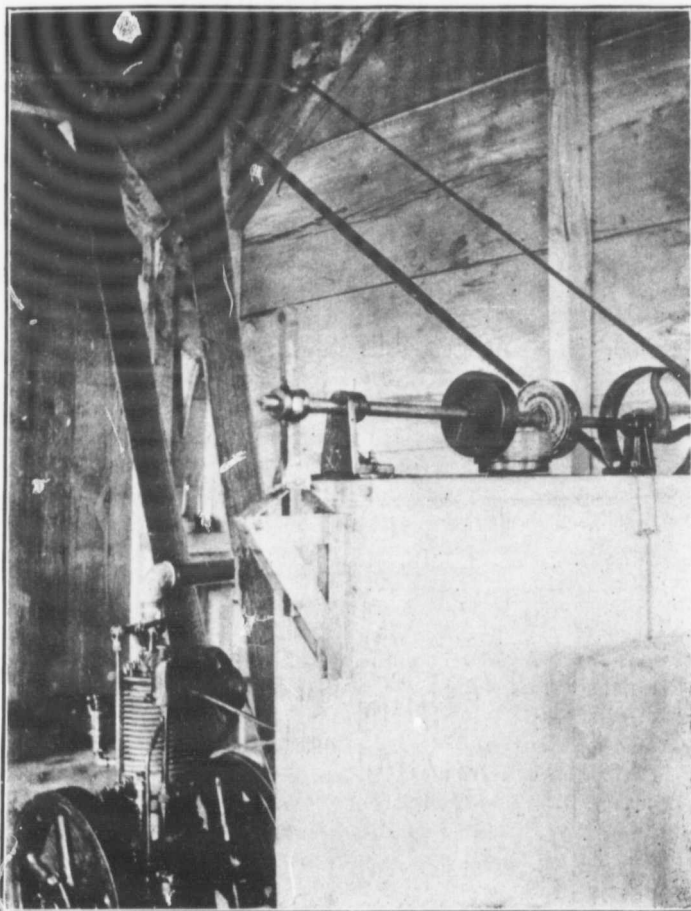
Class 190.

Section

| | | | |
|--|--------|--------|--------|
| 1. Best and most attractive display of 50 lbs. of Extracted Granulated Honey, in glass, 50 points for quality, 50 points for display | \$5 00 | \$4 00 | \$2 00 |
| 2. Best 24 sections of Comb Honey (any variety), quality to be considered, clean sections and best filled | 6 00 | 4 00 | 3 00 |
| 3. Best 100 lbs. of Extracted Liquid Honey in glass, display to count | 7 00 | 5 00 | 3 00 |
| 4. Best 20 lbs. of Extracted Honey in glass | 4 00 | 3 00 | 2 00 |

THE LIBRARY, UNIVERSITY OF PURDUE

- | | | | |
|--|------------------------------|------|------|
| 5. Best display of 200 lbs. Comb and Extracted Honey, suitable for a grocer's window or counter, space to be occupied not to exceed 6 ft square by 4 feet high | 10 00 | 7 00 | 4 00 |
| 6. Best and most attractive display of Beeswax, not less than 10 lbs. | 4 00 | 3 00 | 2 00 |
| 7. Best exhibit of Italian bees, with queen, in single Comb Observatory hive | 7 00 | 5 00 | 3 00 |
| 8. Best exhibit, any other variety with queen, in single Comb Observatory Hive | 7 00 | 5 00 | 3 00 |
| 9. Exhibitor making the most attractive display, | Special prize, value \$25.00 | | |
| This prize is offered by Clark & Co., grocers, Carrall Street, Vancouver. | | | |



Gasoline Extracting Outfit of Robt. B. Wallace, Vanneck.

FREE TRIP EXHIBITION

For N

A couple of enterprising localities can make big business for "Toronto and Exhibitors' Review" Exhibition number, on August 24th. This will be the most elaborate illustrated publication issued, and will contain picturesque illustrations of the Exhibition, together with information that will interest hundreds of thousands of people. This publication will contain a description of many attractive exhibits in the various departments in front of the numerous attractions. Every person will want to be "in the know" because it will contain a complete collection of information about the Exhibition that has never before been published. If any person is interested in this address "Exhibition Information," 100 Queen Street, Toronto, Ontario, and regarding this attractive publication by return mail.

A visit to Toronto is incomplete without a trip to the Beach Park, Toronto's famous resort. On the spacious grounds of this now famous institution are all the newest and most novel devices for creating amusement and innocent entertainment. The latest ideas from Coney Island, which have been adapted to the Beach, which is equipped with the most completeness and a disregard for safety is approached by no other side of New York. The

FREE TRIP TO TORONTO EXHIBITION

For Newsboys.

A couple of enterprising boys in each locality can make big money securing orders for "Toronto Exhibition Illustrated and Exhibitors' Review," a unique special Exhibition number, which will be issued on August 24th. This special number, which will be issued in newspaper form, will be the most elaborate and profusely illustrated publication that has ever been issued, and will contain a host of picturesque illustrations of Toronto's Great Exhibition, together with all the latest information that will be of interest to the hundreds of thousands of visitors to Toronto at Exhibition time. This attractive publication will contain an illustrated description of many attractive features and exhibits in the various buildings, amusements in front of the grand stand, and numerous attractions on the Midway. Every person will want "Exhibition Illustrated" because it will comprise the most complete collection of illustrations of the Exhibition that has ever appeared in one publication. If any boy interested will address "Exhibition Illustrated," 18 Toronto street, Toronto, full information regarding this attractive offer will be sent by return mail.

A visit to Toronto Exhibition would be incomplete without a trip to Scarborough Beach Park, Toronto's \$600,000 pleasure resort. On the spacious grounds of this now famous institution are to be found all the newest and most elaborate and novel devices for creating hilarious fun and innocent entertainment. All the latest ideas from Coney Island, the metropolis of fun, have been adopted at Scarborough Beach, which is equipped with a completeness and a disregard for cost which is approached by no amusement park outside of New York. The Chutes, Cascades,

Scenic Railway, Midway, and one hundred other features provide an infinite variety of pleasure which makes the hours pass pleasantly and quickly. Each week in the season a free circus act is offered, and for exhibition weeks the special attractions will be of a sensational and thrilling description, including a hazardous leap for life from the electric tower, and troupes of European gymnasts and acrobats imported at immense cost from Europe and not seen elsewhere in America outside of the New York hippodrome and a few leading summer parks. There will also be extra fireworks displays and other special features for the delectation of Fair-time patrons. The electrical display alone is worth seeing, 100,000 incandescent and arc lights being used. King Street East cars run direct to the park, and a special express service is given. Free band concerts are given each day, Sundays included, by Raven's magnificent concert band.

CENSUS OF FOREST PRODUCTS.

The census of forest products of Canada, to be taken on 1st June, 1911, will embrace square, waney or flat timber, logs for lumber and miscellaneous products.

In the first class are included ash, birch, elm, maple, oak, pine and all other timber cut as square, waney or flat, and in the enumeration will be reported for cubic feet and value.

Logs for lumber, which are included in the second class, are in such woods as elm, hickory, hemlock, oak, pine and spruce. They will be enumerated in the census by quantities of 1,000 feet, board measure, with value in the same unit.

Miscellaneous products of the forest include bark for tanning, fence posts, firewood, hoop and hop poles, masts and spars, piling, pot and pearl ashes, railroad ties, staves, stave-bolts and heading,

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5 00 3 00
value \$25.00
Vancouver.



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telegraph poles (including telephone and other poles for electric wires), wood for pulp, and the furs and skins of forest animals undressed, and they will be enumerated by number or quality and value.

The census of forest products will be taken chiefly from farmers and the lessees of timber limits.

INDEXED MILKING THE APHIDES.

Man is not the only being that utilizes inferior animals for his profit. A curious analogy, familiar to all entomologists, is furnished by the ant, which is very fond of the "honey dew" secreted by plant lice which suck the juices from plant tissue, and where these swarm, ants are liable to abound. The intelligent insect whose industry and thrift are proverbial, has discovered that, by touching the lice upon the two little knobs that grow outward from the body, the aphids or plant lice can be induced to give up some of their honey dew. Some kinds of ants actually colonize plant lice, harboring them in their ant burrows, where they suck the juices from tree rootlets. Prof. S. A. Forbes of Illinois, who has made an exhaustive study of the corn-root aphid, declares that certain species of ants collect the eggs of the corn-root aphid in the fall in their young underground nests, and in the spring they place the young hatching from these eggs on the roots of suitable food plants. As these grow and multiply, the ants transfer them from one plant to another, as necessity may arise. During nearly the whole season the ants are dependent on their helpless charges for food, which they find in the abundant fluids given off by the plant lice as they suck the sap from the growing plant. Thus, by harboring these aphides, the ants work an indirect injury to the corn crop.

Plant lice are, therefore, the ants' domesticated cows, which they know how to milk as effectively in their way as man milks the bovine.

USES OF SAWDUST.

Sawdust is usually regarded as an objectionable product because it increases the danger of fire if deposited near mills or lumber piles and necessitates either cartage with accompanying expense or the construction of a "burner" and the use of a conveyance or carts to transfer it from the saws.

A double economy, however, is now in progress. As a result of the use of band saws instead of the old circular and gang saws, a log that, under the old system produced 8 boards, will now produce 9, a very substantial increase in product with a corresponding decrease in the amount of sawdust produced.

Owing to its chemical and mechanical properties, it has an ever increasing field of usefulness. Used as an absorbent for nitro-glycerine it produces dynamite. Used with clay and burned, it produces a terracotta brick full of small cavities that, owing to its lightness and its properties as a non-conductor, makes excellent fire-proof material for partition walls. Treating it with fused caustic alkali, produces oxalic acid. Treating it with sulphuric acid and fermenting the sugar so formed, produces alcohol. Mixed with a suitable binder and compressed, it can be used for making mouldings and imitation carvings; while if mixed with portland cement, it produces a flooring material. It is an excellent packing material for fragile articles and for dangerous explosives and can be used as packing in walls to make them sound-proof and cold-proof.

INDEXED THE CROP THAT PAYS.

No farmer can make the broad statement that one crop pays better than another. The amount of the return depends largely upon the character of the land on which the crop is grown. One kind of land brings the greatest return from a

certain crop; and different quality of very small return crop. Finding out crops the land is is therefore a very the wide-awake far

A splendid example gained by the introduction of crops to soil conditions in the County of Norfolk certain parts of that considerable areas of not hope to compete soils in the growing staple grains. They tempted to grow their profits were not might have been decreased however, a few mer and climate of the suited to growing fruit. The Norfolk Fruit was formed and for reputation-making members agreed to care orchards as stipulated Association. Incidentally was to be marketed agency. The result short of phenomenal. age has been largely apples are now held in the markets of the fits have been most gr sequence, land values, have doubled.

And this has been achieved by selecting the crop for soil. The work that Conservation has undertaken lands according to the soil to determine what profitably be grown, is of no small importance. The commission points out the best on different soils, and the nation will be

INDUST.

regarded as an obstacle it increases the yield near mills or facilitates either cartage expense or the "over" and the use of tools to transfer it.

However, is now in the use of band circular and gang for the old system now produce 9, a product with amount

and mechanical increasing field a absorbent for nitro dynamite. Used produces a terra-cavities that, owing properties as a non-fire-proof material. Treating it with produces oxalic acid, uric acid and fermented, produces alcohol-soluble binder and used for making in carvings; while cement, it is a material. It is an material for fragile porous explosives and in walls to make old-proof.

WHAT PAYS.

The broad statement is better than any other return depends on the character of the land on which it is sown. One kind of crop will give the best return from a

certain crop; another piece of land of different quality would perhaps yield a very small return if sowed to the same crop. Finding out the particular class of crops the land is best suited to growing is therefore a very important matter for the wide-awake farmer.

A splendid example of what can be gained by the intelligent adaptation of crops to soil conditions is to be found in the County of Norfolk, Ontario. In certain parts of that county there are considerable areas of sandy land that cannot hope to compete with heavier, richer soils in the growing of wheat and other staple grains. Thus, farmers who attempted to grow these crops found that their profits were not as satisfactory as might have been desired. Some years ago, however, a few men noted that the soil and climate of the county were well suited to growing fruit, especially apples. The Norfolk Fruit Growers' Association was formed and forthwith started on a reputation-making campaign. All members agreed to care for and spray their orchards as stipulated by the rules of the Association. Incidentally, too, all fruit was to be marketed through the central agency. The results have been little short of phenomenal. The orchard acreage has been largely increased, Norfolk apples are now held as second to none in the markets of the world and the profits have been most gratifying. As a consequence, land values, in the last six years have doubled.

And this has been accomplished mainly by selecting the crop best adapted to the soil. The work that the Commission of Conservation has undertaken, of classifying lands according to the character of the soil to determine what crops can most profitably be grown, is therefore a task of no small importance. If the Commission points out the crops that pay the best on different soils, both the farmer and the nation will be the richer for it.

DISPOSSESSED BY BEES**Uninvited Guests Swarm Into House and Occupy the Parlor.**

The home of Mr. Venables, at New Westminster, B. C., was invaded recently. The invaders numbered several thousand, although Mr. Venables is not able to vouch for their exact number; he didn't wait to count them, but left them in full possession of his parlor, which room they chose to occupy.

The invaders in question were a swarm of bees. They entered Mr. Venables parlor by way of the chimney, which at this season of the year is vacant of smoke. Mr. Venables was apprised of their presence by a loud humming in the parlor, and on entering found the bees in full possession. He closed the doors and fled, and since that time has been looking for some one who knows how to handle swarms of bees.

In search of such a one Mr. Venables visited The Columbia office, and was informed that all that was required in dealing with swarms of bees was a firm but gentle hand to help them into a new hive. Mr. Venables, while not denying the possession of such a hand himself, would rather that the hand used in dealing with these particular bees belonged to someone else.—Exchange.

FAMOUS BAND AT FAIR.

Grenadier Guards Band to Play Twice Daily at National Exhibition.

General Baden-Powell to Review 5,000 Boy Scouts.

It can be fittingly said of the Canadian National Exhibition "that time cannot wither or custom stale its infinite variety." Each succeeding year the management has offered the public something

new and better than had gone before, and this season they have eclipsed all previous efforts by securing the engagement for the entire two weeks of the Fair of the famous band of His Majesty's Grenadier Guards. With one single exception this wonderful organization has not crossed the ocean since 1872, when under the baton of the premier leader, Dan Godfrey, they electrified the people of the United States with a series of concerts.

The Grenadier Guards Band is a part of the history of Great Britain. Its origin has been traced back to the days of Charles II., who signed the warrant bringing it into being in 1665. It was with the appointment of Dan Godfrey in 1866 that it assumed a commanding position as the king of military bands. Under Lieut. Albert Williams, who succeeded Godfrey in 1897, it has steadily progressed until it stands without a peer. Who has not hummed or marched to the swinging air of "The British Grenadiers."

The special features of the Canadian National Exhibition will be in advance of years. General Baden-Powell and his boy scouts should prove a fine attraction. The Model Military camp will be occupied by American troops this year; the spectacle before the grand stand will comprise a battle between a warship of the Dreadnought type and an air ship; a naval review at Spithead, and many equally attractive scenes. A timely display will be models of British vessels contributed by the great English shipbuilders.

Visitors to the Toronto Exhibition this year cannot afford to leave Scarborough Beach Park out of their plans. This \$600,000 amusement resort, modelled after Dreamland and Luna Park, the world-famous institutions at Coney Island, is the finest of its kind outside of New York itself, and has been visited by millions of delighted patrons in the four years that it has been in existence. Its permanent

structures include a scenic railway, a quarter of a mile long, a chute-the-chutes 600 feet in length, and an underground water trip, called the Cascades, which furnishes an unforgettable experience. In addition there are the Streets of Cairo, Human Butterfly, House of Nonsense, Electroscope, Theatre, Johnstown Flood, Aerial Swings, Caroussel, Midway, Bumps, Laughing Gallery, and many other novelties which are renewed each season. The special free attractions for the Exhibition weeks embrace the most thrilling and sensational acts obtainable in the amusement world, and include a death-defying dive for life from a lofty tower and several gymnastic and acrobatic European troupes imported to America as star bookings for the New York Hippodrome. Raven's magnificent band gives two free concerts daily and there will be special fireworks and sports for Exhibition visitors. King Street East cars land patrons at the Park gates. The Sunday afternoon and evening free band concerts at the park, are a popular feature with visitors and citizens.

Indexed

ENUMERATION OF CENSUS VALUES

The farm and urban values of the census of 1911 will be enumerated under the date of 1st June. They will include the real estate and live stock values of each enumeration district at that date, of the live stock and nursery stock sold in 1910, of the dairy products consumed at home, sent to factories or sold, and of the animals slaughtered in the same year, together with the values of other products of the farm.

Land and buildings and farm implements and machinery owned by every person in the enumeration district will be recorded separately for values in 1911, and the rent of land and buildings will also be recorded if leased in that year. Values will be taken for orchard fruits, small fruits and vegetables separately for 1910;

but values of horse horned or neat cattle and hives of bees separately for 1911, at

The values of live stock sold in 1910, of the dairy products consumed at home, sent to factories or sold, and of the animals slaughtered in the same year, together with the values of other products of the farm.

Dairy products consumed at home, sent to factories or sold, and of the animals slaughtered in the same year, together with the values of other products of the farm.

Animals slaughtered in 1910 will be recorded separately for values in 1911, and the rent of land and buildings will also be recorded if leased in that year. Values will be taken for orchard fruits, small fruits and vegetables separately for 1910;

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enic railway, a chute-the-chutes an underground Cascades, which e experience. In Streets of Cairo, use of Nonsense, Johnstown Flood, ussel, Midway, , and many other ved each reason. ns for the Exhibi- most thrilling and ble in the amuse- e a death-defying tower and several European troupes star bookings for drome. Raven's two free concerts special fireworks on visitors. King trons at the Park ternoon and even- at the park, are a sitors and citizens.

SENSUS VALUES

values of the enumerated under the y will include the ock values of each that date, of the stock sold in 1910, consumed at home, ld, and of the ani- he same year, to: s of other products

and farm imple- owned by every per- district will be re- values in 1911, and buildings will also n that year. Values chard fruits, small separately for 1910;

but values of horses, milch cows, other horned or neat cattle, sheep, swine, poultry and hives of bees will be taken separately for 1911, at the date of the census.

The values of live stock and nursery stock sold in 1919 will include horses, milch cows, other horned or neat cattle, sheep, swine, poultry and hives of bees, and nursery stock, which means fruit and ornamental trees grown for transplanting into orchards, gardens and parks.

Dairy products consumed on the farm, and sent to factories or sold, refer to products of the year 1910. They include the values of milk, cream, home-made butter and home-made cheese.

Animals slaughtered on the farm in 1910 will be recorded for the values of horned or neat cattle, sheep, swine and poultry. Horses are not included in these values, as in our country their meats are not used for food.

The values of other products of the farm include those of eggs, honey and wax for 1910, and wool, maple sugar and maple syrup for 1911.

The enumeration of hired labor on the farm refers to the year 1910. It will give the total number of weeks of labor employed, which means the number for all men who work for hire on the farm, and the total amount paid for hire, including allowance for board. The payment should be reckoned for the full time of service, and should include the value of board. The inquiry relating to earnings for domestic service is asked for in Schedule no. 1.

In addition to the foregoing inquiries of values, a question is asked for the value of all lands and buildings not manufacturing establishments or mines owned in Canada in 1911 which are outside of the enumerator's district.

Canadian National Exhibition

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Want and Exchange Column

FOR SALE—On account of having too many bees to look after, will sell one hundred splendid colonies in small or large lots at a bargain. Apply to John Kendrick, New Dublin, Ont.

WANTED—To hear from parties having bees for sale this fall. State style of hive. George Braven, Box 135 Dunnville, Ont.

WANTED—For cash, good bees-wax, or will exchange pure bred Beagle hound pups for the same, or cash. Those having wax to sell drop a line to J. Alpaugh, Galt, Ont.

Any quantity of No. 1 clover honey will be taken in exchange for 5 and 10-lb. pails, same as I use. Will contract now for your next season's crop.

G. A. DEADMAN.

WANTED—First-class honey, comb and extracted; can supply packages. Address, Foster & Holtermann Limited, Brantford, Ontario.

GOLDEN ITALIAN QUEENS—Bred from pure Golden Italian mothers; gentle, hardy, and great honey gatherers; the best that twenty years of experience can produce. Untested, 75c. each, \$8.00 per dozen; tested, \$1.25; select tested, \$1.50. William Elliott, Strathroy, Ont.

WANTED—Clover or basswood honey—finest quality—state how put up—quantity—lowest cash price—mail sample. Edmund J. Berry, Didsbury, Alta. References, Molson's Bank, Calgary, Alta.

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Banat, Caucasian, Carniolan, Italian and Cyprian Queens.

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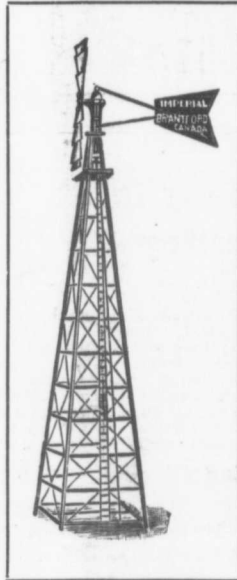


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