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Annual Meeting

Twentieth Annual Meeting Bee-Keepers' Asso., Ontario. | HELD AT TORONTO, DEC., 1899. . .

Q. Bees intended to be wintered in e cellar which are on their summer nds at present (Dec. 6th) with a n of three inches filled with saw-st on top, would it be better to t them into the cellar right away leave them until they get another ?

Mr. Hall: My answer to that is to t them in to-morrow if it is not ezing, and if it is freezing let them ne until they are thawed out, or some hot water from the tea kettle pour it around the stands, so t the moving may be done with-cracking. Never mind a fly; y have eaten nothing in the last weeks to require it. If they are en down loosen them somehow with as little jarring as possible. ke to put bees in when they are g; the clusters are all loose; you get a few stings, it is tru', but few. We do not break a cluster utting them in; the cluster is dy broken. They form a cluster they go into the cellar.

Dickson: I believe in putting in early. Mine have been in a month now, and, just as Mr. ays, there were lots to fly out, as they had not settled down to clustering.

Mr. Post: If bees have a rim of sawdust, as represented in the question even zero weather will not do them any harm. I have about 200 colonies myself now in the same condition; I do not feel at all uneasy about them, although as soon as the weather changes a little warmer I will take them in. The way my stands are built they will never stick.

Mr. Darling (asked by Mr. McEvoy to speak): My bees are not in the cellar yet, they are not packed with saw-dust, but I can take them up quietly by putting them on a pair of sloops or bobs, and draw them when there is a little snow or on the bare ground, and when I get them to the house they scarcely know that they have been moved, sometimes they are all quiet when we get them into the cellar, and sometimes they stir about. Mr. Hall advocates loose bottom boards. I raise up those that are loose and loosen those that are not loose, propping the front of the hive off the bottom board about an inch; I am not bothered with moisture. My bees last year were not put in until somewhere about Christmas. My reason for being so late was on account of sickness. However, I found my bees last spring came out drier and better on the average than they have for some years.

Mr. McEvoy: Let us hear from men who winter on the summe

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stands as to when they pack their bees.

Mr. Sibbald: I have not very much experience in wintering outside. I have wintered some in that way for two or three seasons and this season I have packed them only a couple of weeks ago. I believe they would be better packed earlier, but I had not time to do it.

Mr. Saunders: As far as wintering outside my hives are packed all summer; the only trouble I have in the fall is putting on the cushions, which I do about the last of September or the first of October. I asked this question. I winter the bees in my home yard in the cellar. After I had left for the West about the 1st September last they got some honey dew for about a week or so, and I have been too busy to put them in since I came home, and I wanted to know whether it would be advisable to give them a fly on account of the honey dew or to put them in right away.

Mr. McEvoy: This is a serious thing. If he puts them in the cellar he will have to bring them out pretty early. Leave them out a little longer and bring them in earlier, too.

Mr. Evans: I winter both in the cellar and out of the cellar. I packed some outside a couple of weeks ago in saw-dust, clamping eight or nine of them in a twelve foot clamp. I usually take the saw-dust in the spring and put it in the honey house, so that it is perfectly dry. I can winter in the cellar without any loss whatever, unless from starvation, but I do not think the bees come on as well in the spring after they are taken out. I do not usually put them into the cellar until the middle of January; and I think it is wise to keep them out as long as possible and take them out as early as possible. My cellar is particularly dry; the room is just opposite the furnace so I can open the door and heat it, or close the door and cool it off. Instead of propping up the hives I simply slide the hives back so that they are a couple of inches behind the bottom board. I don't put any cushions on top—just leave the ordinary quilt without loosing it. I set them around in rows, and they seem to winter all right. The only objection I have to that system is they don't come along in the spring as well as those that winter out-doors. At the same time this is not a fair comparison, because I always put the light bees in the cellar.

Mr. Hall: What time do you set them out in the spring?

Mr. Evans: Last spring I did not set them out until about 1st of April the year before about the middle of March.

Mr. Hall: If you have time, put them out on the first of March.

Mr. Newton: I am an out-door winterer, and I fixed mine up about one month ago. Bees that are wintered out-doors should be fixed up just as early as those that go into the cellar and I think the sooner we get done with them and leave them to settle down quietly for the winter the better. If we keep disturbing them in the fall I think we will not have such a successful winter. Then, too, I winter in seperate cases. I used to winter four in a case, and I think it is a very good way and cheaper than single. I like either in single or in four, but I do not care for clamps.

Mr. Armstrong: How much packing does Mr. Newton use?

Mr. Newton, 4 inches on the side and about 10 on top.

Mr. Armstrong: Is it necessary for 10 inches on top?

Mr. Newton: I won't say it is

necessary to have 10 inches on top, but I like it.

Mr. McEvoy: What is that on top composed of?

Mr. Newton: Composed of forest leaves; I do not think there is anything to equal forest leaves unless it is cork saw-dust.

Mr. Post: Do you pack them solid?

Mr. Newton: I don't make any solid work of it; I just throw them in. I do not think the solid packing is as good as loose packing; the frost goes through solid packing sooner.

Mr. McEvoy: What is your packing composed of, Mr. Shaver?

Mr. Shaver: Wheat straw usually, sometimes I use a little oat.

Mr. McEvoy: Have you seen any other packing than forest leaves used, Mr. Newton?

Mr. Newton: Yes; I have seen planer shavings, saw-dust, flax sheaves and cut straw, and I saw one place where they used rough papers torn up and thrown in.

Mr. Miller: Some think there is nothing like the flax sheaf. We have a flax mill in our village, and if I could not get anything else I would use flax sheaf, but I would sooner go five miles for leaves than 25 yards for flax sheaves, because flax itself is of a very cold nature, and it holds the moisture. One thing I find necessary is the space on top of the frame to allow the passage of bees from one frame to another. Never allow your bees to be shut down on the bars of your frames; they cannot get a passage from one frame to another. You can cut holes in your frames, if you like.

A Member: I pack mine all outside, have never put them in a cellar. I pack each one singly, and, as Mr. Newton does, I leave about four inches of space around the hive, and fill that with wheat chaff. I have tried clover chaff, but it seems to lie too solid and gets mouldy.

Mr. McEvoy: I agree with this gentlemen. I like each one packed separate.

Mr. Saunders: I had a little experience with different kinds of top packing. I have tried planer shavings and leaves, and have had the best results from saw-dust cushions. At first I made the cushions too large. I make them now so that there is an inch space between the inside of the hive and the cushion.

Obituary.

Mr. George Sturgeon, Kincardine, well known to many of the readers of the Canadian Bee Journal, passed away very suddenly at his home in Kincardine, on Thursday, August 23rd, of neuralgia of the heart.

Mr. Sturgeon had been a resident of Kincardine for about forty-two years and was for many years one of the town's most enterprising merchants. About ten years ago he retired from active business and devoted his time to the management of an apiary which he did with marked success. In his earlier years he gave his attention to bee culture and flower gardening for pleasure and later he devoted his energies on these lines as a profitable business.

For over twenty years he represented the town at the council board, and was also a Justice of the Peace for the county. Out of respect to his memory the business houses of the town were closed while the funeral cortege wended its way to the cemetery. The town bell was tolled, and the Mayor and council attended the funeral in a body. Deceased leaves a widow, two sons and seven daughters.

Mr. Sturgeon was recognized as an authority on bee culture in the dis-

trict. He first became interested in bees when a lad at home, his father and mother caring for a few skips in the old fashion straw hives. When he commenced the stove and hardware business in Kincardine, he kept bees and did so not for the purpose of making money out of them so much as for the pleasure he realized in studying their habits and incidentally securing honey for the use of his own family. He very early abandonded the old fashioned method of raising a disturbance by bell ringing and tin can beating, when he wished to hive a swarm. A number of years ago he imported a number of queens from Italy and his colonies have always been known as pure Italians. Some four or five years ago, when he was devoting his whole time to the apiary, with 145 hives he extracted a little over seven tons of honey which he disposed of at a good figure. One reason of his success in caring for bees was that he was always ready to purchase the best appliances and he subscribed and carefully studied the Bee Journal and other publications dealing with the apiary. He was a man that could discuss bee culture with marked intelligence and nothing gave him greater pleasure than to give advice and assistance to new beginners.

Moths in Combs, Spreading of Brood, Etc.

By A. Boomer, Linwood

I have read with some interest the articles in the last number of your journal on this subject and I am somewhat surprised that pratical bee-keepers should have so much trouble in preserving their combs. My yard comprises about 125 colonies, and I have every season a very large number of combs, more or less filled with pollen and liable to be attacked by the moth, but of late years I have had really no loss from this cause. My plan is this:—As soon as the extracting season is over, which here is usually before the first of August, and the combs cleaned up by the bees, I assort them by taking only those that are free from pollen and place seven of these in a super, and stack them up in my shed where they remain safely until wanted. Next year those that have pollen in I put eight in a super and put one or two of these supers over a strong colony and let the bees take care of them until late in the fall, then they are taken off and stacked up in the cellar where they remain until the swarming season comes on next year. They are then brought out only as wanted and so far in my experience they have been free from the ravages of this pest, and also from mold. Spreading of Brood—Results: Having had a good season last year and anticipating a fairly good one this year I tried the spreading of brood as practiced by more practical apiarists than myself, and now I have come to certain conclusions, be they right or wrong. Where I spread the brood at the commencement of the honey flow so as to give the queen the whole of the brood nest for brooding purposes I found that she occupied every comb and when the honey flow was over had the brood nest and super crammed full of bees and a lot camping out and very little honey, in fact the brood was in a most destitute condition. My conclusion is this, that if a colony is weak let it entirely alone and the chances are that you may get some surplus, and not such a quantity of bees, and the brood nest in a much better condition for winter. With strong colonies the spreading of the brood will retard and possibly prevent swarming if such is desired.

The season, as is now well known

was a poor one owing largely to the failure of basswood. My average will not exceed 20 lbs per colony. This, however, is exclusive of some 600 lbs of full combs reserved for levelling up for winter. I have fed some 200 lbs. of sugar to some 20 colonies and have enough full combs to fix up the balance.

Let us hope for better things next season.

How Large Yields of Honey are Secured.

"Good evening Mr. Doolittle. It was such a bright moonlight night that I thought I would run over a little while and have a talk with you about large yields of honey. Do you believe some of the yarns got off in the bee-papers? I have some old papers lent me by neighbor Smith, and in one of them I see a report of over 600 lbs. of honey from a single colony during one year. Can there be any truth in such a statement?"

"Well, friend Church, I think there is truth in the statement; for in 1877 I secured 566 pounds of honey from one colony of bees, and so reported of several of the bee-papers of that time."

"Whew, But wasn't that a big thing?"

"This was considered as a large yield at that time, and still so considered by beginners and those that are not familiar with the records of the eighties, during which there were several yields made of from 600 to nearly or quite 1000 pounds from single colonies, the truth of which could not well be doubted."

"But how is such a thing possible?"

"To make you best understand I will tell you something about that colony which gave the 566 pounds in 1877. That spring I selected an average colony of bees and set it apart for extracted honey, intending, of course, to do the best I could with it. I built them up as fast as possible by the means usually employed, that of spreading the brood and keeping as warm as possible without artificial heat, as is frequently given in our bee papers and books. By the time apple-trees were in bloom the queen had brood in twelve frames, and from that source I extracted, according to my diary of that year, 16½ pounds, besides leaving them enough to tide over the time of scarcity between apple-bloom and white clover."

"You speak of 12 frames. Is not that a large hive?"

"Well, yes. But a few days after, these twelve frames, bees and all, we set into a hive four feet long, and a division board placed at the rear of the combs. Once a week two more combs were inserted in the centre of the broodnest until the hive contained twenty combs quite well filled with brood."

"Say, Doolittle, arn't you yarning it? My best colonies do not have over seven or eight frames of brood."

"If you will alow me to go on with my story I think you will see through the whole thing soon."

"Excuse me. I'll try not to interrupt again."

"As white clover was now yielding honey, the hive was filled out with frames of empty comb, the whole number in the hive now being 32. I did not expect that the queen would occupy any of these last 12 combs, but in this I was mistaken; for before white clover was through yielding honey I found brood in every one of the 32 combs, which, if placed compactly together, was fully equal to 15 frames solid full of brood. Each frame gave fully 100 square inches, and each square inch gives 50 worker bees. If exact, it would be about 55, but we will call it 50 as it figures a

little more easily. Hence there were 5000 to hatch out of each of these frames every 21 days, or 75,000 from the 15 frames."

"My! but what a lot of them!"

"Yes; but you were to keep still. The average life of the bee, in the working season, is 45 days; so you will see that the queen could place two and one-seventh generations of bees on the stage of action to where one generation dies off. Two and one-seventh times 75,000 equals 160,700 as the number of bees in that hive during the basswood yield."

"O Doolittle!"

"If I had not been there myself I could have hardly believed it. It was a sight worth beholding when the bees were just starting out for the fields in the morning, for they would rush out like an army, and then, later, the entrance would be one living mass going to and fro. From clover they gave 186 pounds; from basswood, 287½ pounds; and from buckwheat, 76 pounds, making the 566 in all. Here are the figures in my diary of that year."

"Well, I should think you did do the best you could with that colony, as you said you intended to."

"Now, suppose that, instead of securing this large amount of bees in one hive, I had not looked after them at all, but left them to take care of themselves, as most of those who doubt these large yields do, what would I have had?"

"I am not going to answer that question. I agreed to keep still."

"The queen would have laid only moderately, so that, by the time the white clover began to yield honey, they would have had only about from 25,000 to 30,000 bees. At about this time the bees would have swarmed, thus dividing their numbers, while their would have been no laying bee in the old hive to lay eggs for the basswood or buckwheat workers for nearly or quite three weeks. Besides this, there would in all probability have issued one or more after swarms, thus dividing the bees still more, thereby defeating the prospect of any honey at all from the old colony, so that, were we to call 20,000 bees an ordinary colony as kept by the majority of bee-keepers, we should not be far out of the way."

"I think you are about right there."

"This would give but about 71 pounds per colony had this 1877 colony been divided up in that way, so that in reality that big yield, when brought down in this way to its proportion according to the number of bees there were in the hive, is nothing very great after all; for no one would call 71 pounds of extracted honey per colony, in good season, an exagerated report."

"Then you think that the number of bees there are in a hive has much to do with the yield of honey from that hive."

"Most assuredly I do. And all bee-keepers should understand that it is bees that gather honey or nectar, not the number of hives you have standing in the yard, all the way from weak to moderate in bees when the honey harvest arrives."

"Will a large colony do more in porportion than a small one?"

"Now you have touched on a point worth much to every one who desires good returns from his bees. A large colony of bees will do much more in proportion than will a small one, for the outside elements do not have that chilling effect on the hive of a populous colony that they do on a hive with few bees in it. Thus more bees go to the field, and all work to better advantage."

"In a remark you made a little back you hinted at having the bees whe

honey harvest arrived. What about this matter?"

"As I have often said before, and it will bear repeating over and over, the main secret in securing a large yield of honey lies in the securing of a large and contented force of bees at just the right time to take advantage of the honey harvest. If secured too early they are of little use, as there is nothing for them to gather; and if too late, they only become consumers instead of producers."

"How are we to know about these matters?"

"The same way you know about any thing. In connection with the bees the locality must be understood. If a person understands his locality, and secures his bees as we have been talking, he will have no cause to complain of his yield, if the flowers secrete honey. On these things depends our yield of honey."

"I am glad I called, for I not only understand how better to work my bees, but no longer doubt what seemed to me to be 'fish stories' before. Good night."—Conversations with Doolittle in Gleanings.

Questions and Answers

[Questions to be answered in these colums should be sent to us not later than the 15th of each month in order to insure their answer appearing in the following issue. We wish to make this department as useful to our readers as possible and a reliable source of information. For the present at least, the replies will be procured from various sources.]

QUESTION 1—If cellar is damp is it absolutely necessary to have subearth ventilation in order to winter bees successfully?

2.—If cellar is damp would it be advisable to line the walls with lumber and pack between with 4 or 6 in of dry sawdust?

AMATEUR.

ANSWER. 1—The best cellars now have no sub-earth ventilation, but ventilation is by no means to be neglected.

2.—The prime requisite of a bee-cellar is sweetness, i. e., absence of all odors. Hence I would avoid wood or any other vegetable matter as much as possible in its construction, especially if it is damp. Better be too damp than too dry. Bees have been known to winter well in a cellar with often six inches of water on the floor.

Belmont Ont. MORLEY PETTIT.

QUESTION.—Please tell me the best way I can feed back small quantities of honey in the surplus combs without extracting. There is just a patch of honey here and there put in since last extracting.

Dundas Ont. J. E. Y.

ANSWER.—The best way I know would be to uncap any that may be sealed and on a fine day set each super in front of the hive it belonged to. This must be done quickly as possible to prevent robbing. Remove them soon as the bees leave.

My own system is to extract the combs no matter how little they may contain; if the honey is dark I allow the bees to clear them out after extracting by piling them up in the yard a short distance from the hive and giving the bees free access. If the honey is lightI prefer leaving the combs moist as when they come from the extractor; the bees will take to them much more readily in the spring; they are not so liable to be attacked by the wax moth; nor so brittle.

Cainsville Ont. James H. Shaver.

Treatment of Foul Brood.

Question.—1st. "In the treatment of foul brood is it necessary that the supers should come off the hives after the starters are put in or not?

2nd. Do you think it will be necessary to break up all the combs that the bees have been working on in the supers?"

Muskoka, J. T. C.

Answer.—1st. Yes. All supers must be kept off the hives until you have the bees most thoroughly cleansed of all the diseased honey which they took out of the old combs when you removed them. To cleanse the bees, remove all the combs in the evening in the honey season and give them nothing but comb foundation starters, which you will leave with the bees for four days. During these four days the bees will use up the most of the diseased honey in comb, building and will store the balance of it in the little pieces of new combs. Then in the evening of the fourth day take out these new combs (which the bees made out of the starters), and give them full sheets of comb foundation, and when the foundation is made into combs you will find complete cures in all cases that have been cleansed this way.

After the honey flows are over, or at any time that the bees are not gathering honey, this same cleansing process can be carried out and perfect cures made by feeding sugar syrup in the evenings. I have had hundreds of colonies cured this way and fed up for winter on sugar syrup and the most of these cured colonies gave good yields of honey the following season. Don't ever put supers of extracting combs on right after you put the starters in the brood chamber, because if you do the bees will rush up and store all the diseased honey in them and then you will still have diseased honey on hand to cause you trouble later on.

2nd. Every thing depends on your class of super combs whether you can save all, half or none. I have had large quantities of combs saved every year that have been used on foul broody colonies, and these nice white combs have been worth many dollars to their owners. If your extracting combs have never had any brood in them, and you have extracted the honey out of these and then given them back to the bees until they have licked them dry you can save all such combs. But if any of these combs have had only one cell of brood in it make wax of such combs, because when the foul brood matter dries down in a cell it glues itself fast to the bottom and lower sides and the disease will reman in that cell as long as that comb lasts. And all larvæ that will ever be fed from honey that has been stored in such cells will die of foul brood, so be very careful what combs you save.

Wm. McEvoy,

Woodburn, Ont., Sept. 30th, 1900.

The Bee as a Pollenizer of the Blossoms.

Read at the Northeastern Ohio and Western Pennsylvania Convention, by Ed. Jolley.

The bee as a pollenizer of the blossoms is one of the greatest of our natural benefactors. The nectar hidden in the well of the flower is but the bait that lures the bee unwittingly to perform a vastly more important function than gathering and storing honey for either itself or man.

As we look at the high state of perfection of our apple, peach and pear, our berries and small fruits, our melons and squashes, we are apt to regard them as fixtures, as having

always existed as they now exist, while, in fact, nothing could be further from the truth. The present high standard of our fruits represents the labor of the bee for ages.

No where is the natural law of evolving from a lower to a higher degree of perfection more clearly demonstrated than in the vegetable kingdom. Nearly all our fruit bearing trees are double-sext (hermaphrodite), and are capable of being fertilized from their own bloom. But the effect that close in-and-in breeding is just as marked, and just as detrimental in the vegetable kingdom as in the animal; and to guard against this nature has placed a tiny drop of nectar in each blossom to entice the bee to the blossom. The amount of nectar in each blossom is so small that the bee is obliged to visit blossom after blossom in order to secure its load. In this way the pollen is carried from blossom to blossom, from tree to tree, and from one variety to another.

By way of illustration, if you have an orchard of a single variety, Baldwin apples for instance, and the orchard is so far from any other variety that the bees can not carry pollen to the orchard from any variety, the seed from the fruit of this orchard will bring forth nothing but Baldwins. If your orchard contains a number of different kinds of apples, the seed bring a blending of the different fruits, or a seeding different from any in the orchard, and in all probability superior to any of them.

If you were to plant a single Baldwin tree on an island, so far isolated that the bees could not reach it, it might still bring forth fruit, but the seed from this fruit would be sterile and utterly incapable of reproduction. So you see without the aid of bees, the tree on the island was incapable of reproducing itself, and when the tree had aged and died, the island was without fruit. So it would be with the world —remove the pollenizers of the blossoms, and when the present standing of fruits had passed away there would be none to replace them.

You may isolate a single Baldwin tree so far from any other tree that the bees cannot carry pollen from one to the other; so that it will be fertilized by its own bloom, and the seed from this tree will bring forth a Baldwin—one that is slightly inferior to the parent tree. If this in turn is allowed to be fertilized from its own pollen there will be a still lower order of the Balwins. This work of retrogression might be carried on until the once fine apple had degenerated back step by step to the origin of the apple, which, by our best authorities, is said to be a common wild rose. All our fruits have had their origin equally low, so that the bee, in bringing them up to the present high standard, has doubtly earned its title, "busy bee." And as the natural inclination of the bee is to zeal and untiring industry in its work, we may expect that through its efforts the progress of our fruits will be ever onward and upward to a still higher perfection.

Venango Co., Pa.

Good Fuel for Smokers.

Wax Extractor refuse mixed with rotten elm wood is recommended by C. A. Huff, Clayton. Mich., in Gleanings the editor says in a foot note:—"Slum gum (the refuse from the wax extractors) has been recommended for smoker fuel in connection with something else. It burns readily because it is largly propolis and cocoons. It should of course be saved as it is just the thing to start smoker fires."

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EDITORIAL NOTES.

The "Western Bee-keeper" has been succeeded by the "Western Apiary," edited and published by C. H. Gordon, Boulder, Colo. The first issue under the new title and management has come to hand and bids fair to fully maintain the reputation of its predecessor.

A granite monument has been erected to the memory of Rev. L. L. Langstroth the father of American bee-keeping, at a cost of $300, purchased wholly by the funds of grateful bee-keepers of many lands. Editor E. R. Root, writing of this in "Gleanings in Bee Culture," has well said: "If no granite shaft stood for "his memory there would still be the "moveable frame hive which would "be an everlasting monument in "itself."

Editor York commenting on the National Bee-Keepers' Convention, held recently in Chicago says :—"It "exceeded any former meeting in "attendance, there being at one even- "ing session fully 350." The following were elected as officers and executive committee: President, Ernest R. Root, Medina, Ohio; Vice-President, R. C. Aiken, Loveland, Col.; Secretary, Dr. A, B. Mason, Toledo, Ohio. We understand that a very full report of the proceedings has been secured by Editor York, which will be published from time to time in the "American Bee Journal."

Secretary Couse has not yet announced to us the exact dates of the Ontario Bee-Keepers' Convention at Niagara Falls. We understand, however, that it will be held early in December and on such dates as will not clash with the annual Fat Stock show at Guelph.

* * *

Since the above writing we have received the following correspondence from Secretary Couse:

Dear Sir—"The annual meeting of the Ontario Bee-Keepers Association will be held at Niagara Falls, on December 4, 5 and 6, and every effort is being made to have an interesting programme. Papers will be prepared and read by a number of practical and popular bee-keepers. The following gentlemen have been invited to take part, most of whom have consented and none as yet refused: Messrs. W. Z. Hutchinson, Flint, Mich.; E. R. Root, Medina, Ohio; P. H. Elwood, New York; Prof. Shutt, Experimental Farm, Ottawa; Prof. Harrison, O. A. C., Guelph; John

Fixter, Experimental Farm, Ottawa; R. H. Smith, St. Thomas; Alex Dickson, Lancaster; M. B. Holmes, Athens; H. G. Sibbald, Cooksville; W. J. Craig, Brantford. An effort is being made to have all the Ex-presidents attend the convention. It is the intention of the programme committee to have a banquet on one of the evenings and have the president and ex-presidents as guests of the Association. There will be the usual arrangements made with the Railroads and Hotels as to rates. All persons interested in the bee-keeping industry are extended a very cordial invitation. A large attendance is looked for, and this will also be a splendid opportunity to see the beauties of the Falls."

Yours truly

W. COUSE.

Streetville, Ont, Oct. 2nd.

THE EXHIBITIONS.

The honey departments of the fall fairs presented a very slim appearance compared with former seasons, indicating plainly a similar condition in the honey crop throughout the country The exhibit at Toronto was not sufficiently large to demand a separate building, merely occupying one side of the old dairy building, and the number of entries not enough to take the prizes offered. The display, however, was very neatly arranged and creditable to those in charge and the qualities good considering the character of the season.

Among the new inventions the first and second prizes were awarded to Henry R. Smith, St. Thomas. First for a bee-escape and second for a combined section and foundation fastener. The third prize was awarded to Wm. Martin, Belmont, on a section foundation fastener. This latter is a new device on the hot plate principle and it certainly does its work very effectively. The inventions were all very good in their respective spheres and will no doubt prove helpful to those requiring such. The Judges were Mr. Wm. Couse, Streetsville, and Mr. A. E. Hoshal, Beamsville.

* * *

The exhibit at London, while considerably behind its usual proportion came much nearer it than Toronto and from reports gathered there it would seem that western and northern bee-keepers have been favored with the better honey flows. The exhibits were very neatly gotten up and showed a great deal of taste on the part of the exhibitors. We consider however there was a very serious draw-back in the building, owing to insufficiency of light, fitted up as it was for dairy exhibits, and the windows being shaded and curtained, the honey did not show to nearly as good advantage as it would have had the surrounding conditions been favorable. Mr. Martin Emeigh, of Holbrook, judged.

* * *

Speaking of honey exhibits generally there is a very great sameness and a lack of orginality of design

about them year after year that tends to mar and disturb the interest taken in the product. The judges in making their awards have found this "sameness" a difficulty in deciding between individual exhibits; onlookers are inclined to ask us whether our exhibitors have attained to the hight of their ideas of perfection or if they have fallen into a rut. In these times of thrift and enterprise originality and attractiveness goes far towards success and we believe that it would pay exhibitors to give this matter their studious attention and to aim at introducing some new feature each year. This will not only have a bearing upon the general effect but will make the competion for prizes much keener, thus bringing out the individual ideas which alone can make such an exhibit.

Greasy Combs.

J. F. Munday writing in the "Australasian Bee-Keeper" makes a strong plea on behalf of bees that produce greasy looking comb honey, and states what he considers is the cause of this peculiarity, which indeed seems quite reasonable. We, over here, however, prefer the nice white comb and the bees that make it; it may not taste any better nor perhaps as well, but it looks and sells better. We take the following from Mr. Munday's article:—

"What is the cause of this greasy appearance of the honey comb? I think I know. The bees that produce it are remarkable for clinging and clustering on the comb. The heat they engender keeps the wax warm and soft, and the pressure of their feet forces the caps of the comb right on to the honey in the cells. The caps are thus made perfectly air tight. There is no air left in the cells and the colour of honey in the cells is the colour of the combs, for the thin caps that cover it are nearly transparent. Yes! give me this kind of honey every time either in comb or extracted. The cappings of this kind of comb are tougher than those of the white comb honey. It will therefore keep better. It is not so easily damaged, and I fancy it is more easily uncapped with the knife when extracting, in consequence of the extra toughness of the caps; yet the caps are no thicker; in fact, they appear to be thinner than those of the choicest white comb.

When people who purchase comb honey find that the nicest and best of honey is contained in these greasy looking sections they will buy them fast enough. It is only the best of bees that produce them."

Wants Protection Against Bees.

"Spectator" writing to the Farmers' Sun has the following to say upon the above subject: "To the editor of the Sun—In the Sun of Aug. 8, I saw an extract from the Country Gentlemen, to the effect that certain strawberry growers in Kent, Eng. had made a mistake in making a raid on bees and bee-keepers because they thought the bees destroyed the ripe fruit. The writer goes on to say that bees never attack the fruit, but that at blooming time they are highly beneficial in causing fertilization which, without their aid would not take place. Now, there is no necessity for depending on bees to fertilize strawberries, as there are some very excellent varieties, such as Brandywine and Parker Earle that have a perfect blossom. I can not exactly say whether bees attack ripe strawberries or not, but I can

believe it very likely if they have nothing else to do at the time; because I know for certain they are most destructive to ripe raspberies. I have a fine lot of Cuthbert raspberries, and last year the bees came in great force, and spoiled a great many of the ripe berries. This year they came earlier and kept at their work of destruction as long as there were any berries worth while remaining. I estimate the vermin destroyed half the crop at least. A remarkable thing was I had a large collection of flowers in bloom very near the raspberries, but the bees did not care for flowers —they wanted raspberries only. It appears to me that many keep bees and raise nothing to feed them with; then the pests go forth and steal their food from those who get no benefit from them. Some acts have been passed for the protection of bees and bee-keepers. It is time some provision were made protecting people against the ravages of bees. I think it ought to be a punishable offence to keep bees without growing food for them."

Mead Making.

Recipe 195 years old.

The following recipe is from Dr. Warder's work on bees, published some 195 years ago, and, having personally sampled a mead made from the directions given, we can testify to its being one of the best honey beverages we ever tasted. The extract from Dr. Warders' book reads thus:—

HOW TO MAKE ENGLISH CANARY IN NO WAY INFERIOR TO THE BEST OF SPANISH WINES.

"One hundred and twenty pounds will make a barrel of very good mead; but if you make it of clear honey, then your best way is to allow 4lb. to every gallon of water. Let your quantity be much or little which you ought to govern yourself by either considering the bigness of your cask or the quantity of honey you have to make up into mead, mix it in your copper, and then boil it an hour, and scum it well, which scum you may strain through a 'Hippocrate's sleeve,' or a taper bag, made of swan skin, with a hoop at the broad end, letting the narrow end come to a point. This bag will make it as fine as the other, through which you may put it. When your mead is almost cold, tun it up, clay it down, and let it stand till it is fine, and old enough to drink, which sometimes will be sooner than others, according to the time of the year and weather that comes upon it after making. This liquor is one of the choicest of wines, as well as the most wholesome of all vinous liquors in the world, and ought to be drank and made use of in possets, &c., as canary; and thus used, it is imposible to know whether the posset was made of your own mead or canary.

"Thus for making of mead with clear honey. But if you do it with the washings of combs, or dissolve all your honey from the combs, then you must dissolve it in warm water, till an egg will swim in the mead the breadth of a shilling, But here you must be very careful, that before you break your combs into the seive, or strainer, you separate all the young bees, which you may easily know, from the honey, and also the Sandrach (or bee-bread), which is a yellow substance, with which some of the cells are filled, which otherwise will give your mead an ill taste, and then proceed to boil, scum, and tun as before. It is best if it is kept till a year old; and if you make it well (as before) it will keep as long as you please."—British Bee Journal.

Some Dauphin Bee-kepers.

Bee-keeping is an industry which has not as yet been very extensively exploited in the west. Various reasons may be assigned for this fact, not the least of these being the belief that it is very difficult to winter bees here successfully. The experience, however, of those who have kept bees in Ontario and also out here, seems to indicate that no more difficulty need be apprehended in Manitoba than in more eastern parts. Not long ago one of our staff visited two or three farmers at Dauphin, who reported their efforts a success. One of these, James H. Maynard, has in the past favored this paper with an article on the subject. Mr. Maynard winters his bees regularly in a pit made in a dry knoll. The pit consists of a trench about four feet wide and two or three feet deep, covered with planks and earth and provided with a ventilator at either end. Before putting away, the top of the hive is covered with a wire or zinc screen to keep out mice, and over this is put a clean new cloth. The space in front of and over the hives is filled with clean oat straw. Mr. Maynard has had first-class success in bee-keeping, and keeps a nice little colony.

Isaac Spillett, at the foot of the mountain, adopts a method of wintering which seems a little severe when regarded in connection with our 40 below zero record. He has kept bees in Manitoba for the past four years, and winters them on the stand. He makes a box around the hive six inches larger on each side than the hive itself, and fills the interval with perfectly dry sawdust. The usual waxed cloth is removed from the top of the hive and replaced by a new one, right on top of which the sawdust is laid, a cover going on the outside box, but not on the hive proper. The entrance space is left open to the bees through a small tube running through the sawdust. Very fair success is claimed for the method. Mr. Spillett kept a large apiary at Barrie, Ontario, and claims that there is a greater diversity of honey producing plants in the west than in his old home.—North West Farmer.

Diagnosing Diseased Brood.

The following diagnostic signs distinguishing Foul, Black and Pickled brood are given by Dr. Howard in Gleanings in Bee Cuture.

FOUL BROOD.

Glue-like consistence of the mass, and the offensive smell.

BLACK BROOD.

Jelly-like consistence of the mass, the absence of ropiness noticed in foul brood, and the peculiar sour-like smell.

PICKLED BROOD.

Always watery, turning black after being attacked with the mucor fungus—a black mold—and by placing the larvæ in a sterilized chamber, keeping warm and dark, in three or four days the white fungus of pickled brood will appear.

When the nozzle of your smoker becomes clogged and sticky with soot, squart in with an oil can a few drops of kerosene and light with a match. In a few minutes the soot will be burned to a blister, when it can be readily scraped off with a knife and your smoker will be as good as new.

The Month's Work

A. E. Hoshal, Beamsville, Ont.

As to whether it is better to winter bees inside or outside:—In the opinion of the writer it depends largely upon the character of the winter. If the the bee-keeper is situated where the winter seasons are long and steady, and where from the time winter begins until spring opens the weather will not permit the bees to fly, they will then do better if wintered inside; but if on the other hand, he is situated where there are occasional warm days during the winter on which the bees can fly, say once every month or six weeks, then they will do better outside.

When wintered outside they will need to be protected with some kind of packing to enable them to successfully withstand the cold. There are three ways in which this is usually applied. (1) With double walled hives, (2) with clamps and (3) with wintering cases. Of these three methods I would recommend the third. These wintering cases are plain boxes, usually made of about ½ inch lumber planed on one or both sides, and their covers of somewhat heavier lumber so they will not check or crack with the sun and become leaky. They are also of such a size, and so constructed that when the hive is placed inside there will be two inches of space between the sides, ends and bottoms of the hive and the inside of the packing case and from three to four inches between the top of the hive and the cover of the case. These cases should be perfectly rain and snow proof so that the packing inside cannot possibly become damp therefrom. They should also be painted some dark color so as to absorb heat from the sun. Any dry material that is a good non-conductor of heat, such as forest leaves, chaff, cut hay or straw, makes good packing.

The wintering cases should be put on the hives about the first week in October. In doing this remove the hive (which of course is a single-walled one) from its stand and place the wintering case (which should be made to fit it) thereupon. Then place the hive inside the case and bridge from the entrance of the hive to the entrance of the case so that the packing will not prevent the bees passing in and out of their hive. Next fill up the remaining space in the case underneath, about and above the hives with packing, pressing it firmly in with the hands or end of a flat stick and filling the case a little more than even full, so that when the cover is put on and fastened down, it will press firmly on the packing inside. The whole when completed should not be shaded as is often done, but left in the sun during the entire fall, winter and spring, and if while doing this, it can also be protected from the winds so much the better.

An entrance about three or four inches wide and one-half inch deep is usually allowed the bees during the winter, and no upward ventilation through the hive given them. On the front of the wintering case immediately below and even with the bottom of the entrance is fastened a small board about six inches wide by ten inches long for the bees to alight upon when coming in, so that they will be able to gain the entrance easily and not drop upon the ground.

Foul brood bacteria will live at a temperature of 216 degrees below freezing.

Uniting Bees.

G. M. Doolittle writes in the "American Bee-keeper" on the above subject in reply to a correspondent who says "I have some weak colonies of bees which I fear will not winter as they are. How would it do to unite two of these weak colonies together?" The reply :—"This is the proper thing to do, and the time to do it is the later part of September or the first of October; but if you are on the lookout for a warm day it may be done even in November, though it is not best to wait as long as that as a rule. Two weak colonies kept separate will consume nearly twice the stores which both would united, and very likely perish before spring, while, if put together, they would winter as well as any good colony. To unite such colonies late in the season, the following is a good plan: If one of the queens is known to be inferior to the other, hunt out the inferior one and kill her, so that the best queen may survive; otherwise you need pay no attention to the queens for one of them will soon be killed after uniting.

Having the queen matter disposed of, go to the colonies you wish to unite and blow smoke quite freely in at the entrance, pounding on top at the same time with the doubled-up fist or with a stick of wood with a cloth wound around it so it will not mar the hive or make too sharp a noise rather than a heavy jar. When both have been treated in this way, wait four or five minutes for the bees to fill themselves with honey, when one is to be put on a wheelbarrow and wheeled to where the other stands, and both opened. Now select out the combs out of both hives which contains the most honey, setting them in one hive. In thus setting in it is always best to alternate the frames, whereby the bees are so mixed up, as well as being full of honey, that they have no desire to fight, for each bee touched by another is a stranger, filled with honey. Then, their being full of honey makes them so they are not inclined to take wing and fly back to their old home under our manipulation. After the hive is filled, arrange the quilt or honey-board and put on the cover. Next put a wide board down in front of the hive, leading up to the entrance, and proceed to shake the bees off the remaining frames, taking first a frame from one hive and then one from the other, thus mixing the bees as before. After all are in set the wide board up against the front of the hive, sloping over the entrance so that the next time the bees fly they will bump against it, so to speak, thus causing them to mark their location anew, so that none will turn to their old location and get lost. Also remove all relics of the old hive, so that there is no home-like appearance about the old location to entice them back. Put the remaining combs away in some safe place for next season's use, and the work is done."

CELLAR WINTERING

To another who asks the question —"will it do to put bees in a cellar where persons are going in after vegetables every day and how is it best to arrange the cellar?" Mr. Doolittle replies:—"A cellar that will keep vegetables will answer very well for bees, and the going into it every day need not disturb the wintering bees, if the persons entering are cautious about jarring them, or needlessly disturbing the hives in any way; especially if the bees are placed so that the light from the lamp cannot shine direct into the entrance to the hives. If the cellar is kept dark during the winter all that is necessary to do is to

turn the entrance of the hives toward the cellar wall; but if the cellar is light, a place in one corner should be partitioned off so as to make the part which is to contain the bees dark. Bees have been wintered well in cellars where the light of day was allowed to enter; but, as a rule, bees winter best in a cellar into which no light of the sun ever enters while they are in it. The hives should also be ten to fifteen inches from the cellar floor, the bench or platform on which they stand resting on the ground instead of being nailed to the sleepers above, otherwise the jar caused by any movement on the floor above would disturb the bees and tend to make them uneasy, thus causing more or less loss. Rats and mice should also be excluded from the cellar where bees are to be wintered; for of the two, I would rather chance the jar from children playing over bees than of rats and mice running about and through the hives. Many colonies of bees are lost each year from rats and mice in cellars during the winter. The full entrance to the hives should be given where fast bottom boards are used, and with movable bottom boards, the same should be left on the summer stands and the hives raised two or more inches above the bench or hives on which they rest. Where honeyboards are used, I prefer to remove them, substituting several thicknesses of old carpet, or else a chaff of sawdust cushion two or three inches thick, through which the moisture from the respiration of the bees may escape; but still keep them dry and warm.

The bees should be set in, about the middle of November and taken out about the time the elm and the soft maple blossoms, or when the first pollen in the spring is brought in. Some recommend setting in later and taking out earlier; but my experience has been that the sudden change, both in late fall and early spring, are very damaging to bees, whether in the cellar or out of doors, and it is best to avoid them where we can as well as not, as is the case in cellar wintering.

The right temperature of a cellar to winter bees best is from 42 to 45 degrees, but if fixed as above given, they will do very well as 35 to 40 degrees. If the temperature is one where the temperature goes as low as the freezing point and stays there any length of time, I should prefer to leave the bees on their summer stands, for a continued temperature at about the freezing point or a little below, seems to be very injurious to bees."

The Belgian Rabbit

A Subscriber in the Montreal Star, asks the question.—"What kind of an animal is the Belgian hare, or rabbit that there is much said about? Is it a profitable animal to keep along with poultry?"

To which the Star replies as follows.—"This kind of rabbit, commonly but incorrectly called a hare, is giving considerable excitement among persons who are apt to think any new thing must be good. It has been kept as other rabbits, but of late it has been much improved in size. It has so many broods and grows to market size so quickly, that it may really be a profitable thing to have. It is about as large as the native Canadian hare—or rabbit—which is white in the winter but grey in the summer. Doubtless this native animal might be made as profitable as this foreign one if it were reared in confinement. The Belgian has six litters in the summer, one every month, and when the little

rabbits are a day old the doe will breed again, so that with eight at a litter, which is the average number, this is a very prolific kind. The flesh is white like that of a fowl, tender and juicy. At 3 months old a young one will weigh four pounds. They will burrow in the ground, which shows they are really rabbits, as hares do not burrow. So that they must be kept in pens with a tight floor. A pen 6 feet by four closed in with wire netting and having a box at one corner for a sleeping place is used by those who keep them. If the pens are kept clean and littered with sand there will be nothing disagreeable in them; they are cleanly, and if kept clean are not troubled with vermin."

EXHIBITION PRIZE WINNERS.

Toronto.

Best and most attractive display of 50 lbs. of extracted granulated Clover honey, in glass. 1st, R. H. Smith, St. Thomas; 2nd, George Laing, Milton.

Best and most attractive display of 50 lbs. of extracted granulated Linden Honey, in glass. R. H. Smith.

Best display of 500 lbs. of liquid extracted honey. 1st, George Laing; 2nd, R. H. Smith.

Best 500 lbs. of Comb Honey in sections. 1st, George Laing; 2nd, R. H. Smith.

Best 12 sections of Comb Honey. 1st, J. H. Davidson, Unionville; 2nd, George Laing, Milton; 3rd, R. H. Smith, St. Thomas.

Best 100 lbs. of extracted Liquid Linden Honey, in glass. 1st, George Laing; 2nd, R. H. Smith.

Best 100 lbs. of extracted Liquid Clover Honey, in glass. 1st, R. H. Smith; 2nd, George Laing.

Best 10 lbs. of extracted Liquid Clover Honey, in glass. 1st, J. F. Davidson; 2nd George Laing; 3rd, R. H. Smith.

Best 10 lbs. of extracted Liquid Linden Honey, in glass. 1st, George Laing; 2nd, R. H. Smith.

Best 10 lbs. of extracted Liquid Buckwheat Honey, in glass. 1st, R. H. Smith; 2nd, George Laing.

Best Beeswax, not less than 10 lbs. 1st, R. H. Smith; 2nd, George Laing.

Best foundation for brood chamber. R. H. Smith.

Best foundation for sections. R. H. Smith.

Best exhibit of Apiarian Supplies. R. H. Smith.

Best and most practical invention for the Apiarist, never shown before at this exhibition. 1st, Henry R. Smith, St. Thomas; 2nd, Henry R. Smith, St. Thomas; 3rd, W. Martin, Belmont.

Best six varieties of uses to which honey may be put in preparing articles for domestic use. 1st, R. H. Smith; 2nd, George Laing.

For the most tasty and neatly arranged exhibit of honey in the Apiarian Department. 1st, R. H. Smith; 2nd, George Laing.

To the exhibitor taking the largest number of prizes for Honey at this exhibition 1900. 1st, R. H. Smith, Silver Medal; 2nd, George Laing, Bronze Medal.

London.

Most tastefully arranged exhibit of comb and extracted honey, bees wax, the product of exhibitor put up in marketable shape. 1st, Wm. Coleman, Birr; 2nd, Byron Aches, Popular Hill; 3rd, Mrs. S. E. Rudd, London.

Comb Honey, 200 lbs, in sections, put up in most marketable shape. 1st. Byron Aches; 2nd, Wm. Coleman.

Liquid Extracted Honey, 200 lbs,

put up in most marketable shape. 1st, Byron Aches; 2nd, Wm. Coleman; 3rd, Mrs. S. E. Rudd.

Comb Honey, 20 lbs, in sections, in best marketable shape. 1st, Wm. Coleman; 2nd, Byron Aches; 3rd, S. E. Rudd.

Liquid Extracted Clover Honey, 40 lbs, in glass packages. 1st, Mrs. S. E. Rudd; 2nd, Byron Aches.

Liquid Extracted Honey not clover, 40 lbs, in glass packages, 1st, Mrs. S. E. Rudd; 2nd, Byron Aches; 3rd, Wm. Coleman.

Extracted Granulated Honey, 20 lbs, in glass packages. 1st, Byron Aches; 2nd, Wm. Coleman; 3rd, Mrs. S. E. Rudd.

Bees Wax, 10 lbs. 1st, Wm. Coleman; 2nd, Byron Aches; 3rd, Mrs. S. E. Rudd.

Honey vinegar, half gallon, in quart glass packages. 1st, Byron Aches: 2nd, Mrs. S. E. Rudd; 3rd, Wm. Coleman.

Largest and best variety of Domestic uses to which honey may be put, prepared by the exhibitor or his household, two samples of each. 1st, Mrs. S. E. Rudd; 2nd, Byron Aches.

Comb Foundation, for surplus honey, by manufacturer. Wm. Coleman.

Comb Foundation for Brood Chamber, by manufacturer. Wm. Coleman.

Display of queens put up in shape to be readily seen by visitors. Byron Aches.

Ottawa

Despite the general fact that the honey crop in the Ottawa Valley for the season of 1900 is the smallest for many years, there are fortunately a few notable exceptions to this gloomy truth. Three of these lucky bee-keepers made a very fine display at Central Canada Exhibition Ottawa held recently. Mr. Brown, of Chard,—ex-president of the Ontario Bee-keepers' Association. (I may add prospective candidate for the title of M. P. for Prescott Co., at coming general election,)—showed some 600 lbs. honey &c., winning 6 first prizes and 7 seconds. Mr. McLaughlin, of Cumberland, an up-to-date very progressive apiarist, had at exhibition over 2000 lbs honey besides bee-supplies &c., gaining 8 first prizes and 5 seconds. Mr. Demers, of Chapleau, Que., made his first exhibit here with about 100 lbs honey, getting a second and two thirds.

Contrasting this with honey exhibit of 1899, I'm safe in saying the extracted honey is equally good perhaps better; the Comb not very well-filled but excellent quality, the supplies very small in number, the association greatly missing the Brantford Complement.

One might infer by the large number of Union Jacks over the honey show that the apiarists' too have caught the patriotic spirit, a grand out-come of this sad year of wars.

The display of beeswax was made doubly attractive by being moulded in a great variety of fantastic shapes.

Apis.

When honey is taken off the hives it should be kept in a warm, dry room. Any place where the temperature is from seventy to one hundred degrees is a good place to keep honey. It should never be put in a cellar or refrigerator, or the honey will absorb moisture, become thin, watery and sour. Keep honey as the bees keep it, hot dark, and dry, and you can keep it indefinitely.

Communications.

Editor Canadian Bee Journal.

Dear Sir:—I have carefully read the letter of "Spectator" in the Sun and have no doubt he is some ill natured crank that is jealous because a neighbor gets some honey. There are a lot of such men in the country. I frequently hear complaints as to the increase of sweet clover, but although the roads are wild with rag weed and it is spreading rapidly, not a word is said about it, if it yielded honey and some one got a benefit from its growth, there would be a big howl. I am surrounded with raspberry growers and have the bushes growing within ten feet of my hives, they are "Cuthberts" too, but I have never heard a single complaint as to the bees attacking perfect berries. At the end of the season when a few small stunted berries only are left the bees may be seen on them but whether they bite them or only take the juice after other insects have cut the skin I don't know. It has been explained that from the construction of the bees' mouth it cannot bite fruit any more than a man could bite a piece out of an un cut pumpkin. That being so perhaps may explain how bees can bite small raspberries as the fruit is composed of small globes, and when by reason of their being extra small, as in imperfect berries, the bees may be able to get a hold on them and so cut the skin, but from my experience the loss by bees is so trifling that it is not worth considering, and the benefit every fruit grower derives from having his fruit fertilized by bees more than balances the account one hundred times over. In my bee yard I grow apples, pears, plums, cherries, grapes, raspberries, currants and gooseberries, and have no trouble with the bees destroying them.

The complaint that "many keep bees without providing food for them shows how little Spectator knows about bees and throws doubt on his whole whine.

Yours Truly,
J. D. Evans

Islington, Sept. 24th.

Moving Bees a Short Distance.

Editor Hill of the "American Bee Keeper," replying to a question on the above subject says:—"Where but one or two colonies are to be moved we know no better plan than this:—"Set all frames containing unsealed brood, queen and nearly all the bees into anotehr hive-body and place upon the stand where it is desired to have it remain, leaving but a few frames of comb with honey and sealed brood upon the old stand. In the evening of the second day carefully transfer the old hive also to the new location, and, having its bottom board removed, set it upon the hive first removed. If a board or other object is set against the front of the hive, causing the bees to note the new location upon first starting out in the morning, but few bees will be lost."

To remove propolis from the hands after cleaning comb honey, rub them well with lard, which will loosen the propolis, wash off the lard with soap and water and the hands will be clean.

WANTED.

Large quanities of pure honey. Packages furnished free by the buyer. Apply

McCORMICK MAN'F'G CO., LONDON