

# The Canadian Bee Journal

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## NOTES AND COMMENTS

By J. L. BYER

### The Raspberry as a Honey Plant.

We hear a great deal these days about wonderful results being obtained from the raspberry in Northern Michigan. Mr. S. D. Chapman and other bee-keepers of that region claim that it is a greater yielder than basswood. Chapman has been keeping bees here since 1881, and since that time he had only one failure; in 1903, from colonies, he took 13,000 pounds of extracted honey, and his average for 26 years has been about 100 pounds per colony.

Practically all of this honey has come from raspberry. I have wondered why I have not heard more of this plant in the northern counties of Ontario. As far as I can find out, there are thousands of acres of land similar to Northern Michigan in the Parry Sound, Stouffville, Nipissing and Algoma districts, having raspberries in abundance. These sections are practically in the same latitude as Northern Michigan; the climatic conditions are much the same, but I do not recollect of ever seeing anything from bee-keepers in these sections relative to the raspberry being a source of surplus. True, the rasp-

berry yields honey here in York County—last year I think we had about 1,600 pounds principally from this source—but the acreage is so small, even if it did always yield there would not be enough to depend upon.

It would be interesting to hear from bee-keepers located in the places mentioned, and I hope some will satisfy the curiosity of the writer and many others through the medium of the C. B. J.

### Spraying of Potatoes Sometimes Injurious to Bees.

A correspondent in the "British Bee Journal" asks if it is not possible that bees might sometimes be poisoned by potato vines being sprayed with paris green. I have had unmistakable evidence of the possibility of such an occurrence. The potato patch was near the yard, and the spraying was done during a dry spell of weather. In the early morning the bees sipped the dew off the potato vines, and many bees were poisoned. Of course, this is something not likely to occur very often; still, it is well to guard against possibilities.

### The Divisible Brood Chamber Hive.

It may seem strange that the writer, who uses as large a hive and deep a frame as any one probably on the continent, should plead guilty to having a hankering towards giving the divisible brood chamber hive a trial.

However, it is not to be wondered at

by any close reader of the apicultural press, if we consider the influence being exerted by such able exponents of this system, among whom we might mention Messrs. House, Chambers, Green and Hand of the United States, and Messrs. Miller and Hoshal on this side of the line. Of course, it is well not to forget that this same bunch of bee-keepers would make a success of any kind of a hive, and no doubt, if they wished, they all could put up strong arguments in favor of the deep frame, i. e., for the sake of controversy, but no one for a moment doubts their sincerity when they advocate so strenuously in favor of the hive they have adopted.

At the same time, the divisible brood nest offers advantages over the deep frame, especially for out-yard work, to such an extent that it seems to me the most ardent follower of the latter system will have to admit the plausibility of some of the arguments advanced by their opponents. In thus writing I am not repudiating my oft-expressed opinions in favor of a large hive, for, as Mr. House pointed out at the Brantford convention, the divisible hive can be large or small, just as the operator may desire. No, I am not going to get rid of the hives I have at present, but it is not unlikely that in the near future we may test 20 or 25 hives of the divisible brood-nest style. Whether the Heddon, or a hive similar to the one used by Mr. House, with ordinary hanging frames, will be adopted has not yet been decided upon. However, if we should decide upon the Heddon, it will be made with ten frames instead of eight. Two sections in the brood-nest with this size would make a hive in capacity a trifle larger than the 12-frame Langstroth, assuming, as Mr. Miller says, that two sections of the ordinary Heddon equals the 10-frame Langstroth.

#### Necessity of Early Spring Feeding.

Those who were present at the recent Brantford convention will remember that Mr. House had considerable to say in his address relative to the necessity of early stimulating of the colonies, in order to have them in best condition for the honey-flow. Although he has practised this a great deal in the past, he wished it distinctly understood that his experience was teaching him that it was possible to breed a strain of bees that would reach the desired condition previous to the honey-flow, without the apiarist being forced to go to the trouble of early feeding. It will also be remembered that Mr. House was attributing this desired result by a judicious crossing of the Carniolan and Italian races of bees.

My experience with the Carniolan bees would lead me to think that the more Carniolan blood Mr. House (or any other bee-keeper, for that matter) introduces into his apiaries, the less cause he will have to resort to early spring feeding. While the Carniolans in their purity have their faults, there is one thing more than another which they "shine," it is in the matter of building up rapidly in the spring. In fact, with me they are too prodigal in the matter sometimes, and even if nothing is coming in from the fields, brood-rearing will go on very fast as long as there is a pound of honey in the hive. Notwithstanding all I have heard relative to the good effects of early feeding by way of stimulating breeding, I have no intention of adopting the plan, believing that it often does more harm than good, and to the beginner I would say go slow in the matter, rather giving more time, as suggested by Mr. House, to selecting a strain of bees that will winter good and build up strong for the honey-flow without having to be continually nursed

and coddled during the winter.

#### Prices of Honey.

Editor Root, at the recent convention has been speaking of the price of honey in Great Britain. I have seen that comb honey had advanced to two shillings per pound across the water, and I am sure that Mr. Root is right. I recently think it not possible to get honey from home to here. The editor of the *British Beekeeper* says: "It makes one sick to see the price of the successful market correspondent of this country. A farmer, in a letter, expresses a feeling of pessimism, and says the price of honey is now very low, and that it will not go ahead faster than a few years' time. In such a change, we shall not be able to pursue a profitable pursuit. Looking over the market, the Irish and British prices are 5d. and 6d. to the pound for extracted honey. It is reasonable to suppose that comb honey is sold at a price that named by the market. Incidentally, we are seeing conditions over there that are turning towards extracting Canadian honey, and we have none for export. We will not worry ourselves."

#### Foul Brood.

It seems strange that some beekeepers opposing foul brood, and that fact is the matter. I understand it, that Great Britain had have no foul brood in Ontario and the rest of the Union. Just to show that the prominent beekeepers should object, let me quote from a letter to the "British Beekeeper" written by Mr. W. C. Stone:

and coddled during the early spring-time.

#### Prices of Honey in Great Britain.

Editor Root, at different times lately, has been speaking of the high prices of honey in Great Britain, claiming that comb honey had been sold at as high as two shillings per pound. Our friends across the water, judging by the comments on Mr. Root's statement, evidently think it necessary to "go away from home to hear news."

The editor of the "Irish Bee Journal" says: "It makes one stare! We should like to see the photographs of the successful marketers." A correspondent of this same journal, Mr. W. Farmer, in a letter favoring decidedly of pessimism, says: "The price is now very low, and production seems to go ahead faster than consumption, and in a few years' time, unless there is a change, we shall find bee-keeping an unprofitable pursuit."

Looking over the advertising lists of the Irish and British Bee Journals, we note 5d. and 6d. to be common quotations for extracted honey, so it seems reasonable to suppose that very little comb honey is sold for as high a figure as that named by Mr. Root.

Incidentally, we may conclude that conditions over there do not look very promising towards establishing a market for Canadian honey, but as we happen to have none for export just at present, we will not worry over the matter.

#### Foul Brood Legislation.

It seems strange to think of bee-keepers opposing foul brood legislation, but that fact is the main reason, as I understand it, that Great Britain and Ireland have no foul brood laws as they exist in Ontario and several States of the Union. Just to show the attitude of the prominent bee-keepers on the subject, let me quote from a letter written to the "British Bee Journal" by Mr. W. C. Stone: "I have given up

opposing legislation, but personally I would infinitely prefer to be free from Government control. I think that as bee-keeping is chiefly followed as a recreation, it becomes really a private matter, while the man who runs it for profit can himself always suppress foul brood; such, at least, is my own experience. I have had it in my apiary since this matter was last discussed. I have even imported diseased stocks, and yet most certainly prefer liberty to legislation. I say this advisedly and deliberately, as the result of experience in my own apiary and among bees belonging to others. I have suffered very little loss, even with my first case of foul brood, and have no great fear of the disease, being able to cure it with ease in the early stages, and no bee-keeper worth considering need ever let it pass that stage. If he does he is either incompetent or needs experience."

Of course, it goes without saying, that the panacea for foul brood, is, according to Mr. Stone, spraying with drugs, either izaral or phenyle. One cannot help but wonder if Mr. Stone and other "sprayers" have ever had the real foul brood as it exists here, among their bees, and I venture to say that if Mr. Stone should come over here and happen to get in a foul brood locality, and depend upon spraying, if his bees got effected, he would find that unless the law stepped in his so-called "liberty" would simply be another name for the total extermination of his bees. At this distance, when we consider how much difference of opinion there is over there as to methods of treating the disease, it looks as though they were just as well off without any foul brood legislation, as the enacting of such would be sure to prove a source of constant friction and trouble. In the United States and Canada, with the bee-keepers practically a unit on the question, the case has altogether a different aspect.

Markham, Ont.

## THE BEGINNER'S PAGE

Department Conducted by E. G. Hand

Don't buy bees in cold weather, or until all danger of their dying from starvation or many other spring troubles, is past. The beginner is generally in a great hurry to possess his first hive of bees, and if he looks about him at this time of year (March) he can usually find somebody who is just as keen to sell as he is to buy. He may go on a mild day to a man who has bees to sell, and may see the bees flying strongly from the hive. At least, he may think that they are flying strongly, whereas, they may be only flying, and there is a whole lot of difference between flying and flying strongly. The beginner, who has had no experience with bees, may not be able to distinguish the difference, but it is there all the same. To the beginner, any number of bees look like "a lot," because he may never have seen a real lot to know what they looked like. To the beginner, a bee is a bee, and that is all he knows about it. It may be an old bee or a young, a strong, bright, active healthy bee, a weak worn out no good bee, a black bee, a hybrid bee or an Italian bee, but the beginner doesn't know how to distinguish one of these characteristics from another, and it would not avail him much if he did know—not in the matter of buying bees in March, for there is plenty of time between March and safety for all conditions with the bees in the hive to change. The beginner is apt to get the idea that, by the middle of March, the bees' troubles are ended. On the contrary, they are often just beginning, and I think it is no exaggeration to say that more colonies of bees die between the middle of March and the middle of April, in this climate (On-

tario), than in any other month of the year.

The causes are many, and would require several pages to go into fully. Three of the principal ones are starvation, poor queens and what is known as "spring dwindling." The first is the worst stumbling block to the beginner. He has an idea, most likely, that the bees are safe from starvation as soon as they begin working on the willows, elms, soft maples and other early flowers. But they are not unless they have honey left over from last year, and one of the first things for the beginner to learn is that, except in specially favored localities and seasons (and the chances are his locality is not specially favored) bees are not sure of enough new honey to keep them going until the clover blooms. The second cause of spring loss mentioned above—poor queens—is something that has to be attended to late in the summer, for a colony that starts the season with a poor queen, even with an expert in charge to detect the trouble and substitute a good young queen, has a handicap that will put it out of the running as a very good colony when the honey harvest comes.

The trouble known as "spring dwindling" may be caused by any one of a number of things or by a combination of them. A failing queen, a shortage of food (without actual starvation), unfavorable weather, or poor wintering conditions are all fruitful causes. Bees that live through the winter nearly all die very soon after active work begins in the spring, the length of time they live depending on the conditions under which they wintered. If everything was right and the bees came out strong, bright and healthy, with little loss of vitality during their confinement, they will live longer in the spring than bees which have had a "hard racket" during the winter and come out weakened in vitality, even there may be approx-

imately the same for each hive when flight in the spring is the result of the faster than the year and anything y bees to die off f under normal c under normal c retards the rals hive, is conductive en altogether, A for the bees if a son who knows general and his c If you think of March or April wait until May You won't miss doing so.

**Comb or E**  
A question th every beginner i run his bees for comb honey or e often decides in f because he figure supplies will not tractor, uncapping anything of that k ductions of first-c a profit is a thing only be accomplish thoroughly underst bees, and the mon supers, sections, rates, etc., and th out these things probably half the time it is tried) w such as would sta ssary for the sec honey. Another th stock of extractin tractor, you have properly cared fo ant to sell out of honey—a lot of it. comb honey, eve pers must be bo ther every year, a

imately the same number of bees in each hive when they have their first flight in the spring. The dwindling is the result of the old bees dying off faster than the young ones are hatched, and anything which causes the old bees to die off faster than they would under normal circumstances, or which retards the raising of brood in the hive, is conducive to this trouble. Taken altogether, April is a risky month for the bees if they belong to a person who knows nothing about bees in general and his own bees in particular. If you think of buying young bees in March or April take my advice and wait until May 15th or thereabouts. You won't miss any of the season by doing so.

#### Comb or Extracted Honey?

A question that presents itself to every beginner is whether he shall run his bees for the production of comb honey or extracted honey. He often decides in favor of comb honey because he figures that the outlay for supplies will not be so large—no extractor, uncapping knife, tin cans or anything of that kind to buy. The productions of first-class comb honey at a profit is a thing, however, that can only be accomplished by a person who thoroughly understands the handling of bees, and the money spent for sections, supers, sections, foundations, cases, crates, etc., and the time required to put these things together (breaking probably half the sections the first time it is tried) will come to nearly as much as would start in the plant necessary for the securing of extracted honey. Another thing: when you have a stock of extracting combs and a good extractor, you have them for all time, properly cared for; and if you ever want to sell out, these combs are worth money—a lot of it. In the production of comb honey, everything except the supers must be bought and put together every year, and is sold with the

honey. It is also much more difficult to control swarming when running for comb honey, and without control of swarming comb honey can not be produced successfully. There are plenty of other reasons, too, but these will suffice for the present. After you have been running the bees a year or two and have become acquainted with them and with your locality, if you feel like having a try at comb honey, by all means have it. You will be far more likely to succeed than if you tried it first go off.

#### About Supplies.

A word with regard to supplies. Do not "skimp." Better have more than you need than not have enough. For every colony you start the season with you will need a hive to put a swarm in if it comes. You will need a super for the old hive and one—perhaps two—for the swarm. These hives and supers must, of course, have frames in them, and the frames should be wired and filled with full sheets of foundation. If you have never seen a hive complete, it will pay you to have one nailed up at the factory, so you can see just how the whole thing goes together. A queen excluder will be required for each hive, to keep the queen in her proper place. Then you will need a smoker, a good veil and a pair of gloves. You will throw the gloves away after a while but will consider them an absolute necessity at first. A small extractor and a honey knife will complete your outfit at the start. And order your supplies now, so that they will be ready for the bees when needed. What size of hive? For extracted honey production the ten-frame Langstroth hive will make you fairly happy. Fenelon Falls, Ont.

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### Brant and Adjoining Counties Bee-keepers' Convention

(Mr. E. R. Root of Medina, Ohio, having arrived was requested to take the chair.)

Mr. Root.—This is a little bit unexpected and I hardly knew what was meant when I was requested to step over here and take this chair. If you had given me a little warning I would have had a speech ready. I certainly appreciate the honor you have given me, and I am very glad to meet you all here. I understand Mr. S. D. House of Camillus, N. Y., has a paper on "Building up Colonies for the Honey Flow."

Mr. House—Mr. Chairman, Ladies, and Gentlemen: I am going to give you a talk instead of a paper, the subject is one of much importance and has many factors. As every structure should have a foundation so our subject will have its foundation. We will build that foundation in the fall previous to the honey flow and the material we shall use for that foundation will be the queen. In the past half century apiculture has made some very rapid strides. We have improved our implements, our hives and manipulation, but can I say as much for our race of bees. I believe that if we were to import Italians from their native haunts that we would find the weakness of our race or strain of bees to-day. Queen breeders have shown us what can be done by selection in breeding golden Italians. They have a variety there that is good, in its way, and if that can be done in one line it can be done in another. Our Italians fall in my idea of coming up to the right standard of prolificness, and if we are to branch out into high pressure brood rearing we certainly must have high pressure

queens. We find there are several races which have desirable characteristics. For instance, there is the Carniolan. They are wonderful wax producers, not only that, but they are prolific and I think they are superior to anything I ever saw in the Italians. I have said that the queen is the foundation, and I am going to mention that the queen must be young, for in youth we have all the vitality we will ever get, so with a young queen in the fall we may breed up the colony to a strong populous condition, ready for the winter and that colony wintered outdoors with good protection, or wintered in a good repository, will winter well and come out in the spring comparatively in the same condition.

When they are removed from the repository our first duty should be to make an examination of each colony and find out the true condition within. They may not have enough, or they may have far too much stores and I would about as soon have them short of stores as have the hive crowded with honey. Not only that, but we must see that the hive is properly cleaned out and our next point is to make a protection for the brood chambers. The ordinary cover furnished by supply dealers is not sufficient protection. To get the best results we should have a cover that will carry a non-conductive protection of some kind and something of the telescope cover we have in use.

In the course of fifteen days or about that time the queen has occupied all the space, and this will bring us to the point of temperature, if we desire to spread the brood of that colony we must have a higher temperature. I believe Newport says that a bee when quiet takes from three to five respirations, and is then quiet for several minutes, then takes three or four more respirations, etc., but when they are very active, he says, they take 160 re-

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spirations per minute. This is quite a difference. Mr. Newport in his investigations found that the temperature of the hive was entirely due to the respiration and agitation of the bees. so that by activity we cause a greater respiration and by greater respiration the greater pulsation, and the greater temperature of the bees. I believe by the agitation of the bees we have a means of raising the temperature, and we all know what will agitate a colony of bees, one pound of honey will agitate 100 colonies. You will have the whole apiary in an uproar. Mr. Newport found that the temperature inside of a cluster of bees was 96 during the swarming and outside it was but 66 degrees. In August during the lowest activity the temperature was about 80 to 86, and outside it was 78 to 80. Now by stimulative feeding we work the bees up to greater activity and with greater activity comes greater heat, and the question comes how shall we stimulate them. Stimulating from the outside has disadvantages, for instance we may have a bad spell of weather and many bees would be lost, and perhaps our neighbors would receive some of the benefits. So I would say to use an inside feeder and that feeder should be so arranged that it can be manipulated from the outside without opening the hive, so there may be no loss of heat. It should be a small feeder so that only a few bees may work at a time and a small amount will keep them a long time at work. We should feed but a small amount as the bees perhaps are not requiring it for the purpose of feeding, but for the purpose of agitation or activity. We have a higher temperature in the daytime than in the night and so by feeding in the evening we increase the activity which will hold the temperature equal to what it was during the day. In the course of three or four weeks, or about the time of fruit-bloom, our

queens have reached a point where they are filling the ordinary hive, say 10-frame, with brood, and here will come the question of hives. I think every bee-keeper has his hobby, but we need a large hive if we are going to breed a large colony of bees. I consider the 10-frame the best for brood-rearing. I am speaking now of the sectional or half brood chamber hive. We have just passed upon two sections of this hive, and the time has come when they need more room for the fruit-flow, and if they do not get more room they will have the swarming impulse, and we do not want it at this time. So we give them another super, or section of brood chamber. The bees, during the fruit-bloom, will only cover the frames enough to draw out the foundation in the comb, so we will have three half-chambers, or three sections of brood. We carry our bees through in this way until about the 5th of June in our locality, when the white flow begins. Through this time we have been hatching bees at the rate of 2,000 or 3,000 per day, and we have an enormous colony of bees. It will be a matter of choice for the apiarist, whether running for comb or extracted, regarding manipulations at this time.

By the use of a queen-excluder to run these same hives without swarming during the entire season for extracted honey, we place the chamber which will have the most honey upon the stand and place the brood above it. The honey being in an abnormal position, the bees move it above. The excluder would go above the second section of the brood chamber. After going through the breeding season and breeding the colony up to the highest point possible, I take another method, and it is this: Placing a new stand or bottom board, I lift the hive from the old stand, and if this hive has new comb in the upper story I

place this section upon the new bottom board, placing both upon the old stand. I then put on my queen-excluder and super and close up. I take my queen and about four-fifths of the bees and shake them into this new half-chamber, carry away the old brood hive to a new stand and give them a queen cell that will hatch in from 24 to 48 hours, preparation having been made ten or twelve days previously. I proceed in that manner until I have set out something like 50 of these chambers, each filled with brood, a few bees and a queen cell. After setting out the number desired, I commence by adding another half-chamber or section. By this time the queen is hatched. I pay no attention if there are other queen cells, for the queen will take care of them for me. I place on this the excluder zinc, still continuing to take my bees from the first colony to the new colony placed upon the old stand. They have been hatching at the rate of 5,000 or 6,000 bees per day, enough to take charge of more brood. I go through my entire apiary and reduce the bees to half-chambers, distributing the brood over these new colonies, and I get four half-chambers. They are hatching at the rate of 6,000 bees per day, and in ten days I have 60,000 bees per colony, and they are ready to go into the fields to gather extracted honey and place it in the very cells the bees hatched out of. So it is in working for extracted honey.

We will now return to some of those colonies which I first placed in the half chambers. In about four days the super first given is well filled and sealed and they are in condition to receive another super and they get one. About 8 days later if possible, depending on the flow, they are ready for the third super and the fourth. When I go above the fourth, the fourth comes off and the fifth goes in under.

Now, what advantage do we gain by such a method as this? We will review some of them. In the first place I have been breeding bees in large hives and I have bred all the bees that it is possible and have confined these bees down to such close quarters that they had not much house work to do, but simply to look after the brood. It is all super work. Supers are taking the place of brood chambers.

Now if you wish to produce fine comb honey you must get rid of old combs for it has to be done over new ones.

So I pass our apiary through the white honey flow. Some of you may say, what is he going to do in the second flow or how is he going to get in condition for winter. Very easily. About Aug. 1st. our white flow is over. We take our supers from the bees by means of an escape board. Then the question will come whether we will make increase or not. If we do not desire any increase we simply take and double two of our half chambers together. Half of my apiary have already young queens with a large family of bees. For they had a large family hatched out and have kept right on. The other half we are going to requeen. We have had this advantage. We have retarded our queens from laying during the honey flow. Those bees hatched during the white honey flow do very little good unless for the dark flow. But I overcame that by doubling back in one of these half chambers. We have equal to five L. frames so we hatched 20,000 per day which will about keep up family losses.

We have a hive 14 $\frac{1}{4}$  across outside 18 in. the other way and 6 in. deep. That is one section of brood chamber filled with brood frames, not closed ends. We use hanging frames. We have two or three of these one above

the other for we run our brood one. When I they needed gave them a In winter and during the cold frames, the top or around chilled and so about getting over. With us space through may go out into It is one of this hive and wintering. I starve to death, in a sectional have free passage chilled.

There are so I do not think I time I could give But as I consider in its infancy, the light is the should be in the 8 or 10 lbs. of honey to stimulative commence it you should feed 1 pint and one pint bottle the sugar to dis honey. Then cold warm, as you would results.

Mr. Holtermann Mr. House—They commend for spring a small one with that so many bees Four ounces of honey should feed at a time Mr. Holtermann honey, or for any wish to use honey browner sugar would granulated.

Mr. House—It w



the other for the ordinary hive, but we run our bees through the winter in one. When I came to the point where they needed more hive room I simply gave them another of these sections. In winter and breeding in the spring during the cold days, with the ordinary frames, the queen must go over the top or around the cold end bar and get chilled and she will often hesitate about getting out of the cluster to go over. With us we have a perfect bee space through the very centre. She may go out into these isles either way. It is one of the greatest features of this hive and the same applies for wintering. I never saw a colony starve to death, with honey in the hive in a sectional brood chamber. They have a free passage way without being chilled.

There are so many good things that I do not think if I were to take a long time I could give you all the points. But as I consider that bee-keeping is in its infancy, the first step out into the light is the half chamber. There should be in the breeding season about 8 or 10 lbs. of honey in the hive. As to stimulative feeding, if you commence it you must keep it up. You should feed 1 pint honey, 1 pint sugar, and one pint boiling water poured on the sugar to dissolve it, and add the honey. Then cool it. Never feed it warm, as you will not get the same results.

Mr. Holtermann—How do you feed it.

Mr. House—The feeder I would recommend for spring feeding would be a small one with a cloth over it, so that so many bees cannot get at it. Four ounces of honey is about all you should feed at a time.

Mr. Holtermann.—If you have no honey, or for any other reason do not wish to use honey, do you think the brown sugar would be better than the granulated.

Mr. House—It will not give you as

good results as you will get with the honey. With the sugar they will not be stimulated. I would use all honey if I had it in place of the sugar. If I stimulate outside I take extracting combs and fill them with a perforated dipper, turn the comb over the fill the other way and carry it out and let the bees have it. I made a statement regarding throwing a little constantly in the yard, at Syracuse several years ago, and Dr. Park asked me the reason. I told him to try it. I heard no more of it for two years when Dr. Park had an enormous crop and people wondered how he got it. I met him over at Syracuse and he said, "House, I tried it this summer, and you have heard of the results." By throwing a little honey out in the yard you agitate your bees easily. Possibly you need only throw out a pound or so at a time. But I think feeding is the best.

Q. What sized sections do you prefer.

Mr. House.—I use the 4¼ by 4¼.

Mr. Smith—Do you think it advisable to keep up stimulative feeding every day and how do you arrange to do this in out apiaries as the weather sometimes does not permit you to visit them.

Mr. House—I cannot feed out apiaries, it is too much trouble. I stimulate them by giving them a queen so prolific that she will lay all the time. I depend on my queens for stimulating out yards.

Mr. Byer.—Is there any use stimulating them when there is willow bloom.

Mr. House—I usually do not begin until after the willow bloom.

Mr. Miller.—In speaking of pouring the syrup into the combs, I believe this is a nice method, but is it a safe one. If you have a comb out in the yard that is contaminated with foul brood it is not safe. Years ago I found

out to my sorrow that it was pretty expensive.

Mr. Holtermann—I have had the pleasure of visiting Mr. House on two occasions. When I went there I always got a load of valuable information and had my note book in hand, and I must say I was delighted to get him over here and have not been disappointed and do not think any of us have. I see to-day for the first time clearly, that unless stimulative feeding is kept up one would do better not to begin it at all, that is, if you feed for a week, night after night, and then stop it injures the bees, but I never saw clearly until to-day why this is. If you feed slightly you raise the temperature and they can cover more brood, and when you keep this up for a week or so and then stop, they are not able to cover the same amount of space and you are doing an injury. Another matter is the value of feeding in the evening. If you feed in the day time you rouse them and they will go out looking for more. In the evening you prevent this. But it brings out that in the day the bees are naturally more active and the temperature is naturally raised and by feeding in the evening you carry this on through the night. I think this is an excellent plan. In the last number of "Gleanings" Dr. Miller took me to task for advising never to feed honey, but I think it is safe advice to give to the general public.

Mr. House—I believe in boiling honey but I would not want to advise people with less experience for they might think it had reached the proper temperature and not even try it to see if it was right.

Mr. Holtermann—You may not actually find diseased brood in the brood chamber and you may not think you are in a neighborhood where there is foul brood, but your bees may rob a foul broody stock and carry it into a super.

Mr. Root.—I have visited Mr. House and while there I was greatly impressed with the fancy quality of his comb honey and I said something about it in our Journal. The honey was extra fancy and every section was like each other. I asked him to bring out super after super, to divide the piles and look in, but every section as far as I could see was extra good. It was very pretty honey. I think the point about feeding honey is well taken. We have had to consider it at several conventions. I do not know how we are to know if it contains disease germs.

Mr. Hershiser—There was one remark I wish to take exception to, and that is the quality of extracted honey produced from old combs. I think you said it was not as good as that from new combs. I myself know that it is just as good with clean old combs. I mean combs in use a long time, and taken out of the brood chamber, for instance. I want to say that I have produced a great deal of honey in old combs, and I have had a good many bee-keepers try to see if they could tell the difference, and none of them could detect it.

Mr. Holtermann—I have seen these old combs used year after year. They are quite dark when you first take them out, and became lighter in color after they had been used some time. That dark coloring must have gone into the honey.

Question—Are the perforations too small in this excluding zinc?" (Sample.)

Mr. Root—The perforations have been fixed by myself. At one time we had the perforations 170-1000" wide and we found a good many queens were passing through. Then they were made 168-1000, and still they passed through. Then 165-1000, and occasionally one passed through. Then we made it smaller still. I am rather of the opinion

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ion that we went to the extreme, and I think it is rather too small. It is better that occasionally a virgin should go through, and in rare cases a small queen, than that it should prevent the bees going through easily, and sometimes there is a little hesitancy.

Mr. Hershiser—I would suggest that the queen that got through was not a very good queen.

Mr. Holtermann—I have had excellent results from queens that could go through again and again.

Mr. Root—I would like to hear from the gentleman who sent in that question.

Mr. Pratt—I have not had much experience, but in reading the "Journal" there was some fault found, and I thought I would enquire before buying any more and find out if it was right.

Mr. Hershiser—I think the perforations might well be made a little larger. That is my opinion. I have not had any great trouble with it, but it strikes me this way: When the queen-excluder honey-board first came out it consisted simply of strips, and acted more as a discouragement than an excluder.

Mr. House—I have 400 or 500 of this kind, and something like 100 of heavier metal with square 168-1000 perforations. Occasionally with the old ones I find a small queen will pass through. I have never yet discovered where this was any hindrance. All my comb honey is produced over these excluders.

Mr. Cogshall—I think if once in a while a queen goes through, what is the odds? It is only once in a while, and I do not split hairs over it.

Mr. Miller—Occasionally I find queens give considerable trouble, but I have always made a practice of beheading that queen on sight, but I would not like to see that metal reduced.

Mr. Pratt—About wax extractors. I

have got a lot to extract, and I have broken mine. Can you recommend a good one?

Mr. Smith—My experience is to break up the old comb as small as possible, boil it and put it into a good press. I would not like to say which is the best press, but I believe this is better than handling in the steam press.

Mr. Cogshall—This is a very important question. I have ignored it for years, to my sorrow. The first thing you must do is to get the old comb as fine as you can, as fine as powder, which is best done in the winter. The stronger the press the greater amount of wax you will get. Now it was my fortune to get the boiler and press together. I used to boil it in an old kettle, skim it off and put it in the press. Well, I saved up for the last 18 months about 20 barrels of this slum gum, and I got a press about December 1st. I got 700 pounds of wax out of those 20 barrels that I intended throwing away.

Q.—How did you press it?

Mr. Cogshall—With the Hershiser press.

Mr. Hershiser—I am a very modest man, so, without referring particularly to my press or trying to be personal, I want to just say one or two words about this matter. In order to get wax out of old combs, it is necessary to have them fine. I have not found it necessary to pulverize it, though I think it might be a good plan. I am thoroughly satisfied that the hot water is the method. I have frequently used an illustration which I think will bring it to your minds in a way that nothing else will, and any of you can try it. If you will saturate a sponge with any coloring matter that can be washed off, press it until you can get no more out, then soak it again and press again, and you will get more color; and if you repeat this a number of times you can

get it clean, and this is what should be done in extracting wax. Press it and get as much out of it as you can, then saturate with hot water again and you will get more wax. The water will carry the wax out of this slum gum. With such tests as I have been able to get, I have got it to about one-half of one per cent., so I know the method if employed will get the wax. Of course, it takes some little time, but I have made experiments as to time and fuel. I have ascertained that if you are using the solar and throwing away the slum-gum, that you might as well throw away so much money. It is valuable. That slum gum will carry 25 or 35 per cent. of wax. I had on hand a quantity that I wished to make a test of. I have not the facilities to make tests, but used the fuel to the best advantage possible. I took the temperature, which was 37 degrees, and the temperature of the water, which was 33, just one above freezing. The fuel was illuminating gas drawn through the meter and 32 feet was used, which included the whole operation from the beginning until the wax was ready for the market. The amount of water used was 45 gallons. There was 200 pounds of slum-gum, and I got 70 $\frac{1}{4}$  pounds of wax. The cost per pound for extracting this was a little less than  $\frac{1}{2}$ c. So you see the heating of the water is quite an unimportant matter. The cost of the gas was \$1.25 per thousand feet. I satisfied myself that I was getting well paid for extracting slum-gum, and even if there was a far less percentage of wax, still it would pay to extract it. Even two or three pounds to 100 pounds of slum-gum is a paying amount.

Mr. Holtermann—With that wax press, taking old comb and working steadily for five hours, how many pounds can you render in that way?

Mr. Hershiser—It took me about

seven hours to take out the 70 $\frac{1}{4}$  pounds.

Mr. Root—All the solar is good for is to render pickings from the yard.

Mr. Cogshall—The solar will get candied honey out of the cappings.

Mr. Hershiser—I omitted to mention the quality of the wax. I noticed in this discussion that the point is raised that the quality of the wax is not so good from the hot water process. I have produced thousands of pounds of wax, not only from old comb, but from slum-gum all over the country, and I want to say that I have never sold my wax for less than the highest market price, and I have sold it to experts in foundation-making.

Mr. Byer—Do you use acid?

Mr. Hershiser—If it is very old comb I have used acid, but the point is, I have sold to foundation manufacturers; never get less than 30 cents in lots est pursuits on the outside.

Mr. Root—I agree with Mr. Hershiser that the hot-water method will get more out of the slum-gum than any other process.

#### FENCE SEPARATORS AND WASH-BOARD SECTION HONEY.

How unjustly some things, some ways, yes, and some people are criticized, and if not condemned, are looked upon with distrust. We see this truth so frequently illustrated in various comments, and discussions in the different journals devoted to our beloved pursuit, as well as in what occurs at our conventions large and small.

Those who have the courage to introduce any new thing or plan must expect not only the criticism with the necessary explanations to follow, but also misrepresentation. So frequently we see a plan of management outlined by one of the "great lights" in our

pursuit work hands of those same method, plete failure ther attempts out some imp consequence, the plan cond This was p the Ontario Be cently held in part in a cert think that rath to what I belie that has come the production like to say wh Those of us growth or prog like to term it, and the volumi its good and b appeared from t well that it has portance. To-d mation of many In the separator with it, while o leading apiarists vention, speak o for making "was Yes, you can ma honey to perfecti you have to do is ators with that er owing plenty of slats of the separ it is just here why just and where the space between the is made too wide. out in the discussi did not go far en ated that this spa quarter of an inch. why have it as w the separators I u space. We all know

pursuit work like a charm in the hands of those who closely follow the same method, but of course is a complete failure when some careless brother attempts to follow, but who leaves out some important factor, and as a consequence, disaster is the result and the plan condemned.

This was particularly noticeable at the Ontario Bee-keepers convention recently held in Toronto. As I took no part in a certain discussion, and as I think that rather an injustice was done to what I believe to be the best thing that has come out in connection with the production of comb honey. I would like to say what I have found.

Those of us who have followed the growth or progress, or whatever you like to term it, of the Fence Separator, and the voluminous discussions as to its good and bad qualities that have appeared from time to time, know quite well that it has been of no little importance. To-day we find, in the estimation of many of us, there is nothing in the separator line that will compare with it, while others, like one of our leading apiarists at the Ontario convention, speak of them as being good for making "washboard" comb honey. Yes, you can make "washboard" comb honey to perfection if you want to. All you have to do is to make your separators with that end in view, and by allowing plenty of space between the slats of the separator you will have it. It is just here why this criticism is unjust and where the trouble is. The bee-space between the slats of the separator is made too wide. This was brought out in the discussion, but, to my mind, did not go far enough. It was advocated that this space should be a slack quarter of an inch. I would like to ask why have it as wide as this. I know the separators I use have not so much space. We all know what this space is

for. As long as a bee can pass through, what more is required? Except above the top slat and between the bottom one and the section, I make mine practically queen-excluding, or a trifle more than is allowed in the perforated metal. This extra is because the slats of the separator being thicker than the perforated metal makes it harder for a bee to pass through when the space is the same. Make the separators as they should be, and you will have no cause to complain about "washboard" comb honey. As regards the finished product, it should not be hard to understand why that produced with the fence separator is more in demand. Not long since, when in Toronto, I made a tour of some commission houses in search of comb honey. I was willing to pay the extra for this class and took about all that was offered. Did it ever occur to the opponents of the fence production, comb honey, that there is less likelihood of damage in handling, takes up less room in casing, and withal looks ever so much nicer? This better appearance is due largely to there being less wood than in the bee-way section. I congratulate the originators on the success of this much-opposed but valuable help in the production of prize comb honey, and I believe the day is coming when no one will use any other except those who know nothing of them, or unwilling to make the necessary changes to accommodate them, or who are so wedded to their own ways that they do not know a good thing when they see it.

G. A. DEADMAN.

Brussels, Ont.

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If you talk poverty, think poverty and act poverty long enough, you will be convinced that there is nothing but poverty for you.—Success.

# THE CANADIAN BEE JOURNAL

Devoted to the Interests of Bee-keepers

Published Monthly by

The HAM & NOTT Co., Limited  
Brantford - - - Canada

Editor, W. J. Craig.

March, 1907.

## THE EDITOR'S CORNER.

Reports on wintering are very varied, from "good" to "middling." Considerable complaints of dysentery among bees wintered indoors.

†

Circumstances have made our issue of this month exceedingly late. We are sorry, and our readers will accept our apology. We will endeavor to catch up next month.

†

"Don't prepare your supers with sections and foundation until you actually want them, even though they may cost you ten dollars a day to prepare them then," was the advice of Mr. S. D. House at a side-meeting of the Brantford convention. Different to what is generally given, but House is likely right.

†

The address by Mr. S. D. House, Camillus, N. Y., at the Brantford convention, was taken verbatim by one of our stenographers, and is published elsewhere in this issue. It is one of the most valuable on the subject of building up colonies for the honey-flow that has been presented. Mr. House has got hold of the science of stimulation for brood-rearing. Feeding for the effect of excitement and temperature is decidedly a new feature, and throws much light on this question, over which bee-keepers have been considerably divided.

Mr. R. H. Smith, St. Thomas, has let his bees for the season to Mr. Arthur Laing of Hamilton. Mr. and Mrs. Smith are going West for a time, principally for the benefit of Mr. Smith's health. We regret that the change is necessary. Friend Smith stands high in the estimation of the bee-keepers of the province, not only as a bee-keeper, but as a man whose moral worth gives him a leading place in the affections of his fellows. Mr. Laing will conduct the bee-keepers' supplies business and other interests in St. Thomas.

†

As announced in the February issue, a sale and transfer of this publication has been made by the Gould, Shapley & Muir Co. to the Ham & Nott Co., Limited, of Brantford, Ont., and in future The Canadian Bee Journal will be issued from their office here. The Editorship will remain the same. We have pleasure in showing a cut of our new home on page two of this number, also in presenting the greeting of the new publishers. We are sure our readers wish them every success in this undertaking, as well as in the addition of bee-keepers' supplies to their already extensive business.

As to our plans for The Journal, we hope to make it "better than ever." Some very desirable alterations have been made in the appearance this month, the eight extra pages will become permanent, and we expect to introduce new features from time to time that will make the publication attractive and interesting.

We have always endeavored to keep these pages free from outside influences and other interests than that of the bee-keepers, and it shall be our aim to continue this policy. It is a matter of pleasure to us that The Journal has come into the hands of a firm of men who have a broad vision, who believe

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#### ARTICLES WANTED BY COMMITTEE ON ADVERTISING HONEY.

The \$1408.27 raised by the Honey Producers' League has been turned over to the National Association, a committee appointed to spend that money in advertising honey and otherwise advancing its sales. The first plan to be put into operation will be that of publishing in the general press, short articles setting forth the healthfulness, deliciousness, purity and desirability of honey as a food. The purpose for which these articles are written need not appear upon the surface. It is better that it should NOT appear, but there ought to be something about each article that would unconsciously lead the reader to have a better opinion of honey, to have greater confidence in its purity and healthfulness, or knowledge of its economic value as a food. That honey is not an expensive food, requires no cooking, no sweetening, nor other special preparation, but is the "whole thing" ready for use. That choice bakings sweetened with honey do not dry up as quickly as sugar-sweetened goods. Also call attention to Pure Food laws and no adulterated honey now sold. These articles should leave the reader with his mouth watering to test the true deliciousness of honey. These articles must be short, not over 300 or 400 words, and will be judged with reference to their value:

- (1st) Will this article attract attention and interest the general reader?
- (2nd) Will the reader who is not acquainted with the use of honey be likely to investigate and use honey?.. Of course, there would be an easy matter for us to employ one man to write a series of articles for this purpose, but the committee wishes to secure the very best that the country can produce, and takes this

method of inviting everybody to send in articles of this nature. Not over 400 words, perhaps less, to include the thought. Mail each article to W. Z. Hutchinson, Flint, Mich., who will read and mark each according to its merits. The best to be marked 10, the next best 9, and so on. They will then be sent to R. L. Taylor, who will also read and mark each according to its merits. Then to N. E. France, who will also read them. The articles receiving the highest markings in the aggregate will be used and its author paid \$5 for each article used. Everybody is invited to contribute. No limit to number of articles each person may send in. Perhaps thirty or more articles will be used. Please write plainly on one side of paper, or better still, use a typewriter, if possible.

Committee: N. E. France, Platts-ville, Wis.; R. L. Taylor, Lapeer, Mich.; W. Z. Hutchinson, Flint, Mich.

†

In introducing ourselves to the readers of The Canadian Bee Journal, would say that it is our purpose to assist the Editor in every reasonable way to increase its influence and usefulness to Canadian bee-keeping. Such a magazine, we believe, is almost an essential to the advancement and development of the industry in this country, and we trust that to that end the bee-keepers will assist us, not only by their subscribing to The Journal, but by contributions of suitable matter on topics of interest and value. Wishing the bee-keepers a very successful season, and assuring them of our best services, we are,

Sincerely yours,

HAM & NOTT CO., Limited.

†

Victoria County Bee-Keepers' Association will meet in Little Britain on March 29 (Good Friday). A good programme is being provided. Bee-keepers welcome.

<i>Annual Convention</i>	<i>Ontario Bee-keepers Association</i>
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(Question Drawer on Retailing Honey,  
Mr. Timbers in Charge.)

Mr. Beaupre—I think buckwheat honey is sometimes a little off in flavor. It is mixed with other flowers, and you do not get the real thing.

Mr. Lowey—I have heard a good deal said against buckwheat honey since I came here. I am a buckwheat man, and always use it. It is a rich, fine honey, and I know many people who prefer it and ask me to exchange and give them part buckwheat at the same price. I can see no reason why buckwheat should not be worth as much as clover.

Mr. Chrysler—I think it best to sell honey according to the demand and supply. There should be a difference in honey just as there is in the price of grains, and the price must be regulated in the same way—by the supply and demand. If you were to charge the same price for the buckwheat as you do for the clover, you would find that you would have very much on your hands unsold.

Mr. Trinder—Talking about buckwheat, you say it is not worth as much as the white. I live in a buckwheat district and always find that customers will take buckwheat honey in preference to white and say it is the best honey. I sell it at 8c a lb. in the stores and that is all you could get for the white honey. One man has told me that buckwheat just suits his taste, while he finds no flavor at all in the white.

Mr. Brown.—It is simply the supply and demand that regulate the buckwheat market; it is just as good as the white honey to those who like it. It is according to the taste of the con-

sumer. My experience is that some customers like buckwheat, but most are in favor of the white.

Mr. Craig.—Many think that buckwheat honey cannot be injured or spoiled in handling, but it certainly can and is one of the honeys that will not stand careless liquefying. If you can supply fresh liquid or granulated buckwheat honey it is all right, but if you attempt to liquify the granulated article—well, to me, at least, it does not seem to have the same flavor afterwards.

Mr. Kirby.—I have a good demand for buckwheat honey. I put a notice in the local papers together with the price and it sells well. A great many rich people have a liking for buckwheat honey and I soon get rid of quite a quantity in a few weeks.

Mr. Hershiser.—I would like to take two points up; one is in reference to the liquifying of buckwheat honey. If you take time you can bring it out just as good as the white honey, and the second point is with reference to its value as compared with white honey. The National Biscuit Co., used to buy honey from California in large quantities, such honey is as good in quality as any honey, and they bought honey from Wisconsin, basswood honey, for using in the baking of their goods. Now I can sell them buckwheat honey at just exactly the same price.

Mr. Timbers.—We must finally decide it is a question of management or of locality. I think it is of locality.

Q.—Would you advise charging more than wholesale prices in rural districts?

A.—Certainly; I charge retail prices and I sell to all alike. I have only sold 700 lbs. wholesale since I have had bees. In 1903 I had a big crop and sold as much as I could and the rest I held over until the next season.

The President.—That is a good point—holding it over.

Mr. Holtermann.—I do not understand

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stand Mr. Timbers saying that every man should retail his honey. I wholesale what I can. Would it be better for more people to retail?

Mr. Timbers.—I do not mean to say that all should retail their honey. Just get around and see how much you can retail, there will always be that much less for the wholesale market.

Mr. Laing.—Do you mean to say that you can sell from the house.

Mr. Timbers.—Yes, I have done so.

Mr. Laing.—This gentleman says he can sell from the house and there is not another house within half a mile from yours. Did you go and solicit orders?

Mr. Timbers.—No, I never went to anyone.

Mr. Dickinson.—I have done the same thing.

Mr. Laing.—At what price?

Mr. Dickinson.—At the market price, that is the retail price.

Mr. Holmes.—I think a man is very fortunate if people will drive for miles to his house and pay him the market price.

Mr. Lowey.—I never solicited an order; people come several miles and get from 2 or 3 lbs up to 100 lbs.

Mr. Laing.—I like to do anything I can to encourage retailing. I understand a man near me has been selling his honey at 8c a lb. and people have been driving miles to get it at a wholesale price. They won't get a lb. of honey out of me under 10c.

Mr. Hershiser.—Why don't you buy that honey?

Mr. Timbers.—If he bought that honey would it be a credit to his trade? If the honey we get put up by the farmers would not be a recommendation to any man to build up a trade? It is inferior in quality and inferiorly put on the market.

Q.—What is the best selling size and shape of section for comb honey?

A.—I do not pretend to answer that question. I never used a super. Last

year there was a discussion on comb honey and I asked my friend, Mr. Pettit, what kind of super he would recommend. I made thirty during the winter and I have packed them away ready for next year. That is all I know about comb honey.

Q.—Is it advisable to retail honey-dew at the Toronto Exhibition or anywhere else?

A.—No, it is not advisable.

Mr. McEvoy.—It is advisable to sell it at all?

Mr. Timbers.—No, it is not, it would only damage the reputation of the man that sells it and the reputation of our Canadian honey at large.

Q.—If you were getting and asking 10c per lb. for your honey would you refuse to accept an offer of 11c or 12c?

A.—I would run away from that man and hide somewhere. I would consider he was a lunatic.

Mr. Holmes.—Flee from temptation.

Q.—Which is the best way to sell honey, by the barrel or by the can?

A.—I suppose it is in 60 lb. cans. I never sold it in barrels.

Mr. Holtermann.—It is a retailing question.

Mr. McEvoy.—It is the same price, I suppose.

Mr. Whitside.—They usually give the same price in Montreal.

Q.—In selling granulated honey in tins, do you put in 10 lbs of honey or do you make it weigh 10 lbs.?

A.—I tell my customers the tin is calculated in the weight. I give good weight, but they all understand they are getting gross weight. I never try to make them believe it is net weight, but I always give 2 or 3 oz. over.

Mr. Pettit.—You give a tip to the scales.

Mr. Timbers.—They are always to understand it is gross weight.

Mr. Holtermann.—That is a point of great importance to our market and there is a great deal of misunderstanding

ing among those who buy cans or packages as to whether they get gross or net weight. I feel very strongly on the subject, because in business it comes up time and again. I believe the majority of people think they are getting 10 lbs. net. The honey goes to the wholesale trade and is by them retailed, and in nine cases out of ten no explanation is given. I think it should become law that it should be marked on the package.

Mr. McEvoy.—I agree with Mr. Holtermann, they should give 10 lbs. in the tin.

Mr. Timbers.—When I first started retailing my honey I wanted to put it in the same pails as those used by the wholesalers, but found that no more of these pails could be got, so I had to use the other pails, but I tell my customers it is gross weight and they are not deceived.

Mr. Pettit.—I think the wholesaler should mark them gross weight.

Mr. Holtermann.—I think this Association should put on record that it be advisable that where gross weight is sold it should be marked distinctly on the packages.

Mr. Brown. — I think that gross weight should be marked on the cans. I second that as a motion of Mr. Holtermann.

Mr. Laing.—I would like to ask Bro. Holtermann if it would be better if he made that motion in a better form—that we, as an Association recommend that all Bee-keepers use gross weight instead of net weight.

Mr. Deadman.—I would like to see Mr. Holtermann's motion accepted. It is very confusing that some of the pails are gross and some net and I have always to explain to my customers that my pails hold more. I think it ought to be compulsory that the pails be labelled gross or net in small type.

Mr. Dickinson.—I recommend the pail be marked 10 lb. net.

Mr. Holtermann.—This is the first step this Association has taken in this matter at all, and it is perhaps a comparatively easy step, we can probably at a future time go further. I am in favor of legislation in the matter as in adulteration, but, perhaps, if we go beyond a certain point we may have difficulties.

Mr. Dickinson.—I do think it is necessary for us to give value for the money we get and the only way to do it is to give weight. We must certainly make allowance for our packing. If I am shipping to England, I put down as expenses my tins and my crate, but I put in every time the full weight. If that was made compulsory I think it would be better for the Association and for the bee-keepers of Ontario, and give us the name we deserve.

Mr. Hershiser.—I think in selling honey gross you have to take less for your honey; in selling in large bulk you must sell net weight, you cannot say one barrel will weigh 40 and another 60, there would be no way of getting at the value of the package. We do not pay the price of butter in the tub when we buy a lb. of butter.

Mr. Timbers.—Is this Association going to compel its members or recommend them to sell their honey at net weight when all other things that honey has to compete against are put up in gross weight? All marmalades, jams, preserves, etc., are sold throughout the country gross. Is honey to be the only one sold net?

Mr. Dickinson.—I do not think the wholesaler should mark the pails. I sell jams by weight.

Mr. Timbers.—Decidedly, anywhere in Toronto.

Mr. Laing.—Referring to Mr. Dickinson's remark about people getting value for their money, we buy a

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and pay, perhaps 7c. or 8c., 10c. if you like, anywhere along there, and we sell that pail when we weigh it in at 10c. and we get 10c. for it. Identically the same figures we pay for it, haven't we given the people value for their money?

Mr. Pettit.—Certainly.

Mr. Kirby.—I give people a better bargain in giving them gross weight than by giving them net and I have much pleasure in seconding Mr. Holtermann's motion.

Mr. Holtermann.—I think you understand this resolution goes thus far. It does not compel you to sell gross or net weight, it leaves that open to every individual. But when you sell gross weight, that package must be marked gross and when you sell net it must be marked net in plain figures.

A resolution was then passed.

That this Association place themselves on record that it is desirable where honey is sold either wholesale or retail, and gross weight is given, that that gross weight shall be distinctly and plainly marked upon the package.

Q.—Would it be advisable to build a covered delivery wagon for retailing honey, with name and other information printed on the outside?

A.—I do not hardly think it would be advisable. You would have to find the right man for that rig to make it pay, and we bee-keepers are, most of us, in the business for what money we can make out of it, and I do not think that would be a paying investment.

Q.—When the consumer pays 10c. per lb. for honey, how much should the retailer pay out and how much the wholesaler?

A.—That would all depend how many hands it would have to go through. Most dealers I ever knew wanted 20 per cent. and some of them wanted 25 per cent.; if the wholesale is going

to buy it in bulk and he gets 20 or 30 per cent., the storekeeper also gets 20 per cent. or 30 per cent., how much is the producer to get out of it? I think the wholesale man should be allowed 20 per cent. and then he and the middleman make the bargains as they like.

Mr. Hershiser.—The best way is for the producer to sell as high as he can and let the rest do the best they can.

### Spring Management of Bees.

(Paper by Mr. J. Storer, Lindsay.)

"Mr. Chairman, Ladies and Gentlemen:

Spring management is a very important part of bee-keeping and the writer will not be able to do it justice.

Spring management depends so much on fall management that you, Mr. Chairman, will not object, I hope, to a few remarks on that subject. Every hive should have a good queen, and not less than 40 lbs of good honey, when put in winter quarters, then if properly protected during the long winter, spring feeding will not be necessary. Feeding in spring is a disagreeable job for the bee-keeper, and you cannot fuss around a hive at any season of the year without annoying the bees, more especially at this season.

Suppose a bee-keeper has about 100 colonies, part have been wintered on their summer stands, the balance in a good cellar, if proper protection and ventilation have been provided for the hives left out-of-doors, there is no need to touch them till we are getting nice days in April; about this time, those wintered in the cellar may be taken out, but a great deal depends on the season. Some seasons being later than others, a good time for removal from the cellar, if the bees can be kept quiet until then, is when the first pollen is coming on; then choose a fine day. The writer has not tried the Alexander plan and finds no difficulty with bees mixing. Of course, one must be care-

ful not to put too many hives in one place at the start; put a few at one corner of the yard, then the opposite corner, and so on, until all have been placed, then take four or five sheets of newspaper—previously saved for this purpose—and cover the tops of the hives, taking care that no heat can escape; then when the bees are done flying for the day, contract all the entrances as much as possible, this to keep the cold wind and robbers out; if the hives on the summer stand have not had paper put under the cushions, it should be done now.

In an average season, this work should be finished from the 12th, to about the 20th of April, then we may expect the first fruit bloom about the same dates in May, and, knowing the bees have plenty of stores, it is a good plan to leave them alone, except to look out for robbing on a day when weather is suitable for the job. About the time the first flowers come out a start should be made to examine the hives, clip the queens, spread or reverse the brood frames, break a portion of the capping on the honey, making the bees think they are in clover. When this is being done, the bee-keeper should have a book and note the condition of every hive. A record of this kind saves lots of unnecessary opening of hives. When we have 100 colonies we will probably find 80 per cent. will be ready for the honey season, 15 per cent. a little light, 2 per cent. without queens and 3 per cent. dead, dead ones should have been found before the examination; the eighty should be watched closely, making sure that there is always enough of unsealed honey in the hive, and that the queen has lots of room for breeding. A good plan is to treat the 15 that are light, that is to select say, 7 or 8—according to their strength—of the best of them, take out all empty frames; then go to the lighter ones and take out brood frames and

bees, and fill out the 7 or 8, making sure you leave the queens in their own hives; the few that are left light can be used to shake swarms on, or anything else the bee-keeper can do with them to the best advantage.

We will suppose this work is finished say, May 20th, in less than a month the clover season will be on, and on the care given the bees for the next few weeks, largely depends the amount of surplus the bee-keeper will get for his work. Some seasons the bees may fill the hives so full of honey in a few days, that the queen is crowded out of them; another season the bees will be confined in their hive the most of the time, and run short of stores, and the queen will stop laying; to avoid either extreme the bee-keeper must be on hand every day, know what is going on and apply the remedy."

This paper was read by Mr. J. L. Byer in the absence through illness of Mr. Storer.

#### Question Drawer on Spring Management—R. H. Smith in Charge.

Q. Is it best to give, say, 40 pounds feed in the fall, or, say, 25 pounds, and then feed the balance in the spring?

A. I should say it would be safer to feed the 40 in the fall; you might have unfavorable weather in the spring.

Mr. Hershiser—I would like to ask it would not be an advantage to give the difference between the 25 and 40 in the spring?

A. I do not think it would be sufficient to have only 25 pounds in the hive in the fall of the year. I should advise giving the whole of the store in the fall.

Mr. Laing—What would you consider would be sufficient?

Mr. Smith—Not less than 35 pounds.

Mr. Laing—Outside or inside?

Mr. Smith—Either.

Mr. Dickinson—I think more than 40 pounds is needed for outside wintering.

Do you not think there is a difference between

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Do you not think there should be a difference between inside and outside?

Mr. Smith—Yes, if you have a good cellar, but occasionally you come across stocks of bees that consume an exceptionally large amount of stores. It is surprising if bees are strong and in good condition, and have a good queen, the amount of stores, one season with another, they will consume.

Mr. Deadman—I decidedly object to giving them 40 pounds in the fall.

Mr. Hershiser—I find bees consume from 7 to 8 pounds during the four months they are in the cellar; the most I have had consumed by a colony was 11 or 11½ pounds and the least 4½ to 5 pounds. Of course, these estimates are not entirely correct, because no account was taken, but I believe the experiment was sufficiently correct to warrant stating that 20 pounds is sufficient for winter stores, and if 20 to 25 pounds was given it was enough to last them until the apple blossom came.

I would ask what kind of food to give and how to prepare it; that is, how to prepare ordinary candied food. You Canadian bee-keepers know how to prepare the candy to carry a strong colony through without loss.

Mr. McEvoy—Invert a couple of two-quart Gem jars filled with sugar syrup, warm, over the frames, pack in a super. They will take 20 pounds down in one night. If the bees are not packed, and they have not enough stores, I generally try to get combs of honey from those who have more than they require. I had to feed early in the spring, and there was a likelihood of more cool weather, I would make the food comparatively thick, otherwise somewhat thinner.

Q. Give your opinion of the Alexander method of building up colonies, placing the weak ones over the strong.

A. I am not an advocate of it; I look

upon it as being a good deal upon the principle of robbing Peter to pay Paul.

Mr. Kirby—Last spring I tried the experiment and found it worked admirably. I had good working colonies as a result, and must say I am well satisfied with the plan.

Mr. Adams—What strength were the weak colonies?

Mr. Kirby—About the size of my hand. The bees from below would go up through and would help to add to the working conditions of the colony and give the queen every chance to lay, and in that way the bees built up rapidly, and in about four weeks I took them off, and the hives were full of brood.

Mr. McEvoy—What time did you put the brood up?

Mr. Kirby—In May, I think.

Mr. Hershiser—Alexander says that is to be done three or four days after they are taken from the cellar.

Mr. Kirby—I had not the time to attend to them when they should have been attended to.

Mr. Hershiser—I believe the success of this plan depends upon conditions a good deal, and if it was not for the fact that I consider Mr. Alexander a good bee-keeper, I might be inclined to doubt the wisdom of his plan. I tried it with some colonies last spring, and failed with about half of them. I attributed the failure to the fact that bees built very slowly last spring, and it was not a fair season to try an experiment.

Mr. Holtermann—If a strong colony had an inferior queen, the bees would be able to take care of more brood than she could produce, then it would be an advantage, but virtually I don't see any advantage.

Q. What is the least number of spaces or combs occupied by bees would you consider not advisable to unite?

A. I may say I am not in favor of

uniting to any great extent, and it is a thing which I do not practice. Supposing the bees occupy, say, four spaces; that is, a weak stock. By spreading the combs, and allowing the bees to occupy more space, they are able to keep the brood warm and do more brood-rearing than when so closely interspaced. Often in a natural spacing, where they cap two spaces, they cannot brood-rear at all—they cannot keep the brood sufficiently warm—but where there are only two or three spaces, it is better to space more widely and keep the bees warm.

Mr. Hershiser—Some of our beekeepers advocate close spacing, and say the bees will take more care of the brood, and rear more, than when closely spaced. I believe in close spacing.

Mr. McEvoy—I agree with Mr. Hershiser.

Mr. Holtermann—I am in favor of wider spacing. It is only a very weak stock that can be made to rear more brood by the closer spacing.

#### QUESTION DRAWER ON INTRODUCING QUEENS.

(Mr. McEvoy.)

Q. Should green tobacco leaf be used in the introduction of queens?

A. No, you do not want to use tobacco at all.

Q. No; do not want to use tobacco at all.

Q. Would you remove the attendant bees from a cage of a queen purchased from a breeder?

A. Not particular about that, but I would never introduce with a cage, anyway. I have known bees not accept a queen for ten days. They would chase round her and have nothing to do with her. They might possibly kill that queen, but if you watch closely you need not lose any queens.

(Mr. McEvoy releases the new queen alone, under a wire screen over a patch

of hatching brood. The young bees soon form her attendants and protectors, and the wire screen can be removed in a few days.—Ed.]

Q. Is it advisable to place the cage containing the queen in the hive prior to taking out the old one?

A. If I am not too busy I would; if not, I would leave it.

Mr. Holtermann—I have paid out at least \$200 the last few years in buying queens and introducing them, and Mr. McEvoy's method is all right, only it entails a great deal of work, and I can introduce queens as safely as any way I know of by means of the cage.

Mr. Timbers—I have introduced queens, and I always like to take the queen out of the cage she came in, and the bees, too. I believe nine times out of ten it is the bees that come with the queen that cause the queen to be killed. As to putting the new queen in before the old one is removed, I never tried it but once, and it satisfied me that it is not a successful plan. I believe in removing the old queen before you put in the new one.

The President—You must have candy and feed accessible; if you put a queen without food at all into an ordinary colony she will starve. She must have her own food supplied.

Mr. Evans—Won't a queen feed herself?

The President—If she has a chance she will.

Mr. Armstrong—I introduce the new queen and remove the old one at the same time. As soon as I receive the queen I take her out of the cage she came in and put her in a prepared cage. Then I take a few young bees out of the colony she is to go into, and place them in with the queen, and place the cage on the combs and close the hive, and I have found that everything went well.

Mr. Newton—I agree with Mr. Tim-

bers that it is the queen that it most succeeds out of the cage, shake a comb to hatch, an emerging from honey, and the four or five in queen run on with the netting by introducing virgins in the excluders for excluders?

A. No.

Q. What is the fall, to introduce

A. Either, but introduce queens in the necessary, in the have to be regular circumstances.

Q. How would virgin queen?

A. The same tagging.

Mr. Couse—Can

A. If it is a virgin not be left more must be allowed tagging.

Q. Have south advantage over north

A. I do not think preference as far as

Q. Will a queen brood colony carry either hive?

A. No, never.

Q. Can a queen introduced in a super bees off from the bees and then re-

A. I do not understand

Mr. Chrysler—E queen in a super, then removed from below

bers that it is the bees that come with the queen that do the mischief. I find it most successful to remove the queen out of the cage in which she came and shake a comb with a brood about ready to hatch, and with the young bees emerging from the cells, and some loose honey, and then take a piece of netting four or five inches square and let the queen run on the brood and cover her with the netting. I never lose a queen by introducing her that way.

Q. Would you advise introducing virgins in the supers over queen-excluders for superseding than remove excluders?

A. No.

Q. What is the best time, spring or fall, to introduce queens?

A. Either, but I would rather introduce queens in autumn. If it was necessary, in the spring, but this will have to be regulated according to circumstances.

Q. How would you introduce a virgin queen?

A. The same way as the others, by caging.

Mr. Couse—Clip her wings, eh?

A. If it is a virgin queen she should not be left more than two days; she must be allowed to fly out before clipping.

Q. Have southern queens any advantage over northern-reared ones?

A. I do not think it makes any difference as far as that is concerned.

Q. Will a queen taken from a foul brood colony carry the disease to another hive?

A. No, never.

Q. Can a queen be successfully introduced in a super by shutting the bees off from the brood chamber for 48 hours and then remove the super?

A. I do not understand.

Mr. Chrysler—By introducing a queen in a super, the old queen being removed from below. When she is

there a day or two, if the queen-excluder is removed, she would be accepted?

A. Of course.

Mr. Chrysler—If you want to keep her over, you shut off the bees from the super and introduce that queen into the super by shutting the bees off from the brood-chamber for 48 hours; then remove that super, and the bees will go on with that queen successfully.

Mr. McEvoy—Would you put a fine screen over the brood-chamber?

Mr. Chrysler—Yes.

Q. If a queen has lately died, and no visible preparation for another, will a new one be accepted?

A. At once? I suppose so. I believe in visible preparation all the same.

Mr. Evans—Mr. McEvoy, you said you knew several cases where foul brood had been caused by introducing queens. Now, you state that in introducing a queen one never gets foul brood. Where is the difference between the bee and the queen?

Mr. McEvoy—I suppose the food had diseased honey in it.

Mr. Couse—Why didn't the queen bring it?

Mr. McEvoy—It is not caused by the queen, but by the food; it would be the honey in the prepared food.

Mr. Timbers—I do not think any foul brood honey ought to be mixed with the food.

Mr. Evans—In all the cages in which the queens are shipped there is candy which has in it some honey and there is always the risk that there is some contagion in that.

Mr. Hershiser — This excitement about foul brood being introduced by imported queens or shipped queens, I think came up about a year or two ago at the National Convention, if I remember right. Mr. N. E. France, the bee inspector of Wisconsin, knew of one instance of foul brood having been

introduced in this way, and that is the only specific instance that I know of, and I think it would be unfair to queen breeders to spread abroad a report of this kind. This man may have done it unintentionally. If an inspector know of this and he will advise of it, I think he will take precautions that it should not occur again. Did you know this for a fact that this has been done in this way, Mr. McEvoy.

Mr. McEvoy—Yes, I know it.

Mr. Hershiser—It is a kindness to all bee-keepers to advise them of this. Was it the same person that France knew of?

Mr. McEvoy—I don't know.

Mr. Hershiser—I think what we want to do it to protect our bee-keepers.

Mr. Holtermann—Mr. President we want to remember that the germ of foul brood has been discovered by three bacteriologists in the queen. Mr. Evans' proposition that we should not suppress the fact that foul brood may be brought into the hive through this infection of queens is perfectly correct; I am strongly in favor of getting good queens, we should have better blood into the province. At any rate Mr. McEvoy's position in saying that he will not mention the name is a correct one. We may know things and yet when it comes to a court of law, we might come in for some very heavy damages.

Mr. McEvoy—I don't care anything about that.

Mr. Holtermann—I think Mr. Hershiser's suggestion that the Inspector should advise the queen breeder of it is an excellent one.

Mr. Evans—I think we ought to know distinctly and plainly how we can bring and introduce these queens without any danger.

Mr. Couse—Supposing the queen-breeder thoroughly boiled the honey in

such cases, would there be any danger?

Mr. McEvoy—No.

Mr. Couse—Why does he not do it?

Mr. Hershiser—As Mr. Holtermann states that bacteriologists have discovered the germ of foul brood in the queen I must suppose it is true as three scientists have found it. But what I want to know is, whether the queen is capable of transmitting this disease to the colony or whether the queen is perfectly safe if she has the disease?

The President—Prof. Harrison made the statement as Mr. Holtermann gave it and I asked him some questions about it, he said that if the queen were taken right out of the hive when she was laying eggs and it was found in the eggs, they would have to be destroyed. I said if that queen were taken out of the hive under the McEvoy treatment and put into a hive where she could not use those eggs the queen having no chance to lay for some days would have no developed eggs in her, would she afterwards be likely to transmit the disease. He said that might make a difference. I would like to make a test on that line. The egg laying would be stimulated from pure food and not from the diseased honey and germs.

Mr. Pettit—I would not like to run the risk.

The President — I think disease is very seldom carried from the queen. I would be afraid of the candy and the attendant bees.

Mr. Pettit—If it is on the eggs, they gets on the combs.

The President—If the queen is caged for 3 or four days she becomes very small and if you introduce her into a hive she will not lay for 2 or three days, then those eggs will be developed from the pure food.

Mr. Roach—If you put her in the cage there is no danger.

The President—Mr. McEvoy's treat-

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ment has proved successful. I do not think anyone questions it. He takes queens or from diseased colonies and he shakes them off the foundation and leaves them there 3 days and then he shakes them again and it is impossible for those queens to transmit the disease.

Mr McEvoy—The queen does not give it.

### SPRING DWINDLING.

Spring dwindling in bee-keeping is a feature of the business that nearly every apiarist suffers from more or less. The man I bought my first colony from, about twenty years ago, used to close his hives up with heavy entrance blocks, on the morning of a day, that he thought would be unfit for bees to fly. I used to do the same sometimes with my hives. This closing them up, without supplying them with water used to cause them to become greatly excited, so that I used to let them fly about noon time, when the day was warmest. Not liking this method, I gave it up, and took to shading to darkness for a season or two on cold days. About fifteen years ago I conceived the idea of a portico with screen slide the same as Mr. Holtermann's, but not having made any new hives since, I failed to put my idea into practice, so that Mr. H. has got in ahead of me with his patent. The idea is a valuable one, and is well worth the royalty charged for it.

Last spring I constructed another portico which I do not think conflicts with Mr. H's patent in any form. It is made as follows, from lumber three-quarters inch thick and three inches wide, (it can be made any width). Cut the side pieces nine inches long and the top piece the length of the width of the hive, and nail the top piece on the ends of the side pieces, then tack a piece of painted wire cloth on the one side of this frame, and across the bot-

tom on the outside of the wire cloth, tack a strip three-eighths by one-half inch, and also tack the wire cloth to this strip, which keeps the wire cloth even across the bottom. This enclosed portico is easily set on the alighting board when weather is unfavorable, its weight is all that is required to keep it in place, and when not needed is easily taken off the alighting board.

Before being placed on the alighting board, a wet sponge, or a small feeder containing water should be placed thereon, for the convenience of the bees. The material for its construction only costs a few cents. Besides being a great help towards preventing spring, dwindling it is also a useful adjunct to close off robbers from a colony at any time.

Although the mercury has been down below zero a good many times this winter, I think bees are wintering fairly well, as far as I can find out, in this locality.

W. H. KIRBY.

Oshawa, Ont., Feb. 17th, 1907.

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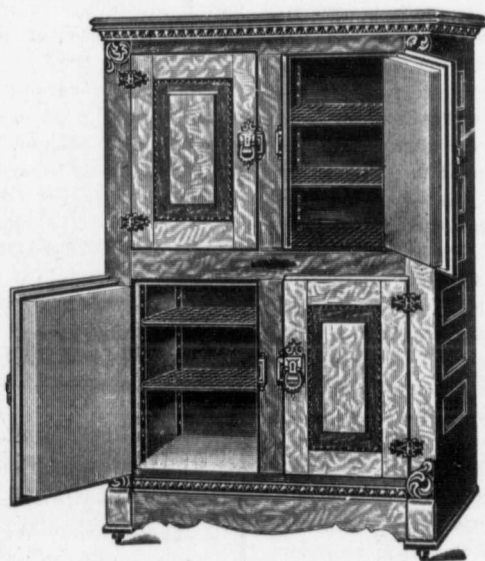
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### Want and Exchange Column

Advertisements for this column will be received at the rate of 25 cents for 25 words, each additional word one cent. Payments strictly in advance, as the amounts are too small to permit of book-keeping. Write copy of ad. on a separate sheet from any other matter and on one side of the paper only. Say plainly how many times ad. is to be inserted. Matter must reach us not later than the 23rd of each month.

#### WANTED.

If you have either comb or extracted honey (clover or basswood), write me. I am wanting more, and can pay you perhaps more than some. State price and how put up. G. A. Deadman, Brussels, Ont.

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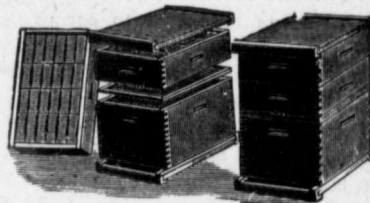
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