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CANADIAN BEE JOURNAL

PUBLISHED MONTHLY.

NEW SERIES
VOL. VI, No. 10.

BRANTFORD, ONT., APRIL, 1899.

WHOLE No.
410

Very few, indeed, in Canada are being deluded by the supposed advantages of plain sections and fence separators. We do not know of a single bee-keeper who has been engaged extensively in comb honey production for any length of time who has adopted the above. We know of one extensive bee-keeper who has lately gone into comb honey production, who last season arranged a lot of supers and who produced honey in such sections in this way. We rather smiled, not in our sleeve, but over the editorial desk, when he wrote us the other day saying: "I shall not produce much comb honey this year. I find it sells very slowly and is difficult to dispose of."

If the editor of the CANADIAN BEE JOURNAL can be the means of keeping men who have little practical experience in the production of comb honey, and others, from believing that bees will fill a section better because the bee space is attached to a fence instead of the section, and that it does not matter how much propolis there is about the hive when the sections are put in, and other things just foolish, his ever having become a bee-keeper will have been some advantage to a fraternity. We do not propose to dwell upon the absolutely groundless statement that the editor of this JOURNAL showed the cuts to illustrate the No Bee-y Sections article in the December 1898 issue. The fact was that The Goold, Appleby & Muir Co., Limited, ordered the cuts and paid for them as they would for

any other goods advertized; such an absolutely foundationless statement has its effect, however. To dwell upon these side issues not affecting the merits of the question may blind weak and unreasoning minds; yet only those who have a weak cause to defend need to resort to such tactics, and our case is strong enough without such methods. The methods adopted by another journal in this direction we refuse to follow. This reminds us of the following, the source of which we have forgotten, "How few men and women there are who, in a verbal discussion will stick to the question; and this number is again greatly reduced when you come to a controversy in a paper. Honest, well reasoned controversy, is, or should be, a source of enjoyment to victor, vanquished and onlooker. The person who stoops to other tactics, drawing the spectator in a clever way away from the issue to veil his defeat, resorts to that which is only worthy of one who stands in a lower intellectual and even moral grade."

We believe the arguments used in the December article leave the fence separator no ground to stand on; and furthermore, very few will be misled by groundless misrepresentation, and an oversight on our part in not making it clear that plain sections were at the Toronto Exhibition but not judged, (when, if judged, any one could tell at a glance they would have received no prize,) is not worth considering for two moments.

In closing we beg leave to quote what

Mr. S. T. Pettit says upon this question :

" I hope our bee-keepers may not loose their heads and run after that silly fad—the plain section.

If the bees are crowded, as I usually do mine, in order to get well filled sections, the cappings in many cases, would be fastened to the fence. A one inch projection on the sides of the sections is the proper thing. This talk about less peep poles and better finished sections is all nonsense. A tall section may look a little better but there will be no more money in it in the end. In a tall section the foundation is more liable to sag and curl out of shape than in a square one. That plain section is a delusion and a snare, in every count; if it is lighter then you must put in more honey to make it up. It takes less space in shipping cases, but is more exposed to injuries in many ways; and more than that, the vaneer will make up in cost. So after all, the gain to the poor bee-keeper is only imaginary all around. But of course every change makes business, you see."

The above from so practical a man is worth a good deal, and as far as the editor of the CANADIAN BEE JOURNAL and the Gould, Shapley & Muir Co., Limited, all concerned, we propose to do as we have always done, promote only such business as will be in the interest of bee-keepers. We feel sure such a course in the long run will commend itself to bee-keepers.

* * *

What reports are in go to show that bees have come very well through the severe spell of cold weather.

Bees Those wintering in the cellar
Wintering. are, of course, not much affected by the cold weather, and the large majority of bees are wintered in this way. As far as our own bees are concerned, some weak colonies, which might otherwise have survived, have perished; but, as far as we know, colonies in good condition, when packed, are all right. They have had several good

cleansing flights recently so there is every reason to believe they will be all right.

* * *

Aside from what has been said in the CANADIAN BEE JOURNAL little, if any, attention has been paid to the question of the value of a queen which has come through the winter with a colony of bees that have wintered poorly. Bees winter well when kept in a quiet condition. They do not hibernate, but it is something bordering on this condition. When through unfavorable conditions they become active and continue in that condition that activity wears them out. It leads them to increased consumption of stores, the alimentary canal becomes filled, dysentery, etc., sets in with dire results. That such a condition of the colony, while influencing very seriously the worker bees, does not influence the queen, appears unreasonable. While it is true that in the active condition of the queen it is not her nature to leave the hive and take to wing, and that in spring the queen does not take a cleansing flight, yet the conditions which bring about discomfort and disease in the worker bees is the condition under which the queen is wintered, and upon careful reflection we would have a right to expect that the queen would suffer.

Coming to practical experience what do we find. Our experience goes to show that where a colony has been badly affected with dysentery the colony in the spring does not pull up quickly even when other conditions are favorable. More than that, a test made by C. W. Post, Trenton, with two queens in colonies having had dysentery, resulted in the same condition the following winter. This of course does not say that the second year's dysentery was the result of the first, but it is an important guide in the treatment of such colonies.

Of late years we have not had much experience with colonies having dysentery,

but past experience has strongly indicated that a colony thus affected can most rapidly be built up by introducing a new queen.

Let it be remembered that in the above we speak of diseased colonies; not such as went into winter quarters numerically weak and came out in the same condition. Such with a good queen often prove very profitable colonies.

* * *

Ordering supplies in advance is very generally advised, and a sort of blame thrown on the man who does not send his orders some time before the goods are needed. By way of variety, a writer in *British Bee Journal* has this to say on the other side:

"I do feel as a beginner, that this is a great grievance to us amateurs, who do not and cannot know, until experience teaches us, what we do want, and in consequence, are kept waiting, by tradesmen, who ought themselves to know by experience when, and to what extent, the rush of orders will come in. It is the only trade I know where the seller has the face to expect his customers to tell him beforehand what they will want; and in our case—I speak for us novices—we do not know, and the tradesman loses what might turn out afterwards to be good customers by the fearful delay in supplying the most simple and absolutely necessary articles, and thus frequently putting back a beginner to so late a date that he is unable to make a success by having everything on train at the proper time, and perhaps even disgusting him for good in consequence."—*AMERICAN BEE JOURNAL*.

In the above question there are several points to consider. The experienced bee-keeper can order his supplies early, and if these orders were out of the way early then the amateurs would be able to have their wants supplied without much trouble. Again, at the opening of the season a bee-keeper does not know with certainty what goods he will require. Many of them order lightly with the intention of getting more if the season is favorable. He forgets that the condition which requires him to require goods rapidly has the same effect on hundreds of

others. From the supply dealers standpoint there is not margin enough to justify him in manufacturing a lot of goods that may not be required until the following year. Of course, a large factory with modern equipments and the capacity for turning out a large quantity of goods may be able to handle a very large trade, but the small factories with light stocks should be considered, and even the large factory may get too much business to handle promptly.



The United States Bee-Keepers' Union.

Philadelphia, Sept. 5, 6 and 7.—The following notice it sent us by Dr. A. B. Mason, the Secretary of the United States Bee-Keepers' Association.

Toledo, Ohio, Feb. 27, 1899.

The Executive Committee of the United States Bee-Keepers' Association has complied with the request of the members as expressed at the Omaha convention, and decided to hold the next convention of the Association at Philadelphia, Pa., commencing Tuesday evening, Sept. 5, holding three sessions on Wednesday, and three on Thursday, the last being on Thursday evening.

The program is being prepared, and arrangements are being made for the entertainment of those in attendance on the meetings. Notice of exact place of meeting, railroad and other arrangements, will be given in due time.

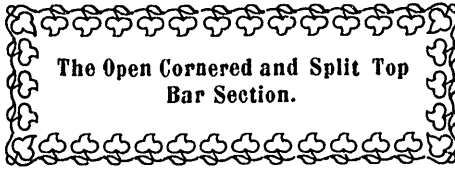
The Philadelphia Bee-Keepers' Association, with only one exception, I believe, is composed of amateurs, who are keeping bees for pleasure, and not profit in dollars and cents, and its members are showing quite an amount of interest in the coming convention; and in a recent letter from its Secretary, in speaking of securing rates, and places for delegates, he says: "I can assure you that we will do everything we undertake to do in a thorough manner" So we shall have a cordial reception, and an interest taken in our comfort. A. B. MASON, Sec.



Bees seem to be wintering fairly well so far.

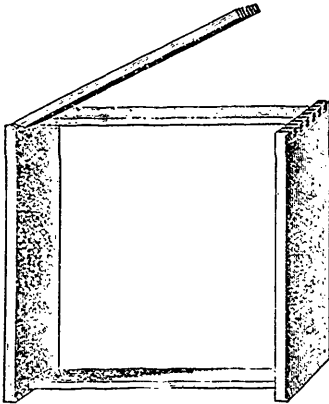
Leed's Co.,
March 10th.

M. B. HOLMES.



The Open Cornered and Split Top Bar Section.

We herewith illustrate an open cornered one piece section. Last season with some hesitation and, under the circumstances, a good deal of courage, the Gold, Shapley & Muir Co., Limited, put a section of this design upon the market. Being practical comb honey producers, they had found out the value of this feature. As the one



SPLIT TOP BAR.

piece sections are made to-day, with, we believe, the exception of those of the G. S. M. Co., the corners are closed and the opening in the top and bottom bar very much lessened. This tends to discourage the bees from entering the sections, and after they enter it tends to provide easier means of communication through the comb. Open the top and bottom bar as far as possible and the readier means of communication thus offered, diminishes the necessity for pop-holes in the sections. Last year a number of customers objected to the change, and it required some explanation and patience to carry the matter through. This year only one has objected to the open top and bottom bar. He handled sections to sell again, and in a letter he stated, that for his own use he had no objection to the new design, but some of his customers might object. In this way and for the benefit of bee-keepers, a great and valuable reform has been introduced. It has been done as the result of the practi-

cal experience of the company, and because they had the courage to face objections that they knew would be raised. If we are going to supply the British market, we must have comb well fastened to the wood and the cells filled and capped next the wood. Only this kind of honey can be shipped. Again the more perfect the section the better.

The illustration shows another new departure this season and one which will commend itself to almost all bee-keepers alike. The top bar is split and the comb foundation is pinched between the two sides of the top bar, thus in a moment it can be inserted and without the use of any foundation press, hot plate machine, etc., a machine which many cannot afford to purchase; a machine which often proves unsatisfactory and in any case requires patience, care and experience to work to proper advantage. The best way to insert the foundation in the new design of section is to insert the full sheet, putting it the desired depth below, holding the foundation in that position, press the second half of the section in place and then with a sharp-bladed knife cut off the remainder of foundation. Probably no class will appreciate this feature to a greater extent than those having a few bees, and who have dreaded the work of putting foundation in sections.

The Paris Exposition.

As the time is now fast approaching to commence making entries for the Paris exhibition of 1900, all who wish can do so by procuring the necessary forms of application from the secretary of the Canadian Paris commission, Ottawa, Ontario. The time for making entries closes on the first of June next, 1899. I would like to hear from all honey producers, particularly members of the Ontario Bee-Keepers' Association, at as early a date as possible who intend to send honey to this great fair.

I feel assured that the Dominion Government is both willing and prepared to do their part to make the honey exhibit a grand success. Further particulars will be given as soon as possible. In the mean time I would ask all intending exhibitors to write me at as early a date as possible, with any suggestions they desire to make re the Honey Exhibit at the Paris Exhibition.

W. J. BROWN
President O. B. C. A.

Notes and Pickings.

—D. W. HEISE.

Hellow! Mr. Editor! After a month of roasting and shin heats since attending the Senate meeting at Brantford, during that extremely cold dip, I think I am sufficiently warmed up to do a little Noting and Picking.

To the question of whether imported queens are superior to home bred ones, G. M. Doolittle says in the American Bee Journal, that from years of experience with imported Italians and home bred queens, he does not think any proof can be found to substantiate such a claim. Mr. D. believes, in fact, that the balance of proof is on the other side. He thinks this is attributable to the fact that beekeepers on the other side of the water, are somewhat careless in the selection of their breeders and the queens they export often being selected from second and third swarms. How different is the mode practiced by the best American breeders! Queens are selected for generations, each selection being made from the very best of that generation for the succeeding one, and so on until perfection is well nigh reached. From Mr. D's observations, the home bred queen from good selections has always proved superior to the imported ones.

[I doubt very much if there has been enough selection for honey producing qualities, doubtless there has been a great deal for color.—Ed.]

Bees dying on the snow. If the cause is diarrhoea, they may as well die on the snow as anywhere, says Mr. Doolittle in Gleanings. This just reminds me that a short time ago a neighbor of mine chanced to walk through my garden while the bees were having a good flight, after having been confined for a good time. This man noticed the dead bees lying on the snow quite thickly, and coming around to where I was working with great excitement, exclaimed, "Why, your bees must be all dead!" I tried to assure him that I thought they were wintering very nicely. "Why," said he, "the snow is covered with dead bees, there surely can't be any left in the hives alive."

The truth of the matter was, as every experienced apiarist well knows, by far the majority of those dead bees found on

the snow were those carried out of the hive; true, some flew out and failed to return, but those being old and about at the end of life's span, it was preferable that they should die outside than remain in the hive to meet the same fate. Then again it is true, as Mr. Doolittle says, 100 bees on the snow will attract more attention than 1,000 on the ground, but there should be no occasion for alarm.

The Boiler of Beedom quotes from a foreign journal a sad experience with bees placed against a south wall. The hot sun beating upon the hives, with the additional heat reflected from the walls, melted the combs of a colony into a heap. At the conclusion of the quotation we are told "A north wall is safer." Quite right, if the north wall doesn't happen to have a very warm south side to it. "See."

Prof. A. J. Cook, in the American Bee Journal, asserts with a good deal of positiveness that honey dew is a secretion of plant lice, the definition in the dictionaries to the contrary notwithstanding. The professor seems to think where many are deceived as to the true origin of this substance is that they search only on the lower branches of trees, and not finding any of the insects they conclude that it is "exudation" from the leaves; when in fact the insects are at the top of the trees and the secretion, excretion, or exudation falls to the lower branches. The professor says further, "I have now carefully examined this secretion for years." (I note he calls it a secretion.) If this be its true name then the substance which the bees gather is "excrement or voidings." Although the professor says, "It is not to be inferred that this honey dew is unwholesome. It is a secretion and not an excretion. It has a similar origin to honey, and may be as delicious. I am not at all anxious to cross sticks with such an eminent scientist as Prof. Cook, neither would I for a moment attempt to define the origin of honey dew, but I really desire more light on the subject. And I fail to see how it can be a secretion of the insect, without coming to the bees as an excretion or excrement unless it be (as I would like to believe) first an exudation of the leaves, taken up by the insects, and then emitted by them, in the same way that the bee takes up the nectar from the flower and then emits it upon reaching the hive. I am much interested in this subject and would like some explanation from the Professor regarding the similarity of nectar secretion by blossoms, and

honey-dew secreted within the body of an insect.

While attending the Union Bee-Keepers' Convention at Brantford, which was held during that protracted cold snap of the fore part of February, I heard such men as Alpaugh, Gemmell, and Holtermann expressing anxiety as to the welfare of the bees on summer stands. This coming from such experienced bee-keepers as the above, and knowing that my own bees had considerable honey dew for winter stores, I fully expected when the weather moderated, I would perhaps find life extinct in a number of hives, but I am pleased to report that they have had two flights during the last three weeks, and all apparently healthy and strong, responded to the sunshine, save one.

[You know friend Heise we are of the "lean and hungry" kind. We "think too much" and meet trouble more than half way. I felt anxious, but the bees appear to be all right.—Ed.]

I think Mr. Editor, that report of the senate meeting at Brantford had better have gone through the hands of a revising committee. Just notice what this picker is reported to have said to the question. "Should supers be put on the hives before or after swarming?" "Mr. Heise.—They always swarm on comb honey. I crowd them until they are black. I generally run pretty strong ones, and am pretty sure of them. I do not put any comb honey on any fruit bloom; I draw the extract off and put on the comb; very often I will give this honey to the weaker colony, and they will boom right up. I do not put these supers on every colony; maybe ten will be ready to day, and I follow them up in that way, when they whiten out, anybody can see it at a glance; if they whiten out in fruit bloom I should put them on then; not comb honey." Oh dear, dear, dear: This whole thing is neither sense or nonsense. Perhaps when I do happen to say something in conventions I don't speak English. But I positively disclaim anything contained in the above sentences as having been uttered by me at said convention.

[Now look here, my dear Heise; I am quite sure that you cannot remember all you said at Brantford, and I am mighty sure I do not want to, I am glad you

made the correction, I did not get it until the moment we had to go to press.—Ed.]

It is not often that I have occasion to find fault with my colleagues in convention, but when two honorable senators will so far lose their self respect as did F. A. Gemmell, and W. Atkinson, at Brantford recently, by making an aggravated assault on a photographer's personal property, in attempting to walk through a supposed open door, (a plate glass mirror,) to interview the fellow who they thought resembled themselves in the adjoining room, I consider it a lasting disgrace. The demand for immediate senate reform is justifiable, and imperative.

While being arranged in a proper position for a snap shot in the picture gallery, where the reprobates above referred to ran foul of the mirror, Mr. R. F. Holtermann, (more commonly known as the Editor of the C. B. J.) expressed a desire to be tickled down about the fourth rib, or that some one would tell a funny story, that would cause the muscles of his face to contract, and bring on a smile, which is very, very rarely found there. As this picker happened to be standing by his side, and owing to the disparity in our height, I was in a very advantageous position, and kindly consented to keep up the "tickling," while the other fellows told stories, (real funny ones) Now dear reader when that picture appears in the Journal, (which I expect will be with this issue,) just observe the effect the tickling and stories had on that Editor. Perhaps I "tickled" too hard, or perhaps the other fellows told stories too hard. Instead of producing the smile, his countenance really takes on the expression of one in extreme agony, and no smile at all. Poor Editor! This effect on the said Editor reminds me of the Dutchman who purchased a small porker from his Irish neighbor. After keeping said porker until he grew big and fat, the pig killing day arrived, and after breaking Mr. Grunter's skull with an axe, and "giving him it in the neck" with a huge knife, of course Mr. Pig lay motionless, and just as the Dutchman attempted to take him by the leg to place him in a more congenial position, Mr. Grunter decided to make his last kick on earth, with the result, that his foot came with tremendous force against the Dutchman's bread-basket, which paralyzed him for some minutes. When he finally recovered from the nervous shock, he exclaimed, "Irish—ish—Irish, deat or alife!" Moral,

A grim Editor will be the same whether in a picture gallery, or in his private sanctum.

[You do not appear to realize that I was trying to appear reconciled to having my picture taken alongside of yours. Ed.]

Size of Hive Entrances and Covers.

—T. E. BAINARD.

Two years ago I used several bee hives with entrances seven eighths of an inch by eleven and one half inches. I liked them so well that I have scarcely used any other size since.

Entrances as large as this are used by a large number of bee-keepers during the summer season, but how many have used it for outside wintering? Last winter I tried a dozen for the first time, mice guards were cut out of hardwood, one quarter of an inch by one inch and eleven and one half inches long: these were crowded into each entrance leaving a bee space both above and below the guard. This winter thirty-five colonies have large entrances. Yes, and no mice guards are being used; these are wintering better than the other eight with the three eighths inch entrance. The colonies are all packed alike, four in a case, packed with tight straw four inches thick and seven-eighths inch sealed covers.

The summer alighting board is leaned up in front of each hive as a snow and wind break.

All hive entrances are made very small in the spring.

Why are bee hive covers made so small? Being so small they are of little value except for about four months in the year. That is, those that winter outside.

Why not make the covers about twenty inches wide and twenty-four inches long, using two ten inch boards in their construction, covering the space between the edges with cotton cloths well painted. A cover of this size would afford very good shade for summer and four of them could be used to cover a wintering case containing four colonies. This cover made of ten inch lumber will not cost any more than a fourteen inch cover.

St. Thomas, Ont., March 6th, 1899.

[There are a great many matters to consider in wintering bees. I believe that

with certain other conditions, a wide and large entrance may be used, and under certain other conditions a small entrance is desirable. To master the wintering problem all the conditions must be considered. As to hive covers, expense has much to do with the question. Our new galvanized iron top with two inches or more of packing fills the bill. In selling it we make less money on the hives, but we hope to get, and we are getting, an increased demand for the hives.

Large as last seasons trade was, we have already sold at this date, March 11th, about two thirds as many hives as we sold all last season. Ed.]

What Should not be Done.

—JAS. ARMSTRONG.

Don't buy a large number of colonies of bees to start with, get a few colonies at first and then you will get bees as fast as you can handle them profitably.

Don't be opening the hive every day or two or three times a day.

Don't go to work to invent a hive of your own. If you do the chances are you will rue it before you are in business very long.

Don't get it into your head that you know it all, for if you do, you will be sure to get it knocked out some day when you are not thinking.

Don't extract your honey before it is capped.

Don't buy every new thing that comes along, that is supplies, queens, bees, etc.

Don't take any stock in patent right men. Give them the G B as soon as they come in the yard and don't forget it.

Don't ship your honey to strangers unless you know them to be all right.

Don't keep anything dirty around your honey.

Don't buy poor supplies because you get them cheap, buy nothing but the best and get the standard goods every time.

Get them from the Goold, Shapley & Muir Company, and you will not make any mistake.
Cheapside, Ont., Feb. 9th, '99.

[As Mr. Armstrong deals some in supplies himself, this is a high compliment which the company will try and deserve.]

The Alpaugh Family

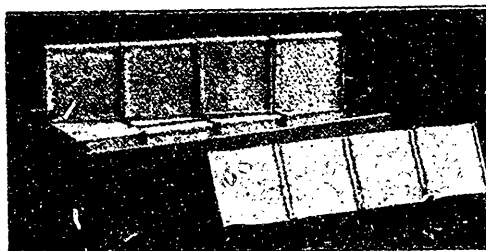


MR. AND MRS. JACOB ALPAUGH, AND MASTER
NORMAN ALPAUGH, Galt.

We herewith present our readers with an engraving of the Alpaugh super, the large engraving is loaned through the courtesy of the Editor of the Bee-Keepers' Review. The smaller shows the super with the comb honey therein. The super and hive A in the catalogue of the Goold, Shapley & Muir Co., Limited, embodies this super and in addition in the end of

the hive there is a passage cut off from the comb honey super proper, yet which when opened will allow a current of air to pass through the separated end of the super and through the brood chamber thus giving ventilation to the brood chamber from above without passing through the comb honey super. This latter feature is the idea of Mr. C. W. Post.

THE ALPAUGH SUPER.



Bee-Keeping in the Past.

H. R. ROWSOME.

In this day of bee periodicals and compendiums, we bee-keepers rather fail to realize how meagre and scanty was the really practical information that was accessible to our forebears. It is mentioned in a biography of Lorenzo Langstroth that he had great difficulty in finding a text book on bees when he first began to explore that subject; and he had to fall back on the fourth book of Virgil's Georgics. Being curious to examine his early bias I looked over that book, and give to the readers of the BEE JOURNAL, in a fragmentary way, some of the curious bee lore that that pioneer sought to unlearn:—

The ancients believed that honey fell from heaven in dew, but wax was found from flowers.

The dislike of bees for strong smells is so great that they will attack persons who are strongly perfumed. Therefore, when you want to take the honey, disarm the bees, which will be otherwise violent and dangerous, by personal cleanliness and the application of smoke to the hive.

In stormy weather they do not fly as usual, but remain about the hive or try short flights, ballasting themselves with little pebbles. When you see them swarming in the air be sure they will make for water and trees. Rub with savory and balm the place where they are likely to settle, and make a clashing of cymbals and they will alight of their own accord and get into the hive. When there are two kings in a hive there is a battle. First there are hoarse murmers, alarms as if of a trumpet; then the bees form around their king, issue forth into the air, and the action begins, lasting until one or the other party is routed. You may stop it, however, by sprinkling a little dust among the combatants.

Hives should not be near yew trees nor an echo, though no reason is assigned.

Bees do not generate like other animals but find their young among the flowers. Their ardour in their honey getting work is such that they often expose themselves to accidental death while engaged in it. In any case they are short-lived, seven years being their limit; yet the race ever goes on. If the stock of bees should die out altogether there is a mode of repairing the loss in which the eastern nations

repose unbounded confidence. The remedy is to kill a two-year old bullock in a narrow chamber by beating, bruise the body and leave it there with twigs of Casia and thyme, when bees will gradually breathe within it, till at last you get a large swarm—a sort of killing the fatted calf.

Herein, Mr. Editor, may be suggestions for a lot of experiments and new ideas with the consequent controversies and papers at conventions.

BURLINGTON, ONT.

A Beginner's Inquiry.

As Editor of the Canadian Bee Journal you must be capable of giving a new beginner in the bee business some good advice and I write you for the same.

1st. What are the best and cheapest hives for a beginner to use?

2nd. Would you advise the Italian bees in preference to the common black bees?

3rd. Can I take out from the old-fashioned square box hive the queen and put in the Italian queen. If so, how is it to be done?

4th. What supplies will I need for each colony of bees. The above questions answered will oblige

E. B. B.

Hall Stream, Que.

Dear sir,—I am in receipt of your letter, and in reply would say that the hives most generally used in the country is the eight frame "Langstroth," and so far as I know it is the cheapest hive. Of course you will understand that the lowest in price is not necessarily the cheapest. A well constructed hive is of great importance, and bee hives want to be accurate and correct. The material used in the hives should be durable, and if the above is not found there is likely to be great trouble and inconvenience. I consider the double walled hive an unnecessary expense; it is heavy to handle in the summer, and if general use is any sign it is but very little used, and there is but very little demand for it in Canada.

As to Italian bees. I prefer the Italian, or a bee more than one-half Italian, for the following reasons;—they are less likely to be attacked by the moth, the queen can be discovered more readily, they stick to the combs better, and can be handled with less trouble. There is of course a difference in strains. The very light colored colonies are very rarely of any use for honey gathering. You can get a queen out of an old box hive in the

following manner;—smoke the bees, turn the hive upside down, put an empty box on top, have no openings between the two, close them with the cloth, then drum the bees, rapping two sticks rapidly on the hive containing the bees. In about twenty minutes all the bees with the queen will be in the empty hive.

The next difficulty is to separate the queen, I would put the queen excluder underneath the hive with the combs, shake the bees in front of the hive, and they will go to the combs. In running along the ground, or better on top of a cotton sheet, try to detect the queen. With smoke assist them in reaching the combs, and the queen not being able to pass through the perforated metal can be kept separate. Then put the queen on the bottom board of the hive according to directions sent with each queen.

As to quantity of bee supplies for each colony, I send you a circular and price list. If running them for comb honey you should take a No. 2 hive, with either supers "A" or "B." A pound of light brood foundation to each hive, about one hundred sections, and one pound of foundation for each hive, a bee veil, a No. 1 smoker, and for each five colonies you have spring-count I would get seven hives. It pays to get the best smoker. If you are running for extracted honey take a No. 3 hive in place of the No. 2, and sections and section foundation, and take an additional pound of brood foundation. You should have a honey extractor and honey knife. I trust the above information will be satisfactory.

Yours truly,

R. F. HOLTERMANN.

A Question.

Will you please tell me in the next number of the Canadian Bee Journal the best method of transferring seven old box hives into frame hives? Also the best time and how to change queens? These bees are black and I want Italian. Can I take any frames containing Italian queen cells and put them into the hives of black bees? Give me full particulars as I am a beginner. All the eight Italian colonies I bought from you are alive with their sixteen swarms.

Quebec.

As has been before stated some transfer bees and comb during fruit bloom; it should be done at a time when honey is coming in, and if the combs are to be

transferred at a time when brood is in the comb when there is not too much honey stored in the hive. Bees are transferred by gently smoking the bees, and turning the box upside down. Ed.]

On page 520 appears an engraving reproduced from a photograph taken of some of the bee-keepers who attended the late Brantford convention. A portion of the proceedings is published in the present number. A portion of the Ontario Bee-Keepers' Association report will appear in the next issue of the Canadian Bee Journal.

Bees are wintering very quiet so far. I don't think there is a dead colony in the whole lot.

March 1st, '99.

C. W. Post.

Bees I think are wintering fairly well. We have had the coldest weather this winter for one steady week I ever knew. Niagara Peninsula.

WILL ELLIS.

March 9th, '99.

I have not examined the bees for the last two weeks and do not know just how they are at present, but they seemed to be all right just after the cold snap.

Waterloo Co.,

JACOB ALPAUGH.

March 3rd.

Blondes should not wear deep cream color.

A clever oculist warns ladies having weak eyes against wearing spotted veils. In such cases it is much safer to wear no veil at all.

A French lady advertises that she is willing to take pet dogs out for daily walks from 5 a. m. till 11 p. m., at a charge of half a franc per hour.

An expert says that glass would be a better and more lasting material than stone for making monuments which are exposed to the wearing action of the weather.

Meeting of the Senate of Canadian Bee-Keepers.

Court House, Brantford, Feb. 9th.

The Convention assembled at 7.30 p. m., after an adjournment of an hour and a half. Mr. Alpaugh was again unanimously voted to preside. He thanked the Convention for the honor, and introduced the first question of the evening on summer management:

How can the Bee-Keeper Best Manage to Prevent the Mixing of Dark and First-Class Honey, Either Comb or Extracted?

Mr. Heise said he never had had any trouble, because he never had occasion to put on supers until the berry blossom. While the berry honey is a trifle darker than clover honey, it mixes right along with it, and there is very little distinction. In regard to the closing of the season, most of us know how to manage that.

Mr. Shaver. Why not take the light honey off before the dark starts?

Mr. Heise. Couldn't; the clover honey, at the time they commenced to gather in the honeydew was not ready to extract. I was told this year that the bees were just as faithful on wheat stubble as they were on basswood leaves; I did not see it myself.

Mr. Shaver. When the wheat is a little on the green side you will see a reddish cast working up on the stubble. A neighbor of mine said they were working on beech leaves, and that the honey is dark.

Mr. Holtermann. There is a great deal of honey spoiled by allowing either early honey or late honey to mix up with it. Those who live where there is no buckwheat are not troubled to the same extent, and I believe east of Toronto, where the fruit bloom does not yield as much as it does in the western part there is not the same trouble. If we go and look at honey on the market we will see time and again sections spoiled by having some dark in the centre of it, and again others that are spoiled by having a few cells on the outside with buckwheat in. What causes the dark honey to be stored in the sections at

the beginning is either that they are put on too soon, while there is still some fruit bloom coming in (and that can be avoided by watching the new comb and as soon as the bees are bringing no more dark in, changing it; in fact, that as a rule will cover all conditions, or, when the sections are put on, if the brood chamber is badly crowded, they start to build out the sections, they will carry some of that dark honey up. By converting as much of the honey as possible into brood, or, as some have said, take honey out of those that have too much and give it to those that have not enough, you can get rid of it fairly well. If the section is three-fourths full, and you can find a local market for it, sell it, because that is almost always dark; if there is not, and there is danger of breaking out these sections not filled well, the only thing is to leave it on. One experience was to take ten colonies of strong colonists; the honey in the brood chamber was buckwheat, and in seven chambers out of the ten there was buckwheat honey; that showed it was taken up. If the extract combs are what they should be—nice white comb—when you are extracting if you hold it up to the light you can see where the dark is; uncap your light, leave your dark in, and wait till you have extracted all your light and then uncap and extract the dark.

Mr. Robinson. Isn't it better to extract the light first? Sooner than spoil the clover entirely, I would extract it before it was quite ripe; I am in favour of having it right, but sooner than have it dark I would extract it. The worst mix we can get is fruit bloom and raspberry; I believe raspberry is just as bad as fruit bloom; I think raspberry is about as poor flavored honey as there is; it is not very dark.

In the production of extracted honey what is the best method of increasing the number of drawn-out Combs?

Mr. Holtermann. If you have a certain number of combs, I would put on the ex-

tracting drawn comb first, and then when they get that partially filled raise it up and put underneath a super with foundation.

Of course if you are in a buckwheat district, and you want to increase your combs for the following year, it is a very easy matter to do it in buckwheat flow, and at the least expense. If you have to draw out your combs and extract them during the time light honey is coming in, you are doing it at great expense, so far as I can see, but if you do it in buckwheat—I believe that is the time, if you need combs, to get your combs drawn out, I do not know that this is the very best way.

Mr. Fleming. I never had much experience, but I believe the fall is a very good time if one has a foundation to use up the fall flow. In the spring the old combs are easier to handle, and the best for extract. I always put the brood combs in the brood nest and use the old ones for extracting. The bees will store honey quicker in the old comb; even if part is old and part is new they will fill the old first.

Mr. Heise. In making use of the old brood comb for extracting, won't it darken your honey?

Mr. Fleming. No, We use all old combs for extracting.

Mr. Holtermann. I have seen old combs taken (and you know it is brown in color), if you put water into that cell it will turn the water a coffee color. It seems to me that that is pretty conclusive evidence that it will color the honey. But in addition to that, that old comb will be all right if you keep on using it (hear, hear), because I have seen the comb being filled and refilled.

Mr. Shaver. I never let weak colonies build foundation; I draw from the better ones and give to the others; make the strong ones build for the others. Why are my combs good? Put in full sheets and you have pretty nice combs.

Mr. Holtermann. C. W. Post uses combs for buckwheat; he has them cleaned out, and uses them the next season for his light honey. We bought eight thousand pounds of light honey from him this year, and you could not get any better anywhere. He never gets any blossom honey in the hives; nothing but buckwheat and clover. He used to laugh at us western people, extracting fruit bloom honeys, because he never got any. He extracts buckwheat, and then the other after that, and has no difficulty.

The chairman said he had had combs

built in a good many different ways, but his were mostly from starters.

Mr. Fleming asked whether the Convention did not think that the principle of putting these combs in with starters would work better if they put the new hive below, and put the queen down.

Mr. Atkinson. Have the upper story over extracting chamber; by putting comb in the centre of the upper story, why wouldn't they work and put the surplus below instead of above; why wouldn't they work above as well as below?

The Chairman replied that they would build them, but that a nice job was not made of it.

Mr. Holtermann. If I was running for extracting honey, I would never use the starter so long as I could get the whole sheet of foundation, because it holds the bees back; unless it is in very exceptional conditions of flow, and you are not aware of these conditions before hand, you must take it for granted that you are going to have a good flow, and if you have that you won't have so much honey.

At what stage should honey be extracted was next in order of debate.

The chairman called first on Mr. Craig, who said that before being extracted the honey should be at least three fourths capped, but wished to know if the chairman meant perfectly ripened.

Mr. Alpaugh replied that he supposed that was the idea.

Mr. Holtermann. I think, with the probability that we will be exporting honey, that it is desirable that we have the quality better than we have ever had it, and more than that, I think we are taking better honey than we used to. We cannot do too much in the direction of producing a good article of honey; there is too much honey extracted when it is thin; I know that some will say that honey ought to be kept till it is capped, and a good deal after, and others will say that honey is sometimes thinner than at other times when it is capped; we will admit that, but we have to come to some practical rule that we can all follow. If the honey is kept, and it has a glossy, shiny look in the cell—if we will all adhere to that of extracting we will have a better quality of honey than is in the market at the present time; and to go beyond that is unnecessary, and to a certain extent impracticable.

Mr. Atkinson entirely agreed with the remarks of Mr. Holtermann.

Mr. Robinson. The longer it is left on,



W. E. Young, G. E. Robinson, W. J. Craig, C. Edmonstone, R. F. Holtermann, D. W. Heise, J. R. Fleming, C. Spencer, B.S.A.
 Jas. Sassef, R. W. Bunch, Alex. Taylor, F. A. Gemmel, F. J. Miller, Jacob Albough, L. Vanstockle, Jas. Armstrong, Wm. Atkinson.

as long as it is warm and dry weather, the better; it might not be as well afterwards.

Mr. Fleming. I took off about 700 pounds one day, and there was a little thick honey mixed with it, but 400 pounds of it poured off just like so much water; I poured it into a barrel, and it thickened right down and was as nice as any honey we had. It was very warm weather. When we were shaking the bees off we had to be careful and not throw the honey on the ground.

Mr. Shaver. The more cap the better, for me, but do not leave it too long. You can leave solid capped honey on the hive until it is thin. A friend asked me when I was leaving for the Exhibition at Toronto, what was the matter with my honey, pointing out that it was thin. It turned out that we had had a heavy rain, the weather was warm and the ground damp, and that both clover and basswood honey had become thinner.

Mr. Holtermann asked whether the bees had not drawn away from the honey in the sup r?

Mr. Shaver replied that he did not know what would draw them away; and that such a thing had never happened before; he thought it must have been on account of the rain.

Mr. Davis asked why one colony will have first-class honey, thick and good in every way, and then in the next hive you have thin stuff, while both hives were strong.

The chairman suggested that the strain of bees had a great deal to do with the quality of honey; that he did not think all bees gathered honey and ripened it the same; some would cap it ever thinner than others.

Mr. Roach remarked that he had frequently seen some honey thick, while the honey from other bees would be quite thin.

Mr. Heise remarked that the weight was his principal test; when he was ready to extract he selected a couple of combs that had a light cap, and extracted that first and weighed it, and if it gave the weight he considered necessary for good honey he went on with the extracting. If it turned out too light, he left the honey on cap. Last year he selected six combs, weighed the honey and it weighed 12 lbs. This he considered good, and went on with the extracting; some of the balance weighed 13½ lbs. to the Imperial gallon.

How Should Honey be Stored, and Where?

Mr. Holtermann. What I wish to know is as to the desirability of the present general practice of extracting honey and leaving it in all kinds of buildings, exposed often for months to the atmosphere, with the idea of that honey ripening and improving in quality.

First; just as soon as you get to the showery season, if you go and put a thin layer of honey on a plate, in an ordinary atmosphere, the result is that that honey will not thicken, but will get thinner, if you leave it there for twenty-four hours; the honey in the top of the tank will act in just about the same way as the honey on the plate, and if the honey gets thinner on the plate, instead of thicker, it will be the same way with a can. If that is the case, unless we keep it in a room where we have artificial heat, or where a great deal of sunlight strikes in through the day and heats it, and it is carefully closed up through the night, it would be better to close it up and keep the atmosphere from it. So much for the ripening of honey.

What most people value in first class honey is the aroma of it. You take syrup, and then take honey, and a great deal of the difference in the value of it to the ordinary person is the aroma. That aroma is from what is called "essential" oils. When you smell a flower you get the "aroma". If you leave that flower open that "aroma" is going to pass into the atmosphere, and the more desirable that aroma is the more of it is going to be lost. I know you can expose it so much to the atmosphere that it becomes tasteless, as far as aroma goes. When you take buckwheat honey, the more you expose it to the air the better, but the other honeys we are handling in a wrong way. The aroma in maple syrup is a different thing; in a flower, the aroma is volatile, and flies off; when you take maple syrup, there is substance there that is not lost.

Mr. Miller. You can get that fine aroma better by not exposing the honey. I always put my honey in tins.

Mr. Fleming. I think it ought to be sealed; the force of the concussion of the honey, and the opening of it to the air as it comes out of the extractor, would cause the aroma to be thrown off more at that time than when it is stored into a 60 lb. can.

Mr. Shaver said he used to put honey in something and let it stand covered with seive cloth, but now he wanted it

sealed up, right while it is warm, if possible.

Mr. Davies had not been in the habit of using 60 lb. cans, but instead used large storing cans of from 200 to 400 lbs. capacity; they put two or three thicknesses of paper over the top of the can, and either put the lid on or tie string around; he had recently eaten honey that was two or three years old, and it was as nice as it ever was.

Mr. Taylor. When I extract I have cans which hold about 1,000 lbs; I cover it with a cheese cloth cover, keep it there for four or five days and run it off into 60 lb. cans. Keep it in a warm place and it is all right.

Mr. Heise. I have a room at the back of the house, up stairs; one window facing the south and one the west. When I extract the honey I carry it up there. I believe it is a good place to keep honey; it gets very warm there during the day time. I store it there in storing tanks holding from 500 to 600 lbs., and am not very particular when I get it out of these tins as long as it runs nice. In the cold weather there is a pipe leading from the store and the room is always kept warm.

Mr. Michner. We run it into barrels, ready headed; run it through the bung, and cork it up.

Mr. Atkinson wished to know whether honey had as good a flavor after it had been candied as it had right after it was extracted?

The Chairman. I do not think so; every time you do anything to honey you do something to weaken its flavor. I used to use cans holding 900 lbs. As I extracted I would fill them up till they came to the top, till the strainer would begin to float, and then as I put in a pail I would draw one off at the bottom and seal it up. That new honey did not get mixed with the other; if there is any thin honey it will naturally want to go to the top. I would keep the can full and towards the last, if it got thin, I would put it into a glass box about 12x4 feet, covered with storm windows off the house, put it out in the sun and that fixed it nice; I had all good honey. I was sealing up the honey almost as fast as I was taking it.

The convention adjourned at 10 p. m. until the morrow at 8.30 a. m.

At half past eight the next morning, all the members were in their places. The first question discussed was

Where Should Combs be Kept After the Extracting Season.

Mr. Atkinson generally kept them in the upper stories, just the same. He said he always looked over them. He generally had about six, spread apart, (no ventilation between the tiers) laid a paper on top and placed a board on top of the paper to hold it down.

Mr. Miller generally kept them in stacks in his honey room. He put a cover on them and always used sulphur on them, burned the sulphur and put the combs away. Where sulphur had not reached every part he had found worms in them but if pollen was kept out there would be no trouble in that respect.

Mr. Armstrong. I generally, after extracting, have them cleaned out, but I am in no hurry taking them off. I leave them on sometimes from the last of July or the first of August to the first of September. If there is honey in any combs put them by themselves. The empty ones I am particular about putting paper or cloth on, so as to be tight, and then pile them to the ceiling and have the combs the same distance apart they would have been in the hives. I put a paper or cloth to seal it down tight at the top, and put a cover on, and leave them there till the next season. I have never used a pound of sulphur in my life for comb honey or empty combs. The trouble in the moth business is, after you extract you leave them exposed over night, when the moths are flying, and they deposit their eggs, and then the combs are destroyed in time. I find it is not necessary to use sulphur if you do not leave your combs exposed over night. Better finish them up the day you move them; if you prevent them getting in, that settles the job.

Mr. Holtermann. The development of the moth and other insects depends, at certain stages, upon the temperature. They stay dormant a long while, under certain conditions, and when favorable conditions present themselves they come on. If you go to work and put your combs out to-day, unless there are fresh eggs laid they are not going to give you much trouble.

Mr. Atkinson. Take off combs in April and leave them exposed, and in the latter part of May you will find any amount of moths.

Mr. Holtermann. They will come at all times.

Mr. Roach had kept them over winter; laid strips across honey comb, and in the spring burned a little sulphur on the floor

and had no bother. He thought if they could be kept entirely close they would keep all right, free of moths. Mr. Roach said he placed about seven to the foot, so that they could have a good circulation of air; he had kept 300 or 400 that way.

Mr. Heise had left them in the hives till the first of October, if the fall was very warm. He was particular to separate the combs that contained any pollen. He thought it took very heavy sulphur fumes to kill some moths, and when he had tried that remedy he had found that it left a bad odor on the combs.

Mr. Holtermann. I do not know of any better way than to return the combs to the hives and leave them there as long as the moth is likely to work. We generally take ours off after we get back from the fall fairs—about the middle of September—and it is a difficult matter to keep the moth out in any other way; it is all right enough to say that you do not want those combs exposed for any length of time to the moth. I believe that in 99 cases out of 100, when the moth that attacks the comb is put away, that that is when it is done. At the same time, there is occasionally a moth in the comb before. We find them rarely in the super, but if there is pollen there, the moth may also be there. This question about the moth—it depends altogether upon where you keep the combs; it is not a matter of such and such a time that the moth develops; they simply develop twice a year because the conditions of the weather are so and so, but just as soon as you store them in some place where artificial heat is applied, they are knocked out. Is the above correct? We have had them develop right in the dead of winter, where it was warm.

Mr. Holtermann then referred to his experience with moth eating their way into wax and developing their cocoons there. He had also tried putting combs in the cellar, but said if the air was such that the moth would not work there was not a living room temperature and the combs would become injured and mouldy. If pollen got mouldy, which it sometimes will, it is a good thing, because the bees will not use it and will go to work to clean it out.

Mr. Atkinson asked the question, what caused the pollen to become mouldy?

Mr. Holtermann. What will develop mould in anything else. I am sure I had fifteen men at the Ottawa Fair alone complain that they were losing their bees through moths. Do away with everything that gives the moth a chance to develop—old comb, refuse etc. Moths will

never trouble combs until the bees leave a portion of the combs, draw away from them, then the moth works on the comb, and after they spin their cocoons in the passages then they encroach on the bees. Some advocate freezing combs to get rid of moths, but I would not.

Mr. Armstrong. Prevent the moths from getting in; that is the best way.

Is it Necessary or Desirable to Have Honey Cleaned from Comb After Extracting?

The discussion of this question was opened by Mr. Shaver, who remarked that if it was dark honey he wanted it thoroughly cleaned, but was not so particular when the honey was light.

Mr. Young (Tilsonburg) and the chairman were of the same view as Mr. Shaver.

The Chairman. Would there be any benefit derived from that little bit of honey left, in the way of coaxing the bees up in the spring? I have found that they went up more readily.

What is the Best Way to Have the Bees Clean up the Comb?

Mr. Holtermann asked if there was one man in the Convention who would take his oath that he had no foul brood.

Mr. Shaver replied that no man could swear to that, not even Mr. McEvoy himself. He (Shaver) did not think he had, but would not be positive. He would feed any one of his hives to the whole yard.

Mr. Holtermann. There is many a man who has been just as sure as anyone here, but who has had it. If we want to stamp out foul brood in this country, we will never do anything that means the general feeding back of honey. To set out, and allow the yard to work on it, ninety-five will do it with risk, to five that won't. I know man after man with foul brood all through his yard, and that is the way he got it; his bees have not got it in any other way than by feeding back his own honey; it can stay there ten years, if it likes. Supposing you have eight combs of brood in your hives; if you have a barrel of honey you have been extracting, you know some of the first that went in will remain there to the last; it will get mixed up, more or less, won't it?

Mr. Shaver. Do you mean to say that you must put the same combs every time?

Mr. Holtermann. You extract your first hive, and that has foul brood; you know it is extremely likely that some of

that honey from the first hive will be mixed up with it; you run the risk of dosing the whole honey crop. By this system of feeding back you run the risk of dosing every colony in the yard. Move it over simply one hive, and the chance of distributing foul brood is not anything like the same. In the one case, you run the risk of dosing every one, and the fact stares us in the face that bee-keeper after bee-keeper has dosed every one of his colonies. Old honey will not cause foul brood, simply because it is old.

(To be continued.)

Do not Send Money.

We understand that J. E. Edwards, who advertised some second-hand bee-keepers' supplies in the Canadian Bee Journal some time ago, has no hives left to dispose of and has suddenly left the country. Editor C. B. J.

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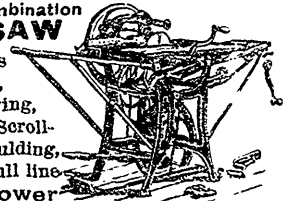
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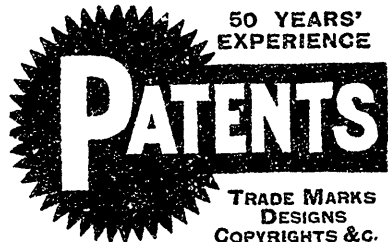
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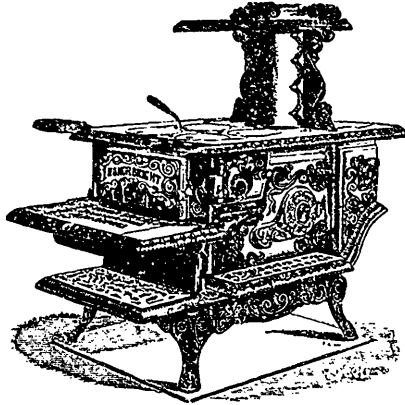
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In the pen a cock and four pullets, purchased and selected for me by the well-known poultry expert, Mr. Jarvis, of the Ontario Agricultural College, Guelph, who has also acted as judge for many years in the leading poultry shows of Canada and the United States. The cock is Thompson, bred at Canton, Ohio. It won 1st as a cockerel. Again under Bridge it this year tied for 1st place for cock in very strong competition. One pullet took 1st at Canton, Ohio; the other was one out of the pen which took first for the best breeding pen. The cock was also pronounced by Mrs. Comyns-Lewer, editor Feather World, London, Eng., who visited the great Toronto Poultry Show this year, as the most perfect type of Barred Rock she had seen on the American continent.

Settings: 13 eggs, \$2; 30 eggs, \$4.
Best cockerels, \$10 each. A few culls left, \$2 each.
No pullets or hens for sale.

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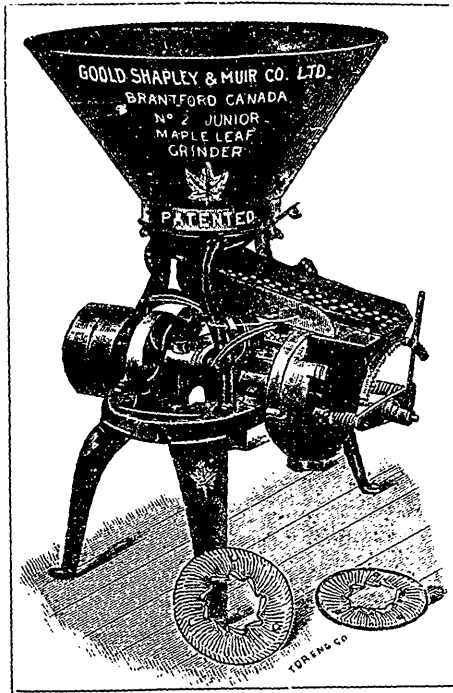
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