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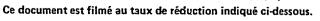
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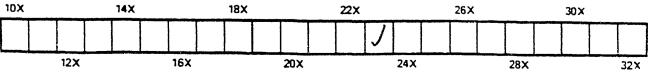
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Its Reading Columns for the advancement of Honey Producers exclusively.

Vol. 2. No. 12. BRANTFORD, FEBRUARY, 1889.



Published Monthly, 40 cents per year.

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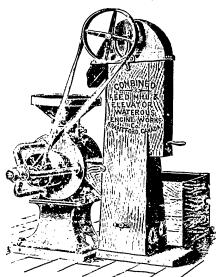
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Vol. 2. No. 12. February, 1889.

With the present number closes the second volume of the *Canadian Honey Producer*, and we may safely say that our Journal has passed the experimental stage. Our circulation has considerably widened during the past year having extended in Europe to Russia, Norway, Switzerland, Germany, France, Ireland and England. It has also reached South America and Australia.

Our Canadian contemporary before we made our appearance decided to leave our fate in the hands of bee-The dekeepers, (a wise decision.) cree has gone forth and as long as E. L. Goold & Co. see fit to publish the Canadian Honey Producer, so long the bee-keepers of the world have shown they will patronize it. We have issued a Journal, full of independent reading matter from able writers, and written to promote the interest of bee-keepers.

We have visited many apiaries, attended numerous conventions, going even so far as Columbus, Ohio, to attend the International American Convention, and have given our readers the benefit of these expenditures. In this respect we have also shown ourselves far in advance of any other Journal in Canada.

Our advertising patronage it will be seen is extensive, and some of our patrons have been with us from the first. This is an extremely favorable indication.

In return we ask our readers to renew their subscriptions promptly, and try and send those of one or more of their neighbors. Many subscriptions have expired and others are expiring. 40 cts. is not much but 1300 of them make \$520.00. Those who are in arrears, or any others may and another's for \$1.00; in short, any three yearly subscriptions for \$1.00.

OUR OWN APIARY.

It has been our good fortune to visit quite a number of apiarists during winter, at a time when bees were in winter quarters, and by so doing we have endeavored to gain more information than a bee-keeper who has only the experience of his own apiary to guide him.

From our observations we feel confident that the best and cheapest indoor repository is one which has a chamber inside of an outer chamber, the outside atmosphere can be allowed to pass into the outside chamber, and there be tempered and permitted to enter into the inner. Direct draughts can in this way be prevented and more equable temperature maintained, and we think as perfect ventilation secured. Owing to circumstances difficult to control, the cellar in which we at first intended wintering was not completed in time, and a cellar with stone walls and cement floor had to be used. It was large enough to allow an inner chamber to be constructed in it and this we did. The walls are made of felt paper, two thicknesses tacked on uprights outlining the walls. We consider this more air tight than any ordinary wall. We have at various times shut all ventilators in this chamber and find in every instance the atmosphere becomes perceptably foul and the bees break cluster, so much so that much as we like experimentation, we came to the conclusion that we were injuring our bees and running the chance of destroying the entire number.

The outer chamber has a ventilator in each side at the top of the cellar, each about four inches square and communicating directly with the outer air. Midway between the two ventilators in the end wall there is a cellar window covered with a trap door, the ventilators we find sufficient to keep send two subscriptions of their own I the air sweet, but by raising the trup

door over window and having the window entirely open, we can regulate the temperature. The trap door is raised or lowered but never entirely closed, as circumstances may necessitate. Moisture condenses freely in this window, the warm atmosphere striking the cold surface causes this.

The bees thus far appear to be wintering well and the inner repository is perfectly dry except where the atmosphere passes into it, caused $r \cdot$ doubt by the cooler air striking the warmer and almost saturated air. Two or three hives here have a little moisture on their bottom boards.

The Ontario Agricultural and Experimental Union.

The annual meeting of the above Association will be held Feb'y 7th and 8th, at the Ontario Agricultural College, papers will be given upon the various branches of the farm, amongst which are "Green Fodders," by Prof. Shaw; "Sheep,""Lucerne" and "Bees." We regret to say no programme is to hand upon going to press, to enable those to attend and hear the subjects they are especially interested in.

We may say here, every periodical should esteem it a privilege to give the Experimental Union a notice, as it is doing a good work and increasing in usefulness. It should receive a more liberal support from the Government financially.

R. L. Taylor, Lapeer, Mich., a Bee-Keeper of eminence, has been elected to the United States Senate. We congratulate Senator Taylor. From what we have seen and heard of him we can also congratulate the State of Michigan, which he will represent in the Senate.

We are indebted to Wm. Couse the Secretary of the Ontario Bee-Keepers' Association, for the report of the business of the annual meeting at Owen Sound.

American Bee Journal. MANIPUI₁ATION.

A New System for the Management of Bees.

> Written for the Michigan Convention. BY DR. G. L. TINKER.

It may be stated as a rule, that a colony of bees dividing up its forces by swarming, will not produce as large a surplus as a colony under the same conditions that does not swarm. In a honey-flow extending over most of the season, the rule may be an exception, but it is a rare thing to occur. In view of these facts, bee-keepers have long sought a means to prevent swarming, or in lieu of that, a nonswarming strain of bees. As it has been the instinct of bees to swarm through all the ages, and since it is the only natural means of increase, it is plain that we may not suppress it ; and especially when producing comb honey. We may create artificial conditions, as in the taking away of queens, or of the stores as fast as brought in, and prevent it for a time, but we shall never be able to prevent swarming where natural conditions exist.

The best we can do is to deal with the results of swarming. And I may here say, that we can do this to advantage, and bring about results exceeding anything accomplished in times past.

We are entering upon the way of a more profitable and enjoyable apiculture, as in many things in these days we are marching with giant strides into realms of knowledge more wonderful than the most vivid imagination has even dared to contemplate. single honey-bee is a helpless thing, but a colony of them has power and utility in proportion to its numbers. Who shall say, then, that it may not be guided to greater results and unheard of wonders? And this we think, no less than we do, that the most useful and yet abundant, the strongest and yet the lightest metal in all the earth, by the skill of man, is to come forth from the elements and give to the world a new civilization, unthought of possibilities and apparently impossible achievements !

For years I have noted the remarkable impulse with which a young swarm begins its labors, and I have thought that we should take heed and make the most of this impulse to rush matters, and pile up a surplus. But it is clear that the impulse can only be developed through swarming. Hence, it will not be a surprise, if the time is at hand when practical bee-keepers shall cease to look for means to prevent swarming, or a non-swarming strain of bees.

The new system of management that I have devised and perfected, and which I shall claim the honor of introducing to my fellow beekeepers as a practical procedure, is founded upon the above views, and an experimental trial of three years.

The ordinary management is pursued up to the time of swarming, which consists in getting all the colonies as strong as possible, and ready for the expected honey-flow. A supply of extra brood-chambers are made ready with empty combs or frames half-filled with good foundation, or a part of each. No wiring of frames is done. As soon as a swarm issues, it is hived in one of the prepared broodchambers on the old stand.

The parent colony is set to one side, and the supers taken of and placed on the prepared hive, and the transfer is usually made while the swarm is in the air. A wood-andzinc queen-excluding honey-board is placed on the brood-chamber, and the supers over it. And here I will say, that the success of this management is largely dependent upon the perfect working of this honey-board, and its adaption to large colonies. This matter is so important that it may be wise to indicate certain points in its construction, essential to success, lest any shall test the new sytem and pronounce it a failure from having made use of an imperfect and unsuitable honey-board :

1. The zinc strips should have two rows of perforations, and be set parallel to, and alternate with, the brood-frames.

2. The wood slats must be plump $\frac{7}{6}$ of an inch wide if the brood-frames are spaced more than $1\frac{3}{6}$ inches from center to center; and the wood should come so close to the perforations that the bees may get a ready foot-hold upon it, and thereby be enabled to pass through the board instantly.

Having hived the bees and transferred the supers, I then shake the bees from the combs of the parent colony, down in front of the new one; but this part of the work may be delayed to any convenient time within 24 hours. Thus all the bees that were in the hive before swarming, are kept together, the brood alone being taken away. A colony so managed acts and works like any young swarm, and as all are large, if plenty of surplus room is given, the product will be correspondingly great.

The brood taken away is placed in another brood-chamber, and put over any colony capable of taking care of it. The added brood is placed over a queen-excluding honey-board, and if supers are on the hive, they are to be carried to the top. With the issue of a swarm, every colony in the apiary is so managed, whether it has one or more added broodchambers. If all the colonies swarm, the result will be an increase of one or more broodchambers on every hive.

Extracting may be done from the added brood-chambers as soon as the brood is sealed, or about the ninth day; or the combs may be left in place till all the brood hatches. If extracting is not desired, the combs may be storified on as few colonies as possible, and kept till fall and the making up of the colonies for winter, when as many combs of sealed honey may be used as is necessary to winter the bees.

[TO BE CONTINUED.] Gleanings in Bee Culture. THOMAS G. NEWMAN. BIOGRAPHICAL SKETCH BY DR. C. C. MILLER.

For fifteen years the American Bee Journal has remained under the management of one man ; and, aside from being ably edited, its general make-up and clean typographical appearance impress one strongly, that, somewhere connected with it, is a man who is well up in the art preservative of all arts. The secret of it is, that Thomas Gabriel Newman. its proprietor is himself a through practical printer. Born near Bridgewater, in Southwestern England, Sept. 26, 1833, he was left fatherless at ten years of age, with three older brothers and a sister, the mother being a penniless widow by reason of the father's endorsing for a large sum.

The boys were all put out to work to help support the family. Thomas G. chose the trade of printer and book-binder, serving an apprenticeship of seven years, and learning

1889.

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throughly every inch of the bilsiness from top to bottom, in both branches.



THOMAS G. NEWMAN.

Early in 1854 he came to Rochester, N. Y., where he had relatives ; and before noon of the day of his arrival he secured a permanent situation in the job-room of the American. Within two months he took the position of assistant foreman on the Rochester Democrat, then the leading Republican paper of Western New York. Later on he spent seven years editing and publishing a religious paper, called the "Bible Expositor and Millennial Harbinger," in New York, and published a score or more of theological works, some written In 1864 he moved it to Illinois by himself. sold out the business, and for a "rest" took his family to England. Returning in 1869 he located at Cedar Rapids, Iowa, where he published and edited its first daily paper. In 1872 he sold this and removed to Chicago, where he embarked in the business, of publishing The Illustrated Journal, a literary serial printed in the highest style of the art and magnificantly embellished. The panic of 1873 ruined this luxury, bringing upon him a loss of over \$20,000.

In 1873 a friend introduced him to the Rev. W. F. Clarke, who wanted to dispose of his interest in the *American Bee Journal*, which interest was one-half, subject to an unpaid contract. This he bought, and afterward the interests of F. Grabbe and Geo. Wagner, thus becoming sole proprietor. For a man not afflicted with the bee-fever, in cold blood to pay more than \$2000 for the simple "good will" of a paper with no printing-office or supplies of any kind, shows an unbounded confidence in the future of bee-journalism. Few men under the same circumstances would have achieved his success. . For three years he employed successively as editors, Rev. W. F Clarke, Mrs. E. S. Tupper, and Dr. C. C. Miller, meanwhile applying himself to the study and practice of bee culture, increasing his apiary from three colonies, purchased for experimental manipulation, in more than 100 colonies in 1879, when he disposed of them because troublesome to surrounding stores. For the past twelve years he has been sole editor having called to his assistance the most successful honey. producers of the continent. With a positive dislike for financial transactions, he is fortunate in his son, Alfred H., who has ability in that direction. Besides the son he has two daughters, all married, and five grandchildren.

In 1879 he went to Europe, at his own expense, as American representative to the various bee-keepers' societies, and attended conventions in England, France, Italy Austria, Germany etc., and was awarded several gold medals for exhibitions of American apiarian implements. He has been elected an honorary member of 14 bee-keepers' associations, and is also life member of the North-American Bee-Keepers' Society (of which he was twice elected president), and treasurer of the North-western Bee-Keepers' Association.

He had been twice elected Grand Commander of Illinois of the "American Legion of Honor," and is an officer of some ten different societies in Chicago, social, fraternal, insurance, etc., and spends much time in visiting the sick and relieving the distress of those in fraternal and social relations with him, thus fulfilling the injunction of the Book of all books, of which he is a diligent student

In 1885 he was elected the first manager of the National Bee-Keepers' Union, which, under his management, has successfully defended a number of bee-keepers in suits at law brought against them. His successive reelection each year gives evidence of the satisfactory manner in which he has performed the duties of his office.

In no one thing has friend Newman shown the persistence with which he follows up any matter he undertakes, more than in his fight against adulteration, and in connection with it what he so constantly calls the "Wiley lie." Prof. Wiley, with all the weight of his official position under government, perpetrated the "scientfic pleasantry" that comb honey was manufactured without the aid of bees. Far and near it was copied by the papers; the professor looking on complacently at the mischief he had wrought, without offering a word to stop its course. Mr. Newman demanded a retraction with no success, for a long time, but he kept up the welfare, denouncing the falsehood with ever-increasing vigor, using such strong language, and such bitter denunciations that one could hardly withhold sympathy for the poor professor, so mercilessly belabored. But it is probable that nothing short of such vigorous language would have wrung from Prof. W. a tardy denial of the truth of his statement, and a mingled attempt at apology and self-justification.

Notwithstanding the use of vigorous language on the printed page, in his attacks upon that which he deems unjust or false, in personal intercourse friend Newman is always the courteous gentleman. Hardly up to medium height, he is of strong build, and of active temperament. In convention he is a good presiding officer, and an easy speaker, sometimes rising to flights of eloquence on themes which, treated by others, would be but common-place.

Let us all heartily join in the wish that Thomas G. Newman may long be continued at the helm of the good old *American Bee* Journal.

C. C. MILLER. Marengo, Ill., Oct. 20, 1888.

The Annual Meeting of the Oxford Bee-Keepers.

The annual meeting of the Oxford Beekeepers' Association was held in the town hall Tuesday morning at 11 o'clock. The attendance was small. Minutes of last meeting and treasurer's report were read and adopted. The following officers were elected for the coming year; President, Wm. Goodger; vice do., S. T. Pettit ; Seo-Treas., J. E. Frith., Directors, M. S. Schell, Martin Emigh, J. B. Hall, Dr. Duncan, F. A. Gemmil. J. E. Frith was appointed a delegate to the Ontario Beo-Keeper's Association in January in place of Mr. Munro, and S.T. Pettit was appointed in place of Mr. Whaley. It was decided that the spring session be held on Wednesday, May 21st, '89. It was moved by Mr. Pettit, seconded by Mr. Munro and carried, that the directors be a committee to arrange for a show next season, draw up a prize list and report at the spring session.

The following questions were than put and answered : Mr. Gemmil asked : Would you extract honey and feed sugar for wintering ? Answered by Messrs. Munro, Pettit, Hall, Goodger and Emigh : Not if we could help it.

What advantages are there in separators ?

Mr. Goodger did not want them.

Mr. Hall liked separators in poor years, but none in good.

Mr. Gemmil liked separators with open sided sections. It was generally thought that narrow sections were the best.

What are the advantages of the honey boards?

The experience of those present was insufficient to give an answer.

Will honey boards keep bees from entering supers ?

Yes ! in poor years.

White clover has materially decreased during the last two years. What is the cause? Dry weather.

Bees have worked considerably on red clover this year, not only in Oxford but in others portions of Ontario.

How many contracted bees in spring !

All the members had done it more or less, but were discarding the practice.

Mr. Gemmil wintered his bees in clamps and leaves them until honey flow commences.

A short conversation as to the advantages of chaff hives elicited little or no information.

FOUL BROOD.

Mr. Pettit thought that this matter should be dealt with very carefully in legislating. It was moved by Mr. Hall and seconded by Mr. Gemmil that the secretary make a report of the damages and losses from foul brood for the last three years to the Ontario Bee-keepers' Association-

J. E. FRITH,

Annual Meeting Ontario Bee-Keepers' Association.

(CONCLUDED.)

Moved by R. McKnight, seconded by W. Rowand, and resolved, That we the officers and members of the Ont. Bee-Keepers' Association in annual meeting assembled, express the great satisfaction it affords them in the appointment of the Hon. Chas. Drury to the important position of Minister of Agriculture, believing as we do that the Agricultural interests of the Province could be entrusted to no better man or one in whom the Agriculturalists of the Province have greater confidence. Carried.

Moved, seconded and carried, That we go into a committee of the whole to discuss the Constitution and By-Laws with Mr. Corneil in the chair.

Resolved, That clause 3 in Constitution, be amended so that all words after the word "fixed" be struck out, and the words "by the Board of Directors at their first board meeting," be substituted therefor.

By-Law No. 4.

Moved by Mr. McPherson, seconded by Mr. Emigh, and resolved, That the first sentence in the paragraph relating to the Treasurer's duties be struck out and the following sentence substituted, viz : "It shall be the duty of the Treasurer to furnish such security for the monies of the Association as the Board shall determine." Carried.

New By-Laws.

Moved, seconded, and carried, That every delegate from an affiliated Association to this Association shall furnish a certificate signed by the President and Secretary of the body which he represents showing that he has been duly appointed a delegate of such society.

Moved, seconded and carried, and resolved, That should an affiliated association become defunct after payment to it of the grant from this association, any unexpended balance of said grant shall be forfeited and paid over to the Treasurer of this association.

Moved, seconded, and carried, That the officers of the Association shall be elected by ballot, with the exception of the Auditors, who may be elected by an open vote of the association. After the reporting of the committee it was moved, seconded, and carried, That the By-Laws be adopted as recommended.

Committee rose and reported.

Moved by F. H. McPherson, seconded by S. Corneil, That we appoint the Hon. Chas. Drury an Honorary member of this association.

Moved by R. McKnight, seconded by W. Rowand, That the thanks of this association be tendered the gentlemen that have prepared papers to be read at this meeting, and special thanks to Mr. Corneil for the trouble he has taken in preparing his paper, and in bringing hives, etc., to explain by different entrances, how different drafts may be caused for wintering. Carried.

Moved, seconded and carried, That the thanks of this association be tendered Mr. Emigh, for the efficient way he has occupied the chair of this Association as President the past year.

The meeting now adjourned.

MEETING OF BOARD OF DIRECTORS.

At the meeting of the Board of Directors Jan. 9th, 1889, Messrs. Wm. Couse, Streetsville, and R. McKnight, Owen Sound, were reelected Secretary and Treasurer respectively.

Messra. McKnight and Pickett were appointed delegates to attend the Toronto Industrial Exhibition Board Meeting, Messra. Emigh, Corneil, Couse and McKnight were appointed an executive committee.

FOREIGN.

LINDEN TREES

Germany is a land noted for the abundance of its linden trees and no one will question the wisdom of their selection for an ornamental tree. F. Huck in *The Illustricrte Bienen-Zeitung* urges Bee-Keepers to see that their beautiful trees are planted in every available place especially in the streets of our cities. In writing of the duration of the bloom, he says a tree remains in blossom from 2 to 3 weeks. By a judicious selection however of varieties, linden bloom may continue for bees from 6 or even to 8 weeks.

For instance he writes, our large leafed or Summer linden tree, (Tilia europaea grandifolia,) is the first, the small leafed or Winter linden tree, (T. europaea parcafolia,) is next, then the Silver linden tree, (Tilia argentea,) and last of all the American linden tree, (T. americana,) which blossoms the latter part of July or even the beginning of August.

Besides the varieties named, there are however many other varieties, one nurseryman in Germany having about 30 varieties.

[The great drawback in our estimation to artificial bee pasture is that it requires to be produced on an extensive scale or it may prove a positive injury ; yet the above article gives us food for reflection. In the first place by a little effort we can often secure the planting of linden (in America commonly called basswood,) trees and assist the pasture already afforded, in the next place by planting such other varieties of linden as we know do well in this country, we may in time extend that honey flow. The linden certain seasons yields honey profusely, and a few trees even when well developed may tell upon the honey crop. Our linden being the last, the others would be in blossom at a time when there is already some honey flow from other sources, and not as if these trees were the only source.-Ep.]

Answers to Queries for February.

No. 55.—My cellar is damp, the walls have drops of water upon them, the bees appear all right, can I risk leaving them alone?

If your bees seem all right you had better leave them alone.—R. H. Shipman, Cannington, Ont.

Yes, if high up from the floor and keeping dry.-D. P. Niven, Dromore, Ont.

I should .- Ira Orvis, Whitby, Ont.

Yes. It is only when the cellar walls and joists over head become frosty that the bees are in danger. - Dr. Tinker, Ohio.

I would not want to risk my bees in a damp cellar. You can dry it by slight ventilation; open the d r for a short time after dark.— Frank A. Eaton, Bluffton, Ohio.

I believe from experiments tried by myself that the scientific way to winter bees in a cellar or bees house, is to raise the temperature in the repository at intervals of about 10 days during the entire winter. The temperature should be raised to about Sö degrees and kept at that for six or eight hours each time. When the warming up process is begun the hives should be stripped of all their coverings except the wire cloth guard over the top of the brood nest, so that the bees can throw off all excess of moisture from their bodies external and internal. This plan acts precisely like a moderate climate which permits the bees to fly once a week or ten days during the winter.—G. W. Demarce, Christianburg, Ont.

Yes, if you are careful not to let the temperature get below 40° -R. L. Taylor, Lapeer, Mich.

Let them remain undisturbed as long as they are doing well. I should introduce a pipe to draw of the moist air.—L. C. Root, Stamford, Conn.

Yes .- D. Chalmers, Poole, Ont.

Yes.-Dr. C. C. Miller, Maringo, 111s.

Yes. As long as they are quict.—E. L. Pratt, Marlboro, Mass.

While they appear all right I would leave them alone.—A. D. Allen. Tamworth, Ont.

Yes, certainly.-S. T. Pettit, Belmont, Ont.

Yes, you can risk them if the temperature is kept up to about 45° and the entrances left wide open and all dead bees kept off the bottom board.—Dr. Duncan, Embro, Ont.

So far as moisture is concerned you need have no fears, as dampness of itself has never yet caused any injury; I mean in the way mentioned in the query.—J. E. Pond, North Attleboro.

Yes. My cellar is just that kind and I have wintered between 100 and 200 colonies in it for the last 10 years with success, but don't let it go below 42° —C. W. Post, Murray, Ont.

Certainly, if you want to, but I would not. -A. B. Mason, Auburndale, Ohio.

It is probable that the walls of your cellar are cooler than the atmosphere in it, and the moisture is really taken away from the air by condensing and runningdown the walls; we should leave them alone.—ED.

No. 50.—Should bees commence rearing brood before being taken out of winter quarter ?

I very much prefer a colony that remains quiet without rearing brood, if it is not till the 1st of May. -R. H. Shipman.

Yes. If the season is warm after going out.-D. P. Niven. Yes.-Ira Orvis.

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With me bees always rear a little brood in Feb, and then no more till set out, unless the time of setting out is as late as April 15th to 20th. In this locality bees should begin breeding as early as the 1st of April at the latest. Colonies wintered out of doors generally begin about March 15th, and often cast swarms as early as May 10th, when fruit bloom is usually at the best. Cellar wintered colonies should therefore be set out as early as 1st of April or if not, they should at least begin breeding by this time. But it is often wise not to set out bees here before April 20th, unless they are at once packed in chaff. It is astonishing what loss of vitality and waste of stores is occasioned by the cold nights and windy days of Spring to unprotected colonies. It is a common cause of feeble colonies and spring dwindling. I have estimated the difference between packed and unpacked colonies in Spring to be at least 10 pounds of honey; but the waste of stores is nothing in comparison to the relative loss of vitality of the bees. A colony compelled by rapid respirations to keep up a temperature necessary to protect a little brood every night (and every night is cool in Spring) are in no condition to forage during the day; and as they are disposed to go after fresh pollen they easily succumb where the bees from protected colonies are able to breast a strong wind and come safely home with their burden of stores. I have seen this so often that I know it to be a fact beyond dispute.-Dr. G. L. Tinker.

Yes. Mine have from 2 to 7 Langstroth frames of brood every Spring.—Frank A. Eaton.

1 think so, if not excessive.-G. W. Demaree.

No. I think they are better not to do so. R. L. Taylor.

If they have sufficient bees to protect it, I would prefer them to have some hatching brood when taken from winter quarters.— L. C. Root.

Not necessarily .- D. Chalmers.

They probably will, but I should not be anxious for it -Dr. O. C. Miller.

I prefer not.-E. L. Pratt.

Yes. They should commence rearing brood in February.—A. D. Allen.

No.-S. T. Pettit.

Strong swarms should commence in March if kept in a warm cellar and sometimes if the weather is mild they will commence rearing brood outside if well protected.—Dr. Duncan.

It depends upon when they are taken out and the strength of the colony, whether they will or not; no harm is done if they do. If they do not, they can easily be built up.-J. E. Pond.

No, not in my locality.-C. W. Post.

Well there ! Some will say yes, and some no; I want them to begin in winter quarters. —A. B. Mason.

We do not know. To hazard a guess; if through unfortunate surroundings the bees get restless and worn out, instinct tells them to go about providing for the existance of the colony and they raise brood. If they are kept quiet themselves they remain vigorous and ready for Spring.—ED.

No. 57.—What time should bees be taken out of winter quarters ?

Not until there is natural pollen.—R. H. Shipman.

When the red maple is in bloom and it is warm enough to gather it.—D. P. Niven.

It depends on circumstances and management.—Ira Orvis.

In answering this question will say, it depends upon when the bees should commence breeding, and if they are to commence early, whether they are to be protected or not. Breeding should commence 60 days before white clover bloom, as breeding does not begin in the cellar until April 15th to 20th, and as white clover blooms about June 1st, in this locality. It will be seen that the colonies set out late, will be at least two weeks behind colonies set out April 1st and protected. And the usual difference in the product of the colonies is about what a good colony would store in two weeks of time. Verily, " it is the early bird that takes the worm "-Dr. G. L. Tinker.

There can be no exact date given as it depends upon locality and season, wait until you are sure the weather is settled, then wait a few days, or as Dr. Miller said at Columbus, wait about two weeks after the right time.—Frank A. Eaton.

The Apiarist must be his own judge of that, I would say as soon as they can gather the first pollen.-G. W. Demarce. When willows begin to bloom or a little sooner.--R. L. Taylor.

If they are in proper condition I would not set them out until about the time soft maple comes into bloom.—L. C. Root.

In the latter part of April when warm enough for bees to Ay, be sure that the breeze is from the West or South.—D. Chalmers.

As soon as weather appears settled and warm, after soft maples are in bloom.—Dr. C. C. Miller.

Not till they can gather pollen, about April 10th in Michigan and Ontario.—E. L. Pratt.

The first clear calm warm day after soft maple or willow begins blooming.—A. D. Allen.

When the soft maples bloom in this locality. I fear that rather too much is being urged in favor of keeping bees late in cellar —S. T. Pettit.

Generally about the middle of April, if the bees are quiet and appear healthy; leave them in until there is blossoms on soft maple, if they are uneasy and signs of diaerhoea, put them out where the snow is gone on the first warm day in April.—Dr. Duncan.

It depends upon the scason and the locality, but not before settled spring weather makes its appearance.—J. E. Pond.

When warm weather has come to stay, a good rule is to wait till you see bumble bees flying.—C. W. Post.

If I had chaff hives I would take them out as soon as warm days were like to come frequently but not having chaff hives, I leave them in as long as they will remain quiet.— A. B. Mason.

If bees are doing well in cellar leave them there until settled warm weather comes on, about soft maple bloom we should say.—ED.

Read at the South Brant Farmers' Institute Meeting.

Shortage of Winter Stores for Bees.

The past two honey seasons have made the above an important though perhaps an unpleasant subject.

No matter how good the honey season has been, many Bee-Keepers take away the stores with which the industrious bee provides her-

self, and to such an extent that in order to winter successfully artificial stores have to be provided.

The farmer who I maintain should gather the nectar from his fields and who should provide his own bees to act as agents to fertilize his fruit bloom and his clover blossoms, will be found particularly liable to neglect his bees and the stores required for wintering, even taking from them not only their surplus but their necessary stores.

You would smile at the absurdity of keeping an account of your fields and on finding that the expenses exceed the receipts any year you at once refuse to cultivate them the next. Or if on finding that the cost of feed and other expenses incurred in maintaining a cow for some reason at any time exceeded the income derived from her product, you would refuse to feed her or even dispose of her; your neighbors would say, some one should be authorized to administer your estate .---And yet year after year colonies are allowed to perish through want of stores, and because the poor little animals are unable to make themselves heard like the starving barn yard stock.

The first question will be: What shall we feed ? In reply, let me say, endeavor not to feed at all, that is endeavor so to manage your bees that you will have in combs sufficient natural stores to winter them and carry them through until they can obtain sufficient for their own requirements.

I now save cembs of honey taken in the upper story, of these I can give to colonies. which are short in the brood chamber in September, and if not required I can extract them. Some advocate feeding sugar syrup. I object to this strongly. It gives much extra labor to the Bes-Keeper. To take it up, store and ripen it exhausts the bee, as we all admit it becomes exhausted in storing honey from the fields. If you have 20 lbs. in the combs ripened and capped as it should be before extracting, and you extruct it and replace it with sugar syrup, it will generally take 25 lbs. of sugar to replace it. The waste by actual and repeated experimentation is so great that by feeding our bees sugar we are building up the sugar market and glutting perhaps the honey market.

If you must feed-your bees not having

gathered sufficient for winter-you must watch your brood chamber. There is often much brood in the combs, but as soon as the combs have room enough to contain the stores (this in our locality will generally be about September 15th,) then feed at once and as quickly as you can get the bees to take it up. The more quickly you feed the less will be your loss in weight. If the weather is fine a strong colony should take up 30 lbs. of syrup in two or three days. The syrup to feed is two parts granulated sugar and one part water brought just to a boil.

All feeding should be done early, and here again we are very likely to fail. No feeding should be done after October 1st, as it is dangerous and conducive to disease and death. For outside wintering a colony should have from 25 to 30 lbs. of stores; for proper indoor wintering fully 5 lbs. per colony less will suffice. Every year there are colonies which have come through the greater part of winter and then perish at the eleventh hour, and the Spring of 1889 will be no exception.

What shall be done? Liquid food should never be fed to a colony when it cannot fly out freely owing to confinement in doors or low temperature.

The indications of starving inside are that the bees come out from the entrance and appear to hunt for something, and gradually loose their strength till they perish eventually unless fed. Such colonies are just on the verge of starving and so far gone that solid food may not be of any immediate use. They should be sprinkled with sugar water, which will restore them, and after that solid food may be given By solid food I mean either sugar cake or sugar candy.

These are made of the best granulated sugar. The cake you can make yourself, and should be laid over the top bars of frames.— The candy is sold by supply dealers and its virtue consists in its being easily got at by the bees, as it is soft and crumbling yet never runs and becomes sticky.

If you suspect a colony of being almost out of stores, it is better to feed them. In handling bees in winter remember it is admitted by all that to disturb them is to injure them; they become excited and discase may set in; and in preparing for winter an ounce of prevention is better than a pound of cure.

> R. F. HOLTERMANN, Brantford, Canada.

January 17th, 1889

For The Canadian Honey Producer. PRIORITY OF LOCATION.

BY J. E. POND.

The question of priority of location is one of the most simple yet brought to the attention of bee-keepers, yet some are attempting to make quite a bug-bear of it. Considered in its simplest forms it amounts to just this and no more. Can any one who chooses keep bees upon his own land.

This is all there is to the question and discussion, no matter how long drawn out can make nothing more, nothing less of it.

The claim that it would be better to have honey gathering confined to a few specialists or not, does not enter into the problem at all for the simple reason that any man has the legal right to do any work, or enter into any business or speculation that any other man has.

Long ago in discussing this very question, I suggested the following idea, viz., let some of the advocates of priority suggest some plan of legislation that would confine the matter within such limits that some one man could control any given field ; but as yet no one has attempted to frame such a bill, and common sense tell us that it is an impossibility so to do. The only way I can see for it to be done, is for some one to bring up not only the right to occupy all the fields within bee flight, but also to hire or bribe everybody else not to enter into the business, an impracticability on its face. The doctrine of the survival of the fittest itseems to me is the best one to apply; no one willkeep bees for any length of time if they don't pay, and he who sticks will eventually command the field. Mike a law declaring bees nuisances, will kill the whole business. As a matter of fact there is some sontiment and a large amount of selfishness combined, all of which tends rather to the injury than to the benefit of the business, for by-andbye the land owners who don't keep bees, will get the idea that there is money for them somewhere, and will continually demand from bee-keepers who must forage on their flora a large sum in payment therefor else they will kick up a row, that will make the occupation far more unpleasant than it now is. My own idea is, that until some one can suggest a practical and practicable remedy, that discussion on the subject should cease, and matters be allowed to go on as they have done for "lo ! these many years."

If any differ, I have no fault to find, but there has been too much theoritical nonsense written on many subjects connected with bee keeping, in the past and less of it in the future will be a benefit to the public generally.

No. Attleboro, Jan. 19th, 1889.

A CELLAR FOR BEES.

A few thoughts may be useful to those who are contemplating constructing a bee cellar. Whether clay or sand location be preferable we need not discuss, for as a rule we cannot choose in the matter, but must accept what nature has placed at our convenience.

The cellar should be all under ground ; to effect this if necessary the earth coming out of the cellar may be used to bank thickly up against the walls. As stone is less porous than brick I prefer the former, but still a thick brick wall well laid up and filled with morter will answer very well. Possibly some one will ask why should the wall be so tightly constructed? I answer, simply, so that the ventilation and the temperature will be under control in all sorts of weather.

My cellar has a shop built over it, the floor of which forms the covering of the cellar. This floor consists of two floors three inches The lower one being that distance apart. below top of joist on which the floor proper is placed and this space is filled with mortar of lime and sand, just the same as used for plastering ; this arrangement helps to maintain an even temperature.

I have a stove in the shop and in cold weather keep a fire. A six inch stove pipe goes through the floor to within about fifteen inches of bottom of cellar, and in the shop it touches the end of the stove and goes up near the stove pipe. Sometimes when the temperature inside and out are about the. same, to assist ventilation I make a fire. Sub-earth ventilating pipes should be laid deep, say from four to six feet if circumstances will permit. If the pipe be made of tile much of the air will pass through the ground right near the cellar, hence the deeper the better. There should be a good fall to the pipe to assist the flow of air. As iron | Havo buckwheat and white clover but the

can be made both air tight and water tight, and is an excellent conductor of heat, I believe it to be the very best available material for sub-earth ventilators-true it would be expensive

Next in order, if the land is tenacious clay, I would choose tile; these when saturated with water are pretty good conductors of Glazad sewerage pipes, 1 should judge heat. to be poor conductors of heat and hence undesirable for that purpose. Stone no doubt would do well as it conducts heat rapidly.

Wood is very objectionable because it is a poor conductor of heat and would very soon decay, and I don't believe any one would care to have air in any living room come through decomposing vegetable matter. A tile drain laid a few rods under the sub-earth pipe at the end and then leading off into the ground will keep the end from freezing up.

A cellar under a room where a fire must be kept going every day is objectionable, because towards Spring it will be difficult to keep the temperature from rising which would cause brood rearing

Before closing I wish to say that, in my opinion, and I think that opinion based upon close observation, that bees which are perfectly wintered, and this means among other things without caring for brood, are very nearly, if not fully as enduring and useful as bees bred in the cellar ; and further, I believe that bees which have gone through the trying ordeal of nursing brood while in continement are just about "played out," " used up."

Now if I am correct it follows that to breed in the cellar simply means to trade one generation of bees for another, with a sad loss of stores and waste of energy and vitality of queens-losses that will militate in no small degree against the season's success.

S. T. PETTIT.

Belmont, Ont., Can., Jan'y 19, 1889.

EEES IN NORTH WEST.

DEAR SHIS :-

Will give you an outline of the success of our enterprize. Have now six very strong colonies with sufficient stores for winter. Still the prairie is covered with flowers, no frost yet to injure vegetation in the least.

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A DESCRIPTION OF THE PARTY OF T

bees find much better pasturage and scarcely work in the buckwheat and never on the white clover, English Mustard, Mignonette and one species of the poppy called generally dresslady. This is a rough stem and flower pod, and serated leaf, I saw as many as eight bees in one flower and not one flower that did not have some in, from one to three generally. I have found a great difficulty in keeping pace with the bees as they are more productive. Give larger swarms and send them out quicker in succession than in any place I have been. I will get two swarms or colonies from the two first swarms, if the weather proves favorable. The hives of the first swarms is full and breeding very rapidly. Expect swarms off next week. It is almost impossible to stop the swarming. I have gone over the old colonies two or three times each week and was very careful to extract all Queen cells, and still I had four swarms come off that I was endeavoring to prevent. In putting them back in another hive, invariable caught one and two Queens. There is also a superabundance of drones in this country. I received a colony of bees for a Mr. I. of Fort Saskatchewan, shipped from Winnipeg fourteen days in transit, but in better condition than those received from you.

Will give you mode of packing, hive same as yours, wire cloth tight on top of hive, two cover on top of cleats, water put in comb and cleats $\frac{1}{2}$ in. thick on each end, over wire cloth inserted in hive, only about a teacupful of dead bees, shipped 15th of July. The above may be of interest to shippers. I find late shipping the best. Season favorable and and immediate attention on arrival will prove successful.

Yours, J. KNOWLES.

CORRESPONDENCE.

Editor Canadian Honey Producer. DEAR SIR :--

Bees are wintering well so far, I have mine all in the bee-house.

We are having no winter at all it seems, no snow on the ground, business in consequence is almost at a stand still. Of sleighing we have had a little, from the 20th to the 23rd of Dec. Snow fell on 9 days to the depth of 9 inches, but there never was more than 3 in on the ground at any one time. The coldest

time during the month was during the night of the 21st, the minimum ther. registering 13° below zero, the warmest day was on the 26th, the maximum ther. registering 55° and the minimum 44° F. The absence of snow has had no bad effects on the clover plants, as far as I can see, and I hope for a favorable spring.

Yours truly, H. A. SCHULTZ.

Clontarf, Ont.

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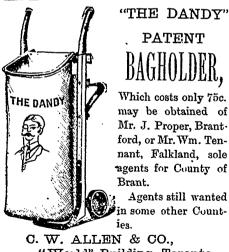
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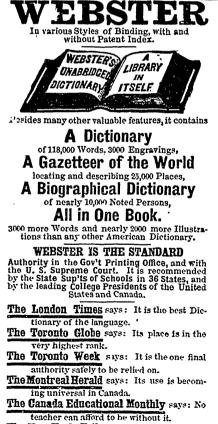
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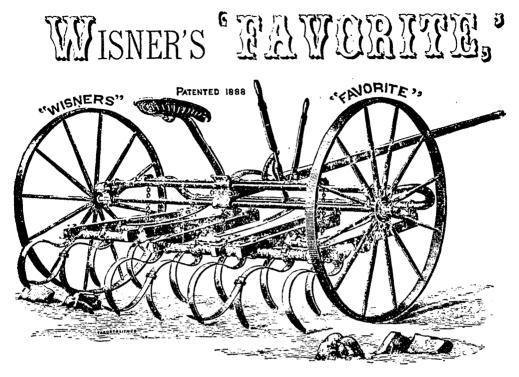
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