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# THE CANADIAN BEE JOURNAL

WEEKLY.

"THE GREATEST POSSIBLE GOOD TO THE GREATEST POSSIBLE NUMBER."

VOL. I.

BEETON ONTARIO, FEBRUARY 10, 1886

No. 46

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Send postal card for sample of leaflet, "Honey, some reasons why it should be eaten."

The CANADIAN BEE JOURNAL will be continued to each address until otherwise ordered, and all arrears paid.

JOURNALS will occasionally be lost in transmission through the mails. We are always ready to re-mail such when notified of the loss.

Subscriptions are always acknowledged on the wrapper of first number after receipt.

American Currency, stamps, Post Office orders, and New York and Chicago (par) drafts accepted at par in payment of subscription and advertising accounts.

ERRORS.—We make them: so does every one, and we will cheerfully correct them if you write us. Try to write as good naturedly, but if you cannot, then write to us, any way. Do not complain to any one else or let it pass. We want an early opportunity to make right any injustice we may do.

We can supply Binders for the JOURNAL at 55 cents each post-paid, with name printed on the back in Gold letters.

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### THE CANADIAN BEE JOURNAL

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" " "American Apiculturist," monthly.....	1.75
" " "Bee-Keepers' Magazine," monthly.....	1.75
" " "Bee-Keeper's Guide," monthly.....	1.75
" " "Texas Bee Journal".....	1.50

## TO CONTRIBUTORS

Communications on any subject of interest to the Bee-keeping fraternity are always welcome, and are solicited.

Beginners will find our Query Department of much value. All questions will be answered by thoroughly practical men. Questions solicited.

When sending in anything intended for the JOURNAL do not mix it up with a business communication. Use different sheets of paper. Both may, however be enclosed in the same envelope.

Reports from subscribers are always welcome. They assist greatly in making the JOURNAL interesting. If any particular system of management has contributed to your success, and you are willing that your neighbors should know it, tell them through the medium of the JOURNAL.

# "FOUL BROOD"

## Its Management and Cure.

BY D. A. JONES. NOW READY.

This little pamphlet is presented to the Bee-Keeping public with the hope that it may be the means of saving infected colonies from death by fire and otherwise. No expense is required to successfully treat the disease, other than the little time required for fasting.

Price, 10 Cents. By Mail, 11 cents.

D. A. JONES & CO., PUBLISHERS, Beeton, Ont.

# FEEDERS

Those who require to do feeding will find it to their advantage to have some of our

## CANADIAN BEE FEEDERS

You can feed 15 to 20 pounds of syrup in one night, and there is no danger of robbing. The price is low, and the sale is very active. Our factory is running on them at the present time.

Made up, each.....	\$ 60
" " per 100.....	45 00
In flat, each.....	40
" " per 100.....	30 00

We can guarantee that they will give satisfaction.  
D. A. JONES, Beeton, Ont.

## 1886. ITALIAN QUEENS. 1886.

Six Wax-encased Queens for \$5. Send for circulars. No circulars sent unless called for.

J. T. WILSON, Nicholasville, Ky.

## FARMERS BUY THE CELEBRATED LARDINE MACHINE OIL,

—AS IT—EXCELS ALL OTHERS.

Manufactured solely by McCOLL BROS., Toronto

# DADANTS FOUNDATION

is attested by hundreds of the most practical and disinterested bee-keepers to be the cleanest, brightest, quickest accepted by bees, least apt to sag, most regular in color evenness and neatness, of any that is made. It is kept for sale by Messrs

- T. G. NEWMAN & SON, Chicago, Ill.,
- C. F. MUTH, Cincinnati, O.,
- JAMES HEDDON, Dowagiac, Mich.,
- F. L. DOUGHERTY, Indianapolis, Ind.,
- CHAS. H. GREEN, Berlin, Wis.,
- CHAS. HERTEL, Jr., Freeburg, Ill.,
- E. L. ARMSTRONG, Jerseyville, Ill.,
- ARTHUR TODD, Germantown, Philadelpy.
- E. KRETCHMER, Coburg, Iowa,
- E. F. SMITH, Smyrna, N. Y.,
- C. F. DALE, Mortonsville, Ky.,
- EZRA BAER, Dixon, Lee Co., Ill.,
- CLARK, JOHNSON & SON, Covington, Ky.
- J. B. MASON & SONS, Mechanic Falls, Me.
- J. A. HUMA-ON, Vienna, O.
- C. A. GRAVES, Birmingham, O.

and numbers of other dealers. Write for SAMPLES FREE and Price List of Supplies, accompanied with

### 150 COMPLIMENTARY

and UNSOLICITED TESTIMONIALS from as many bee-keepers in 1883. We guarantee every inch of our Foundation equal to sample in every respect.

CHAS. DADANT & SON, HAMILTON Hancock Co., Ill.

# MUTH'S HONEY EXTRACTOR

Is second to none in the market. Square Gears, Honey Jars, Tin Buckets, Langstroth Bee Hives, one-piece Sections, etc., etc. Circulars mailed on application. Send ten cents for 'Practical Hints to Bee-Keepers.' Address

CHAS. F. MUTH & SON, 976 and 978 Central Avenue, Cincinnati, O.

EVERY

## Farmer, Fancier, and Poultry-Keeper

SHOULD SUBSCRIBE FOR

# "The Poultry Monthly,"

The Best Magazine of its Kind.

Subscription, \$1.25 per annum. Sample copies, 12c

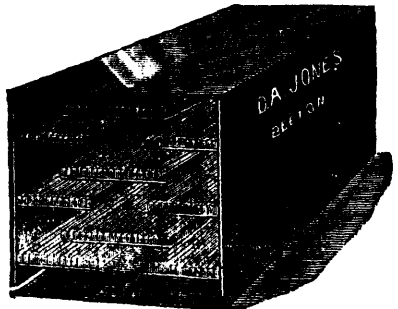
SPECIAL OFFER.—We will send the "Monthly" for a full year for \$1 to all who mention the "Canadian Bee Journal." Send for price lists of Poultry Supplies.

BONNICK & HARRICKS,

P. O. Box 215,

Toronto, Ont

# WINTER FEEDERS.



These are for feeding in winter, or at any other time when the weather is too cold to admit of feeding liquids

### DIRECTIONS FOR MAKING THE CANDY.

Take pure pulverized, or granulated sugar—the former preferred—and stir it into honey, nicely warmed up, until the honey will not contain further additions. Allow it to stand in the dish until both are thoroughly mixed through each other, then place in feeders and set them on top of the frames, packing all around nicely to allow no heat to escape

Each, made up .....	30
Per 10, .....	75
Each, in flat .....	20
Per 10 .....	1 75

We have a full stock on hand ready to go by return express or freight. D. A. JONES, Beeton

# Five Per Cent. Discount.

Off all goods which may be ordered now for use next season we will give the above discount. This is to induce early orders and in case you need anything for this season, you could save freight charges and the discount by ordering ALL TOGETHER. Will be given till further notice.

D. A. JONES, Beeton, Ont.

# THE CANADIAN BEE JOURNAL.

PUBLISHED BY

JONES, MACPHERSON & CO.,

WEEKLY - - \$1.00 PER YEAR

D. A. JONES, - - - - - EDITOR.

F. H. MACPHERSON. AS'T ED'R, & BUS. M'GR.

## SUCCESS IN BEE CULTURE.

WE said we would have something more to say about friend Heddon's book. After reading it all through once we went over several important chapters the second time, and those on his new hive and management the third time, in order to fully understand it. To say that it is a valuable work is in our opinion scarcely doing it justice. Perhaps some may fail to grasp the *keen edge* of the many valuable points which to our mind are so vividly explained. He has not failed to dip down deep into the depths of scientific apiculture and has apparently reached the foundation under-lying the system of management practised and required in connection with his method of procedure. Though the volume is not large yet it is full of good things. We should like to see the work in the hands of all of our best bee-keepers, as we think it will open a new field to their visions. We are so convinced of its value as a practical work that we have ordered a large lot of them with which to supply our Canadian customers. We shall speak of the hive and system later on. After the above some may imagine that we endorse *all* friend Heddon's views; such, however, is not the case, as we differ on many points (which we may have occasion to speak of hereafter,) and we feel that we will *agree* to disagree, until either one of us is convinced that we are in the wrong.

FOR THE CANADIAN BEE JOURNAL.

## SCIENCE AND APICULTURE.

DEAR MR. EDITOR:—The answers to questions in the last C. B. J.—which by the way is rapidly becoming a vigorous adjunct in the bee-keeping world—makes it evident that some points of physiology and physics are not well understood, even by some of our most able and wide-awake bee-keepers.

The view so well presented by Mr. Cushman, p. 93, though once held by Liebig and eminent scientists the world over, and which now often creeps into the writings of scientists, is not the view of the leading physiologists of to-day. Carbon is not fuel for the body to be burned as wood is burned in a stove. It is to aid in building up the body and in the work of building—assimilation as scientists say—that is changing the carbonaceous and other food into tissue heat results. Let me give a proof of this We cut a piece of fresh muscle from an animal just dead. Place this in a vacuum or in an air tight jar containing nitrogen, or hydrogen, or even carbon dioxide, and it will continue for a time to give off carbon dioxide or carbonic acid. Of course fire in such a place is wholly impossible. If by connecting this muscle with a battery and galvanizing the muscle, it can be made to contract with energy. Now both carbon dioxide and heat are evolved quite rapidly. Thus we see the vital process is so far from mere oxydation or combustion that it is not that at all. Like many other of Liebig's beautiful theories this lacks the important element of truth. We may say that nutrition, or the changing of food into tissue and the breaking down of such in work results in heat, and in this complex process oxydation results; but that it is direct and only to supply heat. The above experiment and many others which I might give, had I time, is not true, and will not be found in the teachings of our present authorities in physiology.

Again there is a misconception as to the amount of air needed for life. Marchand found that a frog would live an hour in pure hydrogen, and during the time would give off more carbon dioxide than in air. He also found that frogs would recover after a half hour in a nearly perfect vacuum. Even people in cases of profound syncope breath almost no air. Thus the case recently reported from Ontario, where a girl after burial had turned in her coffin and had torn her hair. Such cases are often reported, and are authentic. Here even human beings breath so little that it is entirely imperceptible, and the air in a coffin suffices, perhaps for days and maybe weeks. This is like hibernation, where animals live with almost no air; though it is likely some is taken. Such statements as these are indeed strange, and some may feel inclined to say that they show culpable ignorance, and are an insult to the bee-keepers of the country. Let me say to such that in these days of the wonderful revelations of science it becomes the modest man to pause before he denies or condemns, else he will prove Pope's remark that a "little learning is a dangerous thing." I have known a score of insects, yes, a hundred, to live for

weeks in a small tightly corked bottle. They needed air and used it. They needed very little, and surely got it. That bees may live for a long period on very little air in just the right conditions is certainly true. It is not true that these conditions are easily secured at will, hence I do not and I guess no other bee-keeper recommends no ventilation. I always leave the entrance to my hives wide open, except for experiment, and would advise the same for others. The fact, however, remains that bees may live for weeks with no air more than is in or comes through the walls of their hive.

Another error which has been taught and is now often believed and urged, is that gases arrange themselves like liquids in strata, the heaviest at the bottom. This is wholly erroneous. Our present physicists know and teach the law of the diffusion of gases. Were it otherwise all wells would be poisonous, as the heavy carbon dioxide would settle to the bottom. As it is only such are poisons as generate the foul gas more rapidly than the law of diffusion can disperse it.

If we fill a bottle with hydrogen and another with carbon dioxide, and connect them with a long small tube, set in air tight corks, the hydrogen bottle being directly above the carbonic acid bottle, soon this law of diffusion of gases will thoroughly mix the two gases in both bottles, even though the hydrogen is 22 times lighter than the carbonic acid. The hydrogen goes down and the heavy carbon dioxide up. What a wise and beneficent law this is, else the oxygen, the great supporter of combustion, would separate off in its stratum, and we would have a conflagration that would render the Chicago fire as nothing. Again it causes the pure air from outside to rush through the thousand little often microscopic openings into our rooms. And thus we live. The mixing of different gases is the more rapid with greater variation in temperature. How quickly we feel the fresh air in winter when a distant window is opened, though only slightly.

Vapor in the air acts as a gas, that is it mixes thoroughly, and moves as the air moves. Hence as long as a bee-hive is warm enough to hold all the moisture in an invisible state, it will pass out of the pores of the hive and at the entrance the same as the air passes, ever accompanying it. Hence we see how the moisture passes from a hive. Until the air is saturated or the moisture raised to the dew point the moisture passes out as freely as the air. This dew point is raised with the temperature. Thus the air will hold very much moisture in an invisible form so long as the temperature is kept well up. It is proba-

ble that moisture does no harm, however much, until the point of saturation is reached, when drops of water or visible vapor will appear, though I am not sure of this.

One more point and I close. Air passes freely through wood, and even through stone or brick walls. Hence our houses or bee-hives are partially ventilated even though closed tight. I have seen the light of a candle extinguished by a person blowing through several inches of hard solid wood.

Thus, to me, it is no surprise that bees in the quietest condition of winter, may live and even thrive when the hive is wholly closed. The ventilation through the hive is doubtless more than sufficient for their needs. Yet we seldom get just this condition for any considerable length of time, so I would advise for indoor as well as outdoor wintering, that the hive be well open at the entrance at the bottom of the hive.

A. J. Cook.

Lansing, Mich.

We are very much pleased with the above able and interesting article. It has enlightened us on this matter, and we always feel, like we presume many others do, when our eyes light on anything in any of the journals from Prof. Cook, that we are about to enjoy a treat, and to us this is an extra good one. It is gratifying to have an able authority to whom we can all look with confidence, knowing that whatever leaves his hand should not be questioned by us novices in science. The above facts will account in a great measure for many of the apparently unsolved difficulties and differences in opinion, and especially in connection with the amount of air that bees require.

FOR THE CANADIAN BEE JOURNAL.

#### THE INDIAN AND COLONIAL EXHIBIT.

**A**FTER a good deal of corresponding one way and another, the Ontario agents have very kindly sent me a letter, from which I make the following extract.

"As the space is allotted to the Association it will be necessary for your body to act unitedly to prevent confusion. We would suggest that you notify intending exhibitors to send papers etc. through you, and you can notify us as to what you require in the way of labels etc.

The understanding is that your association shall occupy the space asked for with goods to be sent by the end of February, and that you will have the privilege of substituting the crop

of '86 during the exhibition. We will send such labels and invoice forms as may be necessary, to any addresses you send us."

I think the above makes everything clear and satisfactory. I hope every intending exhibitor will read the above carefully and govern themselves according.

Doubtless you will all agree with me that we will owe Mr. D. A. Jones a vote of thanks if he can manage to occupy the space to the satisfaction of the Government, and keep it for us until we can occupy it with our honey of 1886. I see no difficulty in making the exhibit all that can be desired. Of course it will require determined, united and concentrated action.

I am in receipt of lots of letters of precisely the right ring to assure me that our efforts will culminate in the grand results we all so much desire.

S. T. PETTIT.

President, O.B.K.A.

Belmont, Ont., February 3rd, 1886.

The extract which friend Pettitt gives above would seem to be in accord with our remarks last week, that all the exhibitors must deal with the commissioners appointed by the Association to represent Ontario. Friend P. seems, however, to have caught the idea that, unaided, we were to fill the space till the crop of 1886 was ready to go forward. It would be selfish of us to wish to monopolize the space now that it is the property of the Association and prevent other supply dealers from taking part. As will be seen by our comment to R. F. Holterman's article in this issue, the Dominion Government will not undertake to pay for mounting the honey plants etc, which we have, and offered to show; if the Ontario Government does not help us either, it would be too much to expect that we could undertake the expense *privately*, and we feel sure no one would ask us to do it.

FOR THE CANADIAN BEE JOURNAL.

#### THE INDIAN AND COLONIAL EXHIBIT.

**K**INDLY permit me to ask a few questions regarding the intended exhibit of honey by Canadian bee-keepers at the Colonial and Indian Exhibition. The contents of the report of O.B.K.A. meeting at Toronto, 12th inst. are carefully noted.

Permit me to ask who is supposed to pay the expenses of the five commissioners? The answer will perhaps be, we will try and get the

Dominion or Ontario Government, or both, but failing that who shall pay them? The Ontario Bee-Keepers' Association cannot do much. I endeavored to help the association by asking bee-keepers, etc., to send in \$1.00 to help this work in January No. *Canadian Live Stock Journal*. Let every one having a department in our rural papers and bee-journals do the same and it must keep up too at its best. This will not pay the expenses of more than one man. Now then, who will pay the balance. The five appointed, no one in Canada can find fault with, we can all as bee-keepers entrust them with any quantity of honey, and know a correct return will be made for every cent. They are men whom Canadian bee-keepers can and will be proud of as their representatives, and the business capability and other requisites are not lacking, but the problem is how are the expenses to be met? It seems probable that one or more Canadians will attend their own exhibit and would pay their own expenses. Can we ask them to look after our own interests on an equal footing with their own? Certainly not, but their exhibit and their work will benefit us, and those not sending one pound of honey to England now will be indebted to those that will. Let us remember this the fall of 1887. Those at no expense at the Colonial will share almost equally in advantages with those going to great expense and devoting much time in making the display. Now this applies to every bee-keeper and intended bee-keeper and let none of us ask these men to do all the work; let a fund be started to defray expenses at the Colonial at once with Mr. S. T. Pettitt as manager and let none of us be niggardly or shirk the duty. This fund should be expended with judgment and justice, and we can all entrust the president of the O.B.K.A. to do so, and let all or part of the expenses of each commissioner be paid. I must say I think three commissioners, if we are to assist all, would have had to suffice us, but let us be equal to any necessary task; send notice of what we will give and by showing we mean business, our Government will catch the impression. It appears to me they should help us as other associations such as fruit growers. If our bees were wiped out of the country fruit growers would have little or nothing to exhibit. Why should we not be fostered a little also? I know one bee-keeper who will give \$5.00 and if all will give in proportion to their means we will have enough to send a dozen commissioners. We should strain every nerve and do our utmost to make this affair a success. Do not let us sleep over it, it is not only the extensive apiarist who is interested, but, as stated before, all, and let

every one help financially be it ever so little but what they *can*, not only financially but with their counsel and in addition let them stir every bee-keeper within their reach into action and inspiration. Bee-keepers of Canada this applies *directly* to every one of you individually. Which of you would stand by and see a few men grapple with a burden too great for them and not assist were it theirs, if we do not help we will be *worse* for we will allow a few men to grapple with a burden not theirs alone, but ours, and we stand by doing nothing. Let us sustain our reputation for large heartedness, fairness and honesty. Stretch forth willing hands with willing hearts and the task is light and easily borne. If we miss our opportunity we will have to pay for it in hard *cash*.

R. F. HOLTERMAN.

Brantford, Jan. 30th, 1886.

Friend Holterman's ideas are good ones and *should* receive due consideration. We have it, however, on good authority, that our prospects of receiving a grant from the Ontario Government are bright, and in that case the O. B. K. A., will be able to make such a creditable display as will bring the resources of the country before the favorable notice of the world, and at a nominal cost; we feel that every Commissioner will be quite willing to lose his time and spend a goodly portion of his own money to this end and it is but right, if the exhibit does not receive government assistance, that those bee-keepers interested—and *every one* of us is—should assist in defraying the expenses. The Dominion government cannot do more than pay the freight on the goods sent over as will be seen by the following extract from a letter written us by the Canadian agents:

"The Department cannot defray any part of the costs of collecting or mounting either of honey or honey plants. The utmost that can be undertaken by the Department is to pay the freight to London and the cost of installation."

#### FORMIC ACID AS A PRESERVATIVE OF HONEY.

**V**ERY important and highly interesting discoveries have been lately made on this subject, which enable us easily to account for hitherto unexplained phenomena in bee-life. It is well known that the honey of our honey-bees when mixed with tincture of litmus acquires an unmistakably red tint, a fact no doubt owing to the subtilized formic acid it contains; the presence of which acid likewise imparts to the raw

honey its power of 'keeping' for a considerable length of time. Honey which has been clarified by means of water and exposure to heat—the so-called 'sirup of honey'—spoil more easily than the ordinary kind, because the formic acid in it has in a great measure been expelled. The honey of very fierce tribes of bees has a peculiarly acrid taste and pungent smell; this is due to the excess of formic acid contained in such honey.

Till lately complete ignorance prevailed as to the manner in which this so essential component of honey, formic acid, found its way into the substance secreted from the stomach or 'honey bag' of the busy workers; recent discoveries have, however, enlightened us on this point. These show us that the sting serves the bee not only as a means of defence, and sometimes of offence, but possesses likewise the almost more important power of infusing into the stored-up honey an antiseptic substance, not subject to fermentation. It has been lately observed that bees in hives, even when left undisturbed, from time to time rub off against the honey-comb, from the point of their sting, a tiny drop of 'bee poison'; in other words, formic acid. This excellent preservative is thus little by little introduced into the honey. The more irritable and vicious the bees are, the greater the quantity of formic acid conveyed into the honey by them; a sufficient admixture of which is essential to the production of good honey.

The praise, therefore, that has been so often lavished by adepts in such things on that indolent member of the bee-tribe, the Ligurian bee, which hardly ever stings, is in point of fact misplaced. The observation just made above will explain, too, why the stingless honey bee of South American collects but little honey; for it is notorious that when trees have been felled which have been inhabited by the stingless 'Melipone,' but little honey has been found in them. And indeed, what inducement have the bees to store up honey that will not keep, since it contains no formic acid? Of the eighteen different kinds of North Brazillian honey-bees known to the naturalist, only three possess a sting.

A very striking phenomenon in the habits of a certain species of ant is now amply accounted for. There exist, as is well known, various tribes of grain-collecting ants. The seeds of grasses and other plants remain stored up by them, often for years in their little granaries, without germinating. In India there is a very small red ant which drags into its cells grains of wheat and oats. But the creatures are so tiny, that, with their utmost efforts, it takes from

eight to ten of them to carry off even one single grain. They move along in two separate rows, over smooth or rough ground, as the case may be and even up and down stairs, in steady regular progression. They have often to traverse more than a thousand metres to carry their booty into the common storehouse. The celebrated naturalist Moggridge repeatedly observed that when the ants were prevented from reaching their granaries, the seeds in the granaries began to sprout. The same thing happened in storehouses that had been abandoned by them. We must infer, then, that ants possess the means of suspending or arresting the action of germination without destroying or impairing the actual vitality of the grain, or without impairing the vital principle that lies latent in the grain.

The famous English scientist, Sir John Lubbock, in his work entitled *Ants, Bees, and Wasps*, relates these and similar facts, and adds that it was not yet known how the ants prevented their provision of grain from sprouting. But now it has been proved that this is due simply to the preservative power of the formic acid, the effect of which is so powerful that it can either arrest the process of germination, or destroy it altogether in the seed.

We will further mention that there exists among us a kind of ant that lives on seeds and stores them up. This is our *Lasius niger*, which, according to the statement made by Wittmack at the meeting of amateur naturalists at Berlin, carries seeds of violets, and likewise of ground ivy (*Veronica hederifolia*) into its cells. In his description of an Indian ant (*Pheidole providens*) Sykes relates that the above-mentioned kind collects large stores of grass-seeds. He notices likewise that after a monsoon storm, the ants bring their stores of grain out of their granaries, in order to dry them. It seems, therefore, that excessive moisture destroys the preservative power of the formic acid; hence this drying process.

We see, then, that the winter provision of honey for the bees, and the store of grain which serves as food for the ants, are preserved by means of one and the same fluid—namely, formic acid. The use of formic acid as a means of preserving fruit, and the like, was first suggested by Feierabend in the year 1877.—*Chambers*.

F. W. FULFORD.—I am wintering over 100 colonies this winter in four different ways and in four different kinds of hives, two of the ways I have in my cellar, and two ways are out of doors, so in the spring I will explain my principles of wintering and their results.

Brockville Ont., Feb. 2nd, 1886.

Albany Evening Journal, Jan. 26.

### THE EASTERN N. Y. BEE-KEEPERS' ASSOCIATION.

THE fourteenth annual convention of the eastern New York bee-keepers' union opened this afternoon in the lecture room in Geological hall at 2 o'clock. For some time previous a small colony of zealous advocates of bee culture had been gathered together in a corner around a curious assortment of apparatus the merits of which they were busily engaged in discussing. The apparatus consisted of various complicated devices of hard wood and fine wire network and were the result of much hard study on the part of their inventors who desired to assist the bees as much as possible in their praiseworthy efforts to supply New York State with honey. One of these labor saving machines was a device invented to save the bees the trouble of making honey comb and consisted of a frame of thin wood enclosing some of the finest looking comb ever set before a bee to fill. This comb was an artificial product and was made from beeswax as follows: Two tanks and a number of large sheets of tin. One of the tanks contains hot beeswax and the other cold water. The sheets of tin are dipped alternately in these tanks until a thin coating of wax adheres to them. This coating is then pulled off and run between rollers which gives it a surface similar to the natural comb. The inventor of this article had a sample of the comb and one in which the frame was filled with honey. Besides this patent comb there were a number of improved hives and improvements to hives, all of which were surrounded by small knots of admirers.

#### BEE-KEEPERS TALKING OVER EXPERIENCES.

After the meeting was called to order Solomon Vrooman, president of the association, made a short speech reviewing the general work of the year and the interests involved in the bee trade. A few minutes were spent in the transaction of miscellaneous business, after which the meeting held a sort of informal session and the remainder of the afternoon was spent in relating the experiences of the past year by the various members.



## EVENING SESSION.

The attendance at the bee-keepers' convention was larger last evening than at the afternoon session. The business consisted of the discussion of two topics, "Uniting Nuclei and and Full Colonies" and "What percentage of increase is preferable in securing the greatest amount of honey?" The first topic was opened by Mr. Frank Boomhower, who gave an interesting account of his experience in this matter, of taking the bees that were to form the nucleus and after putting them in a hive, suspending in their midst a queen. "In a short time," said the speaker, "all the bees in the room were in the hive." Following Mr. Boomhower, Mr. A. E. Woodward and President Solomon Vrooman took up the topic and discussed it at considerable length. The second topic was opened by Mr. Thomas and discussed by Messrs. F. Boomhower, H. W. Garrett, Mr. Flansburgh, A. E. Woodward and C. A. Case.

## ADULTERATION OF HONEY.

Several new members were enrolled this morning. A very interesting paper on "The adulteration of honey and how to remedy the nominal condition of the home market," was read by Mr. John Aspinwall, who stated that two years previous the union discussed the adulteration of honey and the almost unanimous decision of the convention was that the adulteration of honey should be suppressed. The controversy has since gone abroad and excited discussion in various sections, the outcome has been the cessation of the adulteration by several prominent firms. He reviewed the ruinous custom of sending pure honey to wholesale houses to compete with adulterated honey, and be put by and sales delayed until the stock was sold at ruinous prices, and maintained that all trouble would be remedied if producers would work up a home trade. Instead of trusting their stock to an uncertain market he advised them to go about their neighborhood and endeavor to sell their honey. The result would be a fair profit and satisfied buyers. Wintering bees and other topics were also discussed.

## OFFICERS ELECTED.

The election of officers for 1886 occupied the first part of the afternoon ses-

sion. It resulted as follows:

President, Thomas Pierce; Vice-President, Frank Boomhower; Secretary, John Aspinwall; Assistant Secretary, Charles H. Smith; Treasurer, A. E. Woodward.

## THE CARE OF QUEENS.

The topic on "Queen Rearing" was opened with an essay by Mr. Frank Boomhower. In his essay Mr. Boomhower described at length the methods that he had used successfully for several years and pointed out several peculiarities that he had observed in those queens which are the best producers. Following him Solomon Vrooman, H. G. Garrett, Charles H. Smith, John Aspinwall and Mr. Adams discussed the subject and described the methods by which they had achieved success. The second topic of the afternoon, "Introducing Queens" was opened by Solomon Vrooman, who was followed by Mr. Boomhower who exhibited and explained a new kind of cage for the queens with which he had had remarkable success.

## SECOND EVENING.

"Marketing honey" was the topic that occupied last evening's session of the bee keepers' convention. An essay was to have been read by Mr. J. Martin, but owing to his absence the topic was opened by Mr. Adams, who said that in one year he retailed 5,000 pounds of honey in Rensselaer county. He believed in cultivating a home trade and hereafter intended to retail all his honey. He was also in favor of extracted honey. Messrs. Vrooman, Snyder and Woodward added their views on the subject, and continued the discussion until 9 o'clock, when the convention adjourned.

## PROFITS ON DIFFERENT KINDS OF HONEY

Six new members were received at the morning session, M. Youngham, A. Bates, H. J. Northrop, J. Van Deusen, John S. Ludden and John Kraus. Aaron Snyder read an essay on the merits of comb and extracted honey. The paper was brief, but gave a clear, concise statement of the relative amount of comb and extracted honey which a colony of bees will produce, the cost of producing and the prices obtained for the two kinds. He substantiated his remarks by figures showing what four colonies

or bees had done for him. The profits on the two colonies producing extracted honey amounted to \$24.30, and those from the comb honey produced \$28.85, leaving a balance of \$4.55 in favor of the comb honey. After Mr. Snyder's paper the members began an active discussion on the merits of the two kinds of honey. Mr. Aspinwall entered the field as a champion for the cause of extracted honey, and had a lively tilt with Mr. Snyder. Mr. Aspinwall said that he had sold a large amount of extracted honey in one-pound glass jars at 25 cents a jar. Mr. Snyder put the price at about eight cents a pound in the general market, and said he had some three tons of honey that he would sell to Mr. Aspinwall for eight cents, and he could bottle it and sell it for 25 cents. His offer was declined and he claimed a victory for the comb honey. Mr. Snyder was strongly opposed to carrying the honey to the New York market, and all the delegates agreed with him. His rule was to get the best of everything necessary for the production of pure honey, good hives, good bees, good sections and neat cases. Above all, everything should be scrupulously neat. If this rule be followed, he said, dealers will find no trouble in disposing of their product at good prices. Methods of extracting honey were then discussed by Messrs. Snyder, Pierce and Van Deusen.

#### OPPOSED TO ADULTERATIONS.

Mr. Vrooman said that it was the duty of every member of the association to expose any attempt to adulterate honey in any manner. Mr. Pierce followed and said that as an association the beekeepers should do everything in their power to improve the condition of the market by proving beyond a doubt the purity of extracted and comb honey. Mr. Adams was called upon to give his experience as one of the most successful honey producers in the state and said that he was very careful in the production of his honey and retailed it all near home. He said that people knew what they were getting and were willing to pay for it, and that he averaged about 25 cents per pound for all he sold. Considerable time was spent in discussing the relative merits of wooden sections with glass fronts and paper boxes. Mr. Snyder

was strongly in favor of paper boxes on account of their lightness, as the purchaser did not have to pay for three or four ounces of box. Messrs. Adams, Van Deusen, Vrooman, Smith and others favored glass sections as they kept the honey better and presented a finer appearance.

#### OPENING THE QUESTION BOX.

At the final session this afternoon the question box was opened and about an hour spent in answering a number of questions propounded by various members. While the questions were being answered Mr. Gardner gave an account of his experience in bee culture in Florida, and said that of all the states in this country for that special purpose Florida was the worst. In answer to the interesting question: "What is a simple test to discover glucose in extracted honey?" Mr. John Aspinwall said that any extracted honey that would granulate upon being set in a cold place was pure, and that in adulterated honey the pure would granulate and float upon the adulteration. When the question box was emptied the various machines were examined and described and a number of periodicals on bee culture discussed. Among the articles shown were:

The bee smoker for quieting bees, the queen breeding hives, an improved hive for comb honey, an improved knife for uncapping the cells of the honey comb, a patent foundation for bees to start their cells upon made of beeswax, a queen nursery, an introduction cage and a new kind of section boxes; also the *Bee Keeper's Text Book*, *Bee Keeper's Magazine*, *CANADIAN BEE JOURNAL* and *Gleanings in Bee Culture*.

Frank Boomhower, Solomon Vrooman and John Aspinwall were elected delegates to the state convention at Rochester and after deciding to hold the next convention in this city next year the convention adjourned *sine die*.

The above report is furnished by Friend Pierce, whom we to have congratulate upon his election to the presidency.

C. WECKESSER. — As a consequence of the great amount of honey dew gathered the previous summer, the bee business has undergone a general depression, but is living up a little again. My own apiary of 34 colonies was reduced to 24, of which some were mere handfuls. I have taken but little honey, in fact, not enough to pay for the sugar fed; but have sold quite a lot of bees and built up to 39 colonies again which are I believe wintering very finely; those in the cellar (12) are doing the best I think.

## SUNDRY SELECTIONS.

### MY EXPERIENCE IN BEE KEEPING.

N. H. SHEPLEY.—In the spring of 1883 I purchased one skip of black bees, in the old-fashioned hive, for which I paid \$5. I let them swarm twice, and then I undertook to transfer them into one of the Jones' hives. This was an experiment with me, for I had never seen it done or read very much about it before, but I knew it had been done, and I thought I could do it as well as anybody else. So at it I went. I got my hive in position and commenced smoking and drumming. The bees commenced running; some went in the new hive and some outside; and some stayed in the old home. I thought something must be wrong, so I stood them by for the time and studied and read all I could get hold of on the subject of transferring, and made up my mind I would try again. This time they took shelter in their new home without any trouble, but in the operation I lost the queen, and of course they soon began to dwindle down, and through my ignorance in not knowing what was wrong with them they soon became lifeless. This left me with only two hives to go to winter quarters with that fall, and when I opened them up in the spring of 1884, I had lost one of them for the want of stores, so I had to start that spring with one again, just where did I the year before, only I had them in a movable frame hive with one year's experience. This I thought was a little forward instead of backward.

During the winter months of 1884 I read Prof. A. J. Cook's tenth edition of the *Bee-Keeper's Guide*. While reading about the different kinds of bees and the merits and demerits of the different varieties, I caught the Italian fever while musing over my condition. I made up my mind there was no other way for me to get through but to get a skip of this breed. As I think Mr. D. A. Jones is the best doctor for this disease, I applied to him for his latest price list, which was promptly mailed to my address. On receiving it I ordered one of his skips of Italians which came to hand in early spring. So in the spring of 1884 I had two skips, one of blacks and one of Italians (the latter was a very fine lot of bees with a magnificent queen and I was very proud of them). During that summer my blacks swarmed once, and I divided my Italians twice, not letting them swarm naturally at all. Having no extractor I didn't get much honey, but had five colonies to go to winter quarters with. That fall I packed them away very nicely, and was making big calculations on doing great things with my bees. The next season I kept the snow all swept away from the entrance so nicely, but

when I opened them in the spring, behold, they were all gone but one, and worse than all my pet queen was among the lost ones. If she had been spared I would not have cared so much, but it was not so. However, I had one hive left that I raised from her. My black bees were all gone, but I did not care so much for them, for I think they are dear at any price where the Italians can be purchased at any reasonable figure. In the spring of 1885 I had to start with one hive again. I commenced to build them up in early spring. By this time I had learned pretty well how to divide them. As soon as they were strong enough I started a nucleus, and was ready to divide them as fast as they were strong enough to admit of it. I encouraged them as much as possible by feeding sparingly each day, and kept dividing as fast as they filled up. I made four divisions, and they swarmed twice in spite of all I could do. One of these natural swarms flew away. This fall I have six strong colonies to go to winter quarters with. Besides the increase of colonies I have taken three hundred and ten lbs. of extracted honey and forty lbs. of comb honey. If anybody with only three year's experience can show up a better record, we would be pleased to hear from them.

Charing Cross, Ont.

Thanks for report. You are sure to succeed, as you are not discouraged by one or two failures. Your success so far shows what study and determination can accomplish.

DO KING BIRDS EAT WORKER BEES? HIS KINGSHIP IS GUILTY.

F. W. FULFORD.—1st—I have been convinced of the fact that the king bird is guilty of destroying the worker bee many years ago—it is twenty years ago it was an affirmed fact to me. I caught one of these birds and found the stings of bees in its throat. Nevertheless, I think this bird's prey upon bees is principally on drones. 2nd—There is a more disastrous bird called the phoebe bird, which is very destructive to apiarists, for I have watched carefully and killed those birds and found workers in their crops. When they catch a bee they will hold it in their beak until dead. I believe those birds which catch drones will also be injurious to queen raising, as they undoubtedly will destroy queens.

UPWARD VENTILATION IN WINTERING.

Last winter in my repository I had thirty colonies, twelve had upward ventilation, the remainder I kept closed, eight out of the twelve died, the remaining four dwindled down very small, when I set them out in April 18th, 1885. Those which I kept closed with plenty of ventila-

ation below, came out all right. I keep my bees at a temperature of 45°.

Brockville, Ont. Jan. 26, 1886.

#### SAWDUST PACKING.

J. GALLIPEAU.—What do you think of having sawdust above the bees when wintering in cellar? I took the half story and nailed two strips of half inch lumber across, then tacked a piece of cotton cloth so it would rest on the above mentioned strips, filled it with very dry sawdust, leaving a three-quarter inch space between saw dust and top of rack to allow the bees to cluster up to the cotton and pass from one to the other without getting chilled. I think the dry sawdust absorbs the dampness. I have only two swarms, a first and a third swarm. The first swarm came out June 15th, filled twenty-five one pound sections of nice honey and one five pound box, also filled twelve of the Jones frames' right to the bottom bar. The third swarm came out July 27th, filled seven and a half frames, but when I came to put them into winter quarters I was obliged to feed the third swarm as it was strong in bees, but very little honey. They are now in good condition for wintering and trust they will come through safely. This is a good locality for bee-keeping, there being clover, bass-wood and buckwheat in abundance. Am very much pleased with the CANADIAN BEE JOURNAL and wish you every success.

Huntingdon, Que., Nov. 27th, 1885.

Your plan of fixing a passage over top of frames and giving the bees an opportunity of clustering between top of rack and the sawdust cushions or packing, will, we think, work all right. We are glad to know that you are succeeding with your bees and as you have been so successful with a few, we hope you will be equally successful with many, and we see no reason why you should not. You will be educating your neighbors to a more humane way of managing their bees, at the same time, as we understand, many hives are smothered with brimstone, in that locality, to get their honey.

#### VENTILATING THE CELLAR.

G. W. SHEERES.—Would you be so kind as to answer the enquiries I make in this letter through the CANADIAN BEE JOURNAL. I have a stone cellar under my house and have a room partitioned off in one end of it 8 x 15 feet for my bees. The temperature has been from 39 to 41 degrees, is that about right for a cellar? My house is only one storey, 9 feet, and I have a pipe that goes from the cellar up through a closet into

the attic and there is a ventilator in each gable so that there is a good draft up through the pipe. What I want to know most, would it be better to run the pipe down in the cellar to, say about two feet of the floor, or leave it as it is at present even with the cellar roof; there is an earth floor in the cellar and it is a little damp, but it is well drained. I wintered out door last winter and lost heavily; now I have part of my bees in the cellar and part in double-walled sawdust hives.

Clarksburg, Jan. 21st, 1886.

The temperature in your cellar should be kept at least 45°. We would prefer to have the pipe run down to within 2 inches of the cellar floor. The pipe at the present time takes off the heat and not the foul gases. Bank your cellar up or protect it in some way that the temperature may be raised to 45°. Would prefer to keep the temperature at 50° rather than at 40°.

#### BEES FLYING IN WINTER.

JNO. J. HALL.—Would you kindly answer the following questions and oblige a subscriber? My bees are packed in a clamp with 16 inches of chaff all around them and an entrance from the outside to the inside of hives: (1) Is it best to let my bees fly when they want to or to prevent them. If so how? (2) I have 6 hives of bees packed away, if they winter well, would you advise me to buy an extractor or would it pay me better to work for section honey next season.

Shelburne, Ont., Dec. 24th, 1885.

If you attempt to prevent bees from flying by putting a wire screen over the entrance they will likely become uneasy. We think whenever it is warm enough for them to fly out with that thickness of packing it is better to let them; of course, in very cold weather you could stand a board against the entrance to keep them from flying. (2) We think you would be more successful with an extractor. You get three or four times times as much honey and less skill is required than for comb honey, unless you are provided with all the latest improvements for the purpose.

#### BEE CULTURE IN EGYPT.

The Egyptians exhibit great skill in cultivating the bee. The flowers and the harvest are much earlier in Upper Egypt than in Lower, and the inhabitants profit by this circumstance in regard to their bees. They collect the hives of different villages on large boats, and every

proprietor attaches a particular mark to his hive. When the boat is loaded the conductors descend the river slowly, stopping at all places where they can find pasturage for the bees. After having thus spent three months on the Nile the hives are returned to the proprietor, and, after deducting a small sum due to the boatman, for having conducted his hives from one end of Egypt to the other, he finds himself on a sudden enriched with a quantity of honey and wax which is immediately sent to the market. This species of industry procures for the Egyptians an abundance of wax and honey, which they export in large quantities to foreign countries.—*New York Telegram.*

THOS. SCOTT.—Last April some one sent me THE CANADIAN BEE JOURNAL. Though not then engaged in bee-keeping, I had quite a notion of trying it, and the more I read the journal the more I was led to make a beginning, being largely engaged in fruit growing. I thought first of preparing a place in which to winter the bees. Having a nice sand-hill, I set to work, dug out a cellar 9 feet deep, 36 feet long, and 10 feet wide. Having plenty of good building stone I walled it up with stone without using mortar, as mortar would keep it damp, then covered it with cedar, over which I then levelled 2 feet of earth. Now I have a bank cellar, 32 feet long, 7 feet wide, and 7 feet high, with row of shelves on each side with a passage 2 feet, 6 inches, through the centre. I put two ventilators in the top, one extending almost to the bottom of the cellar. Then I have a subterranean ventilator running from the bottom 75 feet, the end of which is covered with wire cloth. Now I had the cellar, but where were the bees? I went to friend Pringle, of Selby, bought 19 colonies of bees, which, with five I had already, making in all 24, placed these in the cellar, made good cushions filled with oat-hulls from the oat mill, being kiln dried. I have been in twice and find it dry and sweet, the bees quiet, and the temperature steady at 42°. Now, sir, what do you think of my beginning?

Newburg, Ont., Dec. 23, 1885.

Your "beginning" in bee-keeping is indeed a good one, and you may feel that you are in good hands. Mr. Pringle is one of our wide-awake bee men. Your repository is well arranged, and have no doubt you will be successful in wintering.

'MRS. SARAH AXTELL.—We wait the JOURNAL for next year, and we feel well repaid for the the last. We have 94 colonies in cellar crowded on to four Quinby frames, packed on two sides

and on top in hives with straw. Front board raised over two inches, so that we can look in and see the clusters of the strong colonies; weaker ones go up higher on combs; have so far kept thermometer between 40 and 45°, which keeps them quiet, dry, and to all appearances all right. It is a pretty sight to see these golden balls so contented and quiet, and know they are well so far in the winter. Have 61 colonies out of doors.

Roseville, Ill., Jan. 27, 1886.

#### CHANGING THE LOCATION OF BEES.

WILLIAM WALL.—My first experience with bees was five years ago, and since that time I have continued to keep them with fair success. In 1884-5 I wintered twenty seven out of twenty nine that I put up, and after selling a considerable number I have put up forty for this winter. I winter them on their summer stands protected by chaff boxes. There are quite a number in this section who keep bees, but I have not yet noticed a communication from any of them in your valuable JOURNAL. Last year proved not a very productive one in this section, especially towards the close of the season. I am afraid I shall not be altogether successful this winter, as bees seemed to gather a great quantity of pollen. They also appeared to consume more honey this fall than usual so that when I arranged them for winter I found them lighter than I had expected. I was well pleased with the goods I received from you this summer, and if I am successful you will hear from me again. You would oblige by letting me know through your JOURNAL, what time would be safest to shift the bees as I intend to remove them about 160 yards. Wishing you and the CANADIAN BEE JOURNAL success.

Pinkerton, Jan. 8th, 1886.

You might move them some evening in the spring, soon as the weather gets warm and before they begin flying out and marking the location. They should not be disturbed by moving unless there is likely to be suitable weather for a cleansing flight soon after. You should place a board in front of each entrance, and have the surroundings changed so that they will mark the new location.

#### AN OMISSION.

A. B. MASON.—The report of the committee on exhibits at the recent convention of The N. A. B. K. A. at Detroit, did not include the exhibit of G. B. Lewis & Co. of Watertown Wis. In a letter to G. M. Doolittle, a member of the committee, they call attention to the omission. Their letter was forwarded to me and I wrote them to state what they exhibited, and where; they say "Our

ections were displayed in the sample room of of the Newhall House, and also they were brought down to the office." This accounts for the omission in the report, for the committee supposed that all the exhibits were made at the Antisdal House. They say, "We only exhibited  $4\frac{1}{2} \times 4\frac{1}{2}$  open top, very white, basswood sections and some English section folders." Please insert the above in the C. B. J. and oblige.

Wagon Works, Toledo O. Jan. 26th, 1886.

## THE CANADIAN BEE JOURNAL.

JONES, MACPHERSON & CO.,

EDITORS AND PUBLISHERS,  
BEETON, ONTARIO.

WEEKLY, \$1.00 per Year, Postpaid

BEETON, ONTARIO, FEBRUARY 10, 1886.

### ERRATA.

On page 679, of C. B. J. 12th line, first column, it should read "a revival of it (a valueless patent) could only fail and needs *none* (not *more*) of our opposition." Second line from the bottom, same column, "purloins" ought to be *purloin*.

The CANADIAN BEE JOURNAL is approaching the close of the first volume and those of our subscribers who desire to have their numbers bound but find they lack some few numbers, can have them supplied at a nominal price of 15 cents for ten. All back issues are in stock with the exception of No. 2; this will be re-printed in a few days.

### RAYS OF LIGHT.

Bee Journals seem to be springing up thick as mushrooms—but we do not wish any of them that kind of growth. The latest edition is *Rays of Light*, published at North Manchester, Ind. The editor is J. J. Martin. It will appear monthly, and is 50 cts. per year. Poultry also receives attention in its columns.

### CONVENTION NOTICES.

A meeting of the North Middlesex Bee Keepers Association will be held in the town hall, Parkhill, on Feb. 18th, 1886. Several items of interest to bee-keepers will be brought up at the meeting. All bee-keepers are cordially invited to attend and supplies of all kinds are expected to be on exhibition. Those in the trade are cordially invited; space will be granted to all to exhibit their supplies. A large attendance is looked for. Any person wishing information may apply to Frank Atkinson, President, Ailsa Craig P. O.; or D. P. Campbell, vice-president Parkhill P. O.; or A. W. Humphries, Sec., Parkhill, P. O.

On Wednesday 24th, 2 p.m., Canadian bee-keepers will convene at the Court House, Brantford. The Grand Trunk Railway has promised one and one-third rates, to bee keepers attending. Reduced hotel rates have been secured at the Kirby House, \$2.00 per day rates secured \$1.25 and \$1.50 per day. An excellent hall seating 400 has been secured free. Several of the leading Canadian bee-keepers have promised to attend and take part. There will be five full sessions, two on the 24th and three on the 25th, which will give those attending ample time to have one of the most successful meetings ever held by Canadian bee-keepers. The objects of the meetings are the advancement of apiculture, more united action—generally amongst bee keepers—for the development of our home market—and to aid in securing a grand exhibit at Kensington. A paper will be read by Mr. Allen Pringle on spring management. Some of these questions are expected to take the form of a debate, particularly the developments of our markets, and is it overworked. A grand time is expected. During the session the Brant Bee Keepers Association will organize.

R. F. HOLTERMAN, Sec. pro tem.

## HONEY MARKET.

### CHICAGO.

Without any material change. White comb honey in one pound frames brings 16 cents; very fancy 17 cents. Dark is slow sale. Extracted honey 6 to 8 cents per pound. Beeswax 25 to 26 for yellow, market steady.

Chicago,

R. A. BURNETT.

### CINCINNATI, O.

Demand is extremely slow for extracted honey. Manufacturers seem to have taken a rest. There is only a fair demand for honey in glass jars and for comb honey. Prices are unchanged and nominal with occasional arrivals and a large stock on the market. We quote extracted honey at 4c. to 8c. on arrival and choice comb honey at 12c to 14c. in a jobbing way. There is a good home demand for bees wax. We pay 25c. a lb. for choice yellow.

Cincinnati,

CHAS. F. MUTH & SON.

### BOSTON.

Honey is selling very well but prices are very low, and we are often obliged to shade our prices in order to make rates. We quote 1 lb. comb, 14 to 16 cents. 2 lb. comb, 12 to 14 cents. Extracted, 6 to 8 cents.

BLAKE & RIPLEY.

## THE BEEKEEPERS' LIBRARY.

We keep in stock constantly and can send by mail post-paid the following:—

BEEKEEPERS' GUIDE OR MANUAL OF THE APIARY, by Prof. A. J. Cook. Price, in cloth, \$1.25 paper, 1.00

A. B. C. in BEE CULTURE by A. I. Root. Price, cloth, \$1.25 paper, \$1.00.

QUINBY'S NEW BEEKEEPING, by L. C. Root. Price in cloth, \$1.50.

THE HIVE AND HONEY BEE, by Rev. L. L. Langstroth. Price, in cloth, \$2.00.

**HONEY**, some reasons why it should be eaten, by Allen Pringle. This is in the shape of a leaflet (4 pages) for free distribution amongst prospective customers. Price, with name and address, per 1000, \$3.25; per 500, \$2.00, per 250, \$1.25; per 100, 80c. With place for name and address left blank, per 1000, \$2.75; per 500, \$1.70; per 250, \$1.00; per 100, 50c.

**POUL BROOD, ITS MANAGEMENT AND CURE** by D. A. Jones. Price, 11c. by mail; 10c. otherwise.

**BEEKEEPERS' HANDY BOOK**, by Henry Alley. Price, in cloth, \$1.50.

**A. B. C. IN CARP CULTURE**, by A. I. Root, in paper 50c.

**ADVERTISEMENTS.**

In purchasing articles advertised in the "Canadian Bee Journal" please mention in what paper you saw the advertisement. Advertisers always wish to know which advertisements are most effective.

**HONEY FOR SALE.**

9,000 lbs. of first-class White Honey. Apply to  
HY. STENNETT,  
Feb. 3, 1886. ST. MARY'S, ONT.

**Great Reduction in Prices.**

Our beautiful all-in-one-piece sections, smooth inside and out, at \$4.00 per 1,000. For larger lots, write for prices. Send for price list of other supplies.

M. H. HUNT,  
BELL BRANCH, WAYNE CO., MICH., near Detroit.

**QUEENS, 1886. QUEENS.**

Reared from Imported Mothers. Two, three and four frame Nuclei. Send for price list. Address

FRANK A. EATON,  
Bluffton, Ohio.

**EARLY ITALIAN QUEENS**

**Nuclei and Full Colonies.**

Fine stocks of Imported Queens on hand. Send for Illustrated Catalogue of Bees and Supplies. Address,

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**WANTED!**

A position as Manager or Assistant by an experienced Apiarist. Best of references.  
Direct, APARIST, care of D. A. Jones, Beeton.

**SAVE MONEY**

By Making Your Own Foundation.

**FOUNDATION MILLS.**

Through arrangements made with Manufacturers I am enabled to offer Canadian customers the following makes of mills at prices much lower than they can be ordered singly and but little above makers list prices.

VANDERVORT,  
ROOT, GIVEN,  
PELHAM, OLM.

Duty free and freight or ex. charges to be paid from my station. Don't fail to write me before purchasing, stating kind and size of mill wanted. **ORDER EARLY.**  
Circulars and samples free.

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Bedford, Quebec.

**I. R. GOOD'S  
PRICE LIST.**

**Italian Bees and Queens For 1886.**

HAVING again located at NAPPANEE, where I expect to devote my entire time to the breeding of PURE ITALIAN BEES AND QUEENS, can also procure and furnish SYRIAN BEES AND QUEENS bred in my Tennessee Apiary. All queens warranted pure to name and untested Queens warranted purely fertilized.

- Tested Queens prior to June 15th.....\$3.00
- Tested Queens, later than June 15th, each.... 2.00
- Untested Queens, prior to June 15th, each..... 1.00
- Untested Queens, later than June 15th, each. 90
- Six for \$5.00. 12 or more 75c. each.

4-Frame Nucleus, very strong, prior to June 15th, \$5.00 each, later \$4.00 each. With untested queen \$1.00 less each. Bees by the pound same price as untested queens. Will also furnish all kinds of sections and hives at A. I. Root's price.

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Comb Foundation Mills.

Send for samples and reduced price list.  
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Tested or untested, will confer a favor by ordering early. We then can send when wanted. Price \$1.00 or \$10.00 per dozen. Tested, \$2.00.

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We manufacture Bee-keepers' supplies of all kinds, best quality at lowest prices. Hives, Sections, Comb Foundation, Extractors, Smokers, Crates, Honey Buckets, Vels, Feeders, Bee-Literature, etc., etc. Imported Italian Queens, Italian Queens, Bees by the lb., Nucleus or Colony, "Bee-keepers' Guide, Memoranda and Illustrated Catalogue" of 48 pages FREE to Bee-keepers. Address **JOSEPH NYSE WANDER, DES MOINES, IOWA.**

**DISSOLUTION OF PARTNERSHIP.**

NOTICE is hereby given that the partnership heretofore existing between us as publishers of "The Canadian Bee Journal" and general job printers, under the firm name of "D. A. JONES & CO." has been this day dissolved by mutual consent.

Witness our hands this nineteenth day of January, A.D 1886, at Beeton, County of Simcoe.

D. A. JONES,  
F. H. MACPHERSON.

Witness—C. FIZETTE.

**FORMATION OF PARTNERSHIP.**

NOTICE is hereby given that we the undersigned have this day entered into partnership for the purpose of carrying on the business of "D. A. Jones & Co." publishers of "The Canadian Bee Journal," and general job printers in the Village of Beeton, County of Simcoe under the name and style of "Jones, Macpherson & Co." and that all debts due the said "D. A. Jones & Co." are to be paid to us.

D. A. JONES,  
F. H. MACPHERSON.

Witness—C. FIZETTE.

# WE CLUB

	Price Both. Club.	
THE CANADIAN BEE JOURNAL and.....		
Cook's Manual (cloth).....	\$2 25	\$2 00
A B C in Bee Culture (cloth).....	2 25	2 00
Quinby's New Bee-Keeping (cloth).....	2 50	2 25
Alley's Handy Book (cloth).....	2 50	2 25
Langstroth on the HoneyBee (clh)...	3 00	2 75

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Largest Bee-Hive Factory in the World.

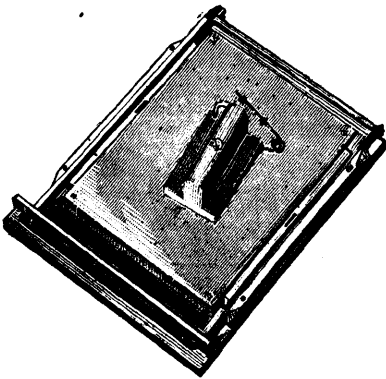
Write for our prices for one price sections, delivered freight and duty prepaid.

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Saves the cost of the machine in nailing 500 frames, to say nothing of the extra quality of the work obtained by its use.



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For Jones' Frame.....\$1.25  
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Ready to go by express or freight.  
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## HEAD \* QUARTERS

IN THE SOUTH FOR EARLY NUCLEI & QUEENS.

Four-frame nucleus, with pure Italian Queen, in April, \$4.  
Three-frame nucleus, with pure Italian Queen, in April, \$3.50.  
Two-frame nucleus, with pure Italian Queen in April, \$3.00.  
After 15th May, 25c. less. I would advise the four-frame nucleus as giving the best result.

Italian Queens—untested in April, each \$1.25, per doz., \$13.  
From 5th May to 1st June, each \$1.10, per doz., \$12.  
After 1st June, each \$1.00, per doz., \$10.  
Tested, \$2.50 ea.  
Selected Tested, \$3.00 each. 50 cents less after June 1st.  
Bees by the pound, in lots of five pounds and over, \$1.00 per pound, no queens; if queens are wanted add price of queens.  
Safe arrival and satisfaction guaranteed. Discounts, 3 per cent on orders of \$50 or over; 5 per cent on orders of over \$100. Illustrated catalogue now ready. Address

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Send for my Circular. It tells you about my **NOTED** strain of **Red Clover Bees**, also other valuable information. I challenge the world on fine bees and queens. Also have on hand, and breed fine English Rabbits.

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We have several grocs of these jars ready for shipment y return freight or express, at the following prices:

		Gross.	Half gross
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They are put up in half-gross cases—no charge for packing or cases.

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Read what J. I. PARENT, of CHARLTON, N. Y., says—We cut with one of your Combined Machines, last winter, 50 chaff hives with 7-inch cap, 100 honey-racks, 500 broad frames, 2000 honey boxes, and a great deal of other work. This winter we have double the amount of bee-hives etc., to make and we expect to do it with this Saw. It will do all you say it will." Catalogue and Price-list Free. Address, W. F. & JOHN BARNES, No 472 Ruby St., Rockford, Ill.

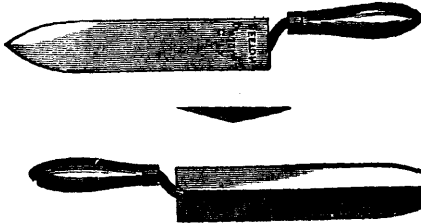


**FLAT-BOTTOM FOUNDATION,**  
High side-walls, 4 to 14 square feet to the pound. Wholesale and retail. Circular and samples free.

**J. VAN DEUSEN & SONS,**  
SOLE MANUFACTURERS,  
SPROUT BROOK, MONT. CO., N. Y.

**HONEY KNIVES.**

We have just to hand a large shipment of honey knives from the makers, Lockwood Bros. Sheffield, England. These are undoubtedly the finest we have had made yet, being the most perfect in shape and neatness of manufacture.



*These Knives are made of the Finest Razor Steel.*

- Ebony Polished Handle, with or without polish.....\$1 50
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- Wood Polished Handle, glazed polish..... 1 00

If by mail, add 15c extra for, each knife.  
D. A. JONES, Beeton, Ont.



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We have them in stock, same as engraving, at 40c., postage 6c. They are good ones too.

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**THE INVERTIBLE HIVE.**

**INVERTIBLE FRAMES,**

- Invertible Surplus Honey uses,
- Entrance Feeders, Top & Bottom Feeders,
- Hive-Lifting Device, Honey Extractors,
- Wax Extractors, Comb Foundation, etc.

My new Illustrated Catalogue is now ready, and will be mailed to all who apply for it. Address

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Are unsurpassed for **Quality** and fine **Workmanship**. A specialty made of all styles of the **Simplicity Hive**, including the **Van Deusen-Nellis**. The "**FALCON**", **Chaff** **Hive**, with movable upper story, continues to receive the highest recommendations as regards its superior advantages for **wintering** and handling bees at all seasons.

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Same price as one-piece. Also manufacturer of **VAN DERVOERD FOUNDATION**. Dealer in a full line of **Bee-Keepers' Supplies**. Send for Illustrated Catalogue for **1885**, Free. Prices always reasonable. Mention this paper.

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THAT HOLD SECTIONS OF HONEY 4 1/4 X 4 1/4 IN.



We call these in our price list "Honey Boxes for Sections." Each box has a nice tape handle, and when adorned with labels "A" or "B," which are made to fit this package, they look exceedingly attractive. The price for boxes is: per 1000, \$20.00; per 500, \$12.50. The price of labels will be, extra, per 1000, \$3.50; per 500, \$2.00; per 100, 45c.

In the blank space at the bottom of label (see cut) is room for name and address of producer, and these may be printed in at the following extra charge. Per 100, 30c.; each subsequent 100 to 1000, 12c.; per 1000, \$1.25. Sample boxes, labelled, sent on receipt of a 3c. stamp.

D. A. JONES,  
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**A. J. Cook, Author and Publisher**  
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**THE NEW ONE-PIECE SECTION.**

Though these sections cost more to make than the old style, still we are supplying them at the same price. We keep in stock 3 1/2 X 4 1/2 (ours), and 4 1/4 X 4 1/4 (Langstroth), and can make any other sizes to order on short notice. Prices:

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