

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for scanning. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of scanning are checked below.

L'Institut a numérisé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de numérisation sont indiqués ci-dessous.

- | | | | |
|-------------------------------------|---|-------------------------------------|---|
| <input type="checkbox"/> | Coloured covers /
Couverture de couleur | <input type="checkbox"/> | Coloured pages / Pages de couleur |
| <input type="checkbox"/> | Covers damaged /
Couverture endommagée | <input type="checkbox"/> | Pages damaged / Pages endommagées |
| <input type="checkbox"/> | Covers restored and/or laminated /
Couverture restaurée et/ou pelliculée | <input type="checkbox"/> | Pages restored and/or laminated /
Pages restaurées et/ou pelliculées |
| <input type="checkbox"/> | Cover title missing /
Le titre de couverture manque | <input checked="" type="checkbox"/> | Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées |
| <input type="checkbox"/> | Coloured maps /
Cartes géographiques en couleur | <input type="checkbox"/> | Pages detached / Pages détachées |
| <input type="checkbox"/> | Coloured ink (i.e. other than blue or black) /
Encre de couleur (i.e. autre que bleue ou noire) | <input checked="" type="checkbox"/> | Showthrough / Transparence |
| <input type="checkbox"/> | Coloured plates and/or illustrations /
Planches et/ou illustrations en couleur | <input checked="" type="checkbox"/> | Quality of print varies /
Qualité inégale de l'impression |
| <input checked="" type="checkbox"/> | Bound with other material /
Relié avec d'autres documents | <input type="checkbox"/> | Includes supplementary materials /
Comprend du matériel supplémentaire |
| <input type="checkbox"/> | Only edition available /
Seule édition disponible | <input type="checkbox"/> | Blank leaves added during restorations may
appear within the text. Whenever possible, these
have been omitted from scanning / Il se peut que
certaines pages blanches ajoutées lors d'une
restauration apparaissent dans le texte, mais,
lorsque cela était possible, ces pages n'ont pas
été numérisées. |
| <input type="checkbox"/> | Tight binding may cause shadows or distortion
along interior margin / La reliure serrée peut
causer de l'ombre ou de la distorsion le long de la
marge intérieure. | | |
| <input checked="" type="checkbox"/> | Additional comments /
Commentaires supplémentaires: | | Continuous pagination. |

THE CANADIAN BEE JOURNAL

WEEKLY.

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

Vol. I.

BEETON ONTARIO, JANUARY 27, 1886

No. 44

TABLE OF CONTENTS.

ADVERTISING RATES.

	PAGE
Advertisements.....	702
Bees in Winter.....	700
Bees, Heldon strain.....	700
Combs, Removing for winter.....	700
Carp in Canada.....	701
Change in firm name, A.....	702
Exercise and Heat: Sugar or Honey.....	692
Enterprise, A New.....	695
Honey Markets.....	702
Honey, Adulterated.....	694
O. B. K. A., Special meeting.....	691
Price lists received.....	702
Queries and Replies.....	697
Queen and half-pound of bees.....	697
Questions, Answered, Some.....	693
Report, G. Guyer.....	701
Sundry Selections.....	700
Ventilation, Without upward.....	697
Ventilation in Winter, No.....	698

All advertisements will be inserted at the following rates:

TRANSIENT ADVERTISEMENTS.

10 cents perline for the first insertion, and 5 cents per line for each subsequent insertion.

Space measured by a scale of solid nonpareil, of which there is twelve lines to the inch, and about nine words to each line.

STANDING ADVERTISEMENTS.

	3 MOS.	6 MOS.	12 MOS.
One inch.....	\$ 3.00	\$ 5.00	\$ 8.00
Two inches.....	4.50	7.50	12.00
Three inches.....	6.00	10.00	16.00
Four inches.....	8.00	13.50	20.00
Six inches.....	10.00	15.00	24.00
Eight inches.....	12.50	20.00	30.00

TERMS.—STRICTLY CASH.

Contract advertisements may be changed to suit the seasons. Transient advertisements inserted till forbid and charged accordingly.

PUBLISHER'S NOTES.

We will always be glad to forward sample copies to those desiring such.

Send us the names of three subscribers with \$3 in cash and receive as a premium one C. B. J. Binder.

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.

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

Subscription Price, \$1.00 per Annum Postage free to Canada and the United States; to England, Germany, etc. 10 cents per year extra; and to all Counties not in the Postal Union, \$1.00

The number on each wrapper or address-label will show the expiring number of your subscription, and by comparing this with the Whole No. on the JOURNAL you can ascertain your exact standing.

ERRORS.—We make them: so does every one, and we will cheerfully correct them if you write us. Try to write us 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.

CLUBBING RATES.

THE CANADIAN BEE JOURNAL

AND "Gleanings," semi-monthly.....	\$1.80
" " "American Bee Journal," weekly.....	1.75
" " "American Apiculturist," monthly.....	1.75
" " "Bee-Keepers' Magazine," monthly.....	1.75
" " "Bee-Keeper's Guide," monthly.....	1.75
" " "Texas Bee Journal".....	1.80

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 a 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 Warranted 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.,
- J. L. ARMSTRONG, Jerseyville, Ill.,
- ARTHUR TODD, Germantown, Philadelphia Pa.,
- 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.
- A. HUMASON, 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

Farm er, Fancier, and Poultry-Keeper

SHOULD SUBSCRIBE FOR

"The Poultry Monthly,"

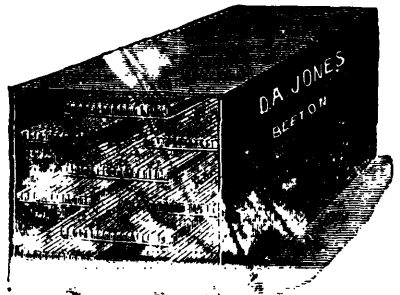
The Best Magazine of its Kind.

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 & HORRICKS,
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

RECIPIENTS 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 to,	75
Each, in flat	20
Per to	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.

SPECIAL MEETING OF O. B. K. A.

REGARDING THE COLONIAL AND INDIAN EXHIBIT.

Queen's Hotel, Toronto, Jan. 12, '86.

AT the special meeting of the executive committee and members of the O. B. K. A., called by the President to consider the matter of sending an exhibit of honey to the Colonial and Indian Exhibition to be held at London, England, this year, 1886, the following members were present: D. A. Jones, Dr. Thom, J. Spence, S. Corneil, J. B. Hall, W. Goodger, A. G. Willows, R. McKnight, M. Emigh, Ira Orvis, the President (S. T. Pettit,) and Secretary. President in the chair.

The President read an answer to a letter he had sent to Mr. A. W. Wright, one of the Ontario agents of the Colonial and Indian Exhibition, which was particularly in regard to sending this years' (86) crop of honey. The answer was quite encouraging.

There was some discussion in regard to the necessary space for the Association to make an exhibit.

Mr. Jones having applied individually for 4000 square feet to the Ontario agents of the C. & I., he was asked if he would be willing to transfer the space (4000 feet) to the O. B. K. A., to which he kindly agreed, if the Association would send an exhibit, otherwise the space to be returned to the bee-keepers of Ontario who will make an exhibit.

Moved by Mr. McKnight, seconded by Mr. Hall, that the Association make an exhibit.—Carried.

Mr. Corneil wished to know the object in sending the exhibit. Mr. McKnight gave some reasons as follows: That by sending the exhibit it would open a market in England for any surplus crop of honey that may accumulate in the future, as will likely be the case; even if we do sacrifice a little at present, there will be a gain in the future. It

would show the world that Ontario is valuable for the production of honey as well as for many other things, and would encourage emigration to our Province.

Mr. McKnight proposed that we as an Association resolve ourselves into a committee and meet the Ontario Government and Commissioners of the C & I, exhibit as soon as possible with the view of getting aid and having matters arranged concerning shipping, exhibitors' fares, retailing honey while exhibition is going on, and sending this years' (1886) crop of honey and occupying the space until the crop could be sent, etc.

Moved by Dr. Thom, seconded by Mr. ———, that Messrs. Jones, Emigh, Hall, the President and Secretary-Treasurer be appointed a committee to look after all matters relating to intending exhibitors.

ADJOURNED TO NO. 6, WELLINGTON ST. W.

We got an interview with Messrs. Wright and Leith, agents of commissioner of Ontario for the C. & I. exhibition, and asked the following questions:

Will freight be paid by the Government from starting point?—Yes.

Will the space allotted to Mr. Jones be allowed to the Association to exhibit this years' (1886) crop of honey?—Yes, if it be utilized in some creditable way up to the time the honey crop is ready to exhibit.

Would we be allowed to retail honey while the exhibition is going on?—They thought there would be no difficulty about that if the main exhibit be left in order.

Will fares of commissioners or exhibitors be paid by the Government?—They were not sure, but thought not. (There was a suggestion made that we, the Association, approach the different R. R. officials in view of getting passes at reduced rates.)

Moved by Mr. McKnight, seconded by Dr. Thom, that a vote of thanks be tendered to Messrs. Wright and Leith, for their kindly given information.

ADJOURNED TO GOVERNMENT BUILDINGS,

Where an interview with the Hon. A. M. Ross, Commissioner of Agriculture, was had, with the object of getting a grant from the Local Government to assist the Association in sending the intended exhibit as the Association do not consider they are able to do so without some assistance.

He, the Hon. A. M. Ross, received the application favorably and promised to do what he could for the Association. He considered it of great importance that there should be a grand display if attempted at all. He was thanked for kindly giving the audience a hearing.

RETURNED TO QUEEN'S HOTEL.

First question—Will there be commissioners appointed to accompany the exhibit of honey while going to London and while there, and how many?

Moved by Mr. Jones, seconded by Mr. Spence, that five commissioners accompany the exhibit.—Carried.

Moved by Mr. Jones, seconded by Mr. Emigh, that J. B. Hall be a commissioner.

Moved by Mr. Emigh, seconded by W. Couse, that Mr. Jones be another.

Moved by Mr. Hall, seconded by Mr. Spence, that Mr. Corneil be a third.

Moved by Mr. Emigh, seconded by Mr. Goodyer, that Mr. McKnight be a fourth.

Moved by Mr. Emigh, seconded by Mr. Spence, that the President be another.

Moved by Mr. Spence, seconded by Mr. Jones, that a commissioner be appointed by the exhibitors if one of the five appointed should not be able to go, said commissioner to be elected by ballot, sending the ballots to the Sec.-Treas. of the Association.

Moved by Mr. Jones, seconded by Mr. Spence, that the names of the five accompanying commissioners be added to the list of committee appointed to look after intended exhibits. Carried.

It is resolved that Mr. McKnight and the Secretary apply to the Provincial Government for incorporation of the O. B. K. A. as soon as possible.

Moved by Mr. Jones, seconded by Mr. McKnight, that the President be chairman of committee.

Moved by Mr. Jones, seconded by Mr. Hall, that W. Couse be Secretary of committee.

Moved by Mr. Corneil, seconded by Mr. ———, that Messrs. Jones, Pettit, McKnight and the mover, approach the Local Government as soon as possible with the view of getting the necessary aid to send the intended exhibit.

Moved by Mr. McKnight, seconded by Mr. Jones, that the thanks of this

meeting be tendered to the President.

Meeting then adjourned.

W. COUSE,
Secretary.

FOR THE CANADIAN BEE JOURNAL.

EXERCISE AND HEAT. SUGAR OR HONEY.

A FULL knowledge of chemistry and physiology would be a great aid to bee-keepers, but few have the time to obtain it.

Those who make bee-keeping a business, and especially those who write for the instruction of others in such matters, would do well to at least read up and obtain a general knowledge of the subject. Otherwise they may be led and lead others into grave error. I liked the answers of G. M. Doolittle to queries 45 and 46. Although I do not feel well posted on these subjects, after reading the various responses, I was prompted to give my views. As I understand it, carbon is fuel for the body. Its combination with oxygen of the air produces heat as in the combustion of coal (carbon) in a stove. Heat produces force when communicated to nerve and muscles or to machinery. Respiration furnishes the oxygen, (as does the draft of a stove) also gives off most of the product of combustion which is carbonic acid gas. Chimnies to stoves take off the same thing. Therefore exertion calls for more consumption of fuel, the result being heat and motion. The muscles and other parts wear out with use and are being constantly renewed from the blood: such renewals require nitrogen and mineral salts. The blood receives the waste or ash and is stimulated to greater speed to carry it away, and where there is need of repair the new blood from the lungs also loaded with fresh products of digestion, rushes there with equal speed to furnish the fresh material which also supplies heat, or warmth and energy. The slow wearing away and oxidization of tissue also furnishes some heat. This would show why exercise produces heat and warmth. There might be plenty of carbon in a form to produce heat in the system, but with low vitality and without exercise it would not be consumed or sent where needed.

Proper foods for man or animals contain carbon nitrogen and mineral salts in certain proportions. Different occupations and climates require different proportions of each. It would be unreasonable to suppose that bees require the same food, in same proportion, in Cuba that they do in Northern Canada. Tallow by the pound will be eaten by men in Arctic regions, while in Tropical countries a little fruit fills the bill. The hog taking little exercise stores its carbon as fat. Active persons and animals constantly use it and

so keep thin. Muscles wear out and rust out as does machinery. Nitrogen is to the body as is steel and iron to the locomotive. Without the steel and iron and constant repairs the locomotive could not change coal into heat, force and speed, and accomplish what it does. The engineer might be called the brain and nerves of the locomotive.

If a person or animal was cold from starvation or had nothing to eat but carbon, then exercise would produce a corresponding depression and make matters worse. With nitrogenous as well as carbonaceous food a certain amount of exercise (not perpetual, however,) would increase the vitality as well as the heat of the body. So if bees warm up by exercise (and I have no doubt they do if exposed to sufficient cold or with loss of heat from top ventilation) then there is all the more need of pollen in the hives. I believe pollen to be necessary at all times as food for bees: a very slight amount may be needed when in the winter cluster and undisturbed by heat or cold, but the little then needed is just as important when needed as at any other time. I want pollen in the hives at all times. The theory that there can be no diarrhoea without pollen and that bees will winter better without it, I consider a false one and against common sense.

I am in theory in favor of granulated sugar syrup for winter stores and I will give my reasons, or part of them, and they may be taken for what they are worth.

Honey is a natural food for bees under natural conditions. Exposure to excessive cold is unnatural, causing more food to be eaten than is natural and is not digested causing diarrhoea, and if long continued causes death from cold and lack of nutrition. Sugar syrup is unnatural as food, but in this unnatural condition is better adapted to this condition than the natural food.

Honey contains sugar, grape sugar and other substances. Dry grape sugar contains more water than cane sugar and is laxative. Honey is also acid, making it also more laxative. Sugar is pure carbon, is not acid but drying, and more apt to cause constipation. Honey is partly digested, therefore in small quantities is more easily assimilated and taken into the blood than sugar syrup, but when taken in large quantities can not be taken up fast enough and passes through, causing irritation and diarrhoea. More sugar syrup can be taken and digested than honey, and, if undigested, would be less apt to cause diarrhoea and might cause constipation. Molasses syrup will cause diarrhoea quicker than yellow sugar syrup and that sooner than granulated sugar syrup. Yellow sugar might be better for spring feeding than granulated.

Who would not prefer constipation in cold weather to the opposite condition? We know that excessive eating, followed by severe exertion, may produce looseness whether the food be nitrogenous or carbonaceous, and that sloppy or liquid food will do the same. Then it would seem that thin watery honey, or pollen and excessive exercise from cold, would cause the same in a bee. Chemically, honey may contain more heat producing elements than sugar syrup of the same density but, if it does, I believe that when exposed to severe cold, man or bees will digest and assimilate more nutriment from the sugar syrup than honey. In connection with this I would like to give my ideas on absorbents and against top ventilation when writing, but will postpone it.

SAMUEL CUSHMAN.

Pawtucket, R. I.

There are many valuable points in your article that are interesting to us and we shall be pleased to have you give your ideas on absorbents and against top ventilation. This matter seems to be of interest even to our bee-friends as far south as Florida.

FOR THE CANADIAN BEE JOURNAL.

SOME QUESTIONS ANSWERED.

MANY of your contributors, as well as writers for other bee periodicals, have tried to search out the cause of the downward tendency of the honey market. The late North American Bee-Keepers' Society in convention at Detroit tried their hand at the puzzling problem. The President hinted that the market was glutted. Others think that the little "slip shod" bee-keepers bring down the market by selling a few pounds of poorly managed honey at a low price. A loud wail comes up from certain quarters from time to time, because some misguided enthusiasts advise everybody to "keep bees." These alarmists tell us that the "thing is already over done." In the aforesaid convention not a single individual seemed to understand that over production is an absurdity as long as there is a stiff demand for all the poor syrups, including Sorghum, that are thrown upon the markets. I must except Mr. C. P. Dadant, as he decidedly took broader grounds and exhibited more faith in the business of honey producing. Some tell us that the want of "co-operation" is the cause of the low prices for honey. But perhaps a greater portion of the honey producers who do not rush into print with their views and grievances believe that the honey dealers have "cornered" the products of the apiary, and manipulate it to suit themselves. In my opinion none of these things have a great

deal to do with the depression in the honey market. The foe is in our own house. The manner in which the bee business has been carried on in the past has brought distrust upon the products of the apiary. The world about us are not fools. They are wise in their way. They have no faith in modern honey, and the fault is our own. Every bee journal is full of "sugar to feed bees." This sugar feeding is steadily and surely ruining the honey trade. I have before me the *New York Weekly Witness*, and to show you how the outsiders look at it from their stand point, I give an extract from an editorial in that widely circulated paper.

ADULTERATED HONEY.

"Some remarks made in our issue of September 3rd last on this subject have raised the ire of quite a number of bee-men, and we have received and are still receiving some very angry letters, remonstrating with us on the sweeping charges which they say are therein made against all bee-keepers.

"We had no intention of blaming all bee-keepers, as more honorable men than the great majority of them are not to be found in any business, and we confess we were misled by reading articles in other journals, in saying that comb is manufactured for the bees to put honey in, as it is only the foundation for the comb in the section-boxes (which is made out of pure wax) on which the bees build their combs. So that unless you get a mouthful of this foundation, or the bees have been fed on glucose or sugar syrup which is seldom the case except for Wintering the bees, we believe section combs are generally pure both in wax and honey.

It is an old saying that "without fire there can be no smoke," and unless there is a considerable amount of truth in the statements published about adulteration, we do not see why they are so extensively circulated, and why the bee-keepers should feel so sore on the subject; and we do not see any difference between man adulterating the honey or causing the bees to do so by feeding them on what is not and never can be pure honey, like what is extracted from flowers. That it is done in some cases, though probably only to a limited extent, is undoubted.

The above though intended to be conciliatory, in fact contains dark suspicions, even of section comb honey. Can you blame the writer for his distrust, when he sees bee-periodicals advising sugar syrup as the best feed for bees? I do not blame him, he at least has grounds for his doubts as to the purity of even comb honey. However much these things may hurt, we have ourselves to blame for it all. A few years ago *Gleanings* pressed glucose into the apiaries of the country as the cheapest bee feed that could be had. It was disguised under the meaningless name of "grape sugar" and hundreds bought without knowing what it was. Years have passed, and this glucose business comes back to drag down the

honey market, and to hang like a black pall over the bee interests of the country. It will be seen that the *Witness* links together, "glucose or sugar syrup" and justly says, "we do not see any difference between a man adulterating the honey or causing the bees to do so by feeding them on what is not, and never can be pure honey like what is extracted from flowers."

The wholesale sugar feeding going on in the apiaries of the country though less reprehensible than the glucose fraud, is as surely undermining the honey trade in the large cities, in fact everywhere except in the home markets of the apiaries. Does anybody doubt that "lots" of sugar syrup goes into the market mixed with honey? I have none. If you winter your bees on syrup and there is any of it left in the brood combs when the early honey harvest commences, it will go into the surplus department as sure as fate. I do not make mere assertions, I know whereof I affirm. Every fall that gives our bees a flow of honey, the following season a portion of my white honey crop is injured as to color, though not as to quality, by the bees carrying the yellow fall honey into the surplus apartments and mixing it with the new white honey. "Without fire there can be no smoke." Yes, that is true, and this building up of the sugar market, at the expense of the honey trade, and "feeding bees on pure syrup" is the place from whence the smoke issues. Perhaps I will be asked "what I am going to do about it." Well, perhaps I will not be able to do much without the co-operation of others, but as for myself I shall feed my bees on pure honey, and if I do not have it at home I will buy it from those who have it for sale, and thus keep inside of the honey trade. Let all bee-keepers do likewise and there will be less complaint about the honey market, and the U. S. chemist will not be under the necessity of classing the honey on the market as "apparently pure." Aside from the glucose vendors nothing has contributed so much to the present condition of things as has the shallow "pollen theory." Not that many well informed apriarists have been captivated by a "theory" that is absurd on its face, but because it has brought into use sugar as a bee feed on the grounds of cheapness more than anything else. We were told with great confidence that the "pollen theory" was to be settled at the Detroit convention. It was settled by Barber and Hall, and finally nailed to the wall by Rev. W. F. Clark. Some years ago I proved by actual facts that bee diarrhœa in my locality was the result of continued low temperature—i. e. it is a climatic trouble. Now, it is admitted that "bees don't eat pollen in a high temperature." Eh?" Well, things will come around strangely enough sometimes.

While I am answering questions I must notice the fact that the Detroit convention with all its wisdom was unable to see how that Messrs. Hall and Doolittle get such large yields of honey. The question can be answered with one word—"locality." If Mr. Doolittle was in my locality, with the methods he describes in his articles, the box hive men would beat him. He prepares his bees for one dash of honey from the linden bloom, and to that end he works all season. If he was here he would have to obtain his honey from a slow, steady yield of nectar and make all his preparations while the honey harvest was in progress, and look after the swarming all at the same time. When an eight weeks white clover slow steady flow struck him, the "hive I use" would fill him with amazement and he would begin to use some other hive, or crop the wings of the workers and queens too. To obtain the best results there must be the application of skill. But skill can never obtain honey when it is not to be had.

G. W. DEMAREE.

Christianburg, Ky.

We quite agree with you that Friend Dadant handled the honey market question with a great deal of ability. When we see men like Mr. Dadant find no difficulty in marketing their honey, is it not a proof that it only requires skill and energy to do likewise? We are aware of the fact that glucose or grape sugar was recommended as a cheap bee food for wintering bees, or feeding them to keep up brood rearing, but not to store. We recommend sugar-feeding only when they have not sufficient stores of honey and then only for winter stores and brood-rearing and should any remain in the combs when the honey harvest begins, which is seldom if ever the case with us, we extract it out and save it for nuclei or for fall feeding again. We prefer feeding sugar syrup during scarcity of honey-flow as when fed with honey the bees become excited and robbing is incited. We do not think that what was said in *Gleanings* did the injury, friend Root merely advocated it in order to assist bee-keepers, but the glucose which was mixed with the honey by the large dealers, especially in the City of New York, and sold to smaller dealers throughout the country was the cause of the trouble. If honey consumers could obtain the honey as it saves the apiaries there would be very little adulterated honey in the country.

Let every bee-keeper sell his honey under his own name and he will create a market that the adulteraters cannot take from him.

A NEW ENTERPRISE.

HOW EGGS AND CHICKENS ARE MADE ARTIFICIALLY

FRIEND NEWMAN, of Norwalk, O., sends the following article which appeared in a late issue of the *Cleveland Chronicle*, and adds as a memo: "Poulterer" is evidently after those editors who are so easily "gulled," and are constantly lying about the manufacture of comb honey. Perhaps it would be well to print the article in your JOURNAL, and thus help to squelch such men by ridicule, if it can be done in no other way." Our friends are all aware that the Prof. Wiley, mentioned in this article is the author of the "Wiley" lie, about the manufacture of combs and the filling of these with honey, and the sealing of them by machinery. Manufacturing eggs is just such another story as that concocted in the fertile brain of this man Wiley, and by "showing up" one we are assisting in "laying out" the other.

PODUNK CORNERS, O., Jan 4th 1886.

DEAR SIR:—How wrapt in astonishment is the mind when it reverts back over a period of 50 or 60 years, and notes the wonderful discoveries, improvements, and inventions that have been made which tend to promote the comfort, happiness, and welfare of mankind.

The last of all these but by no means the least useful, is the remarkable discovery of a process for manufacturing artificial eggs, upon which the editor of the *Cleveland Leader and Herald* has quite a lengthy editorial in his paper of the 16th of December, 1885.

This discovery like many others seems to have happened just at the time, when most needed, for, as we all know, eggs are now used for many purposes for which they were not formerly used, and their increased use has so increased their price that it has become quite burdensome; but it is more than probable that as soon as arrangements can be made for obtaining them by the new process, their price will be materially reduced so that all the poor as well as the rich, can always be supplied with an abundance of this desirable "fruit."

These eggs are so perfect and so like those obtained in the usual way, that it is impossible to distinguish them from the genuine, and so far as we have tested them for culinary and scientific

purposes they are fully equal. The editor of the *Cleveland Leader* is mistaken in saying they can be detected by boiling, and I think he does wrong to throw any obstacle in the way of this new enterprise.

The gentleman who discovered the process by which these eggs are manufactured resides in this country. He is a philanthropist of the highest order, constantly seeking to do that which will benefit his fellow men. He has distinguished himself in many ways as a scientist, and probably is not excelled in that direction by any living man.

When these were first tested to determine their hatching qualities, it was found that they were deficient in some very important ingredients. Although the chickens were perfectly formed, their bones lacked that firmness necessary for easy locomotion.

A leading physiologist residing here, having been consulted, advised the inventor to mix pulverized bone with the albuminous part of the eggs. This advice was followed and worked admirably.

There is another defect, however, which seems not to be so easily overcome. The young chickens are entirely destitute of feathers, and no way has yet been discovered to remedy the defect. The inventor held the theory that the feathers came from the yolk, and he thought that if a larger amount of carrots and saffron was used the feathers might be produced. I did not agree with him, for so far as my observation extended, I had never found any feathers in either of those plants, and a careful examination with the microscope failed to reveal any.

The actual test of the matter proved that I was correct, for however much of carrots and saffron was used the feathers were not forth coming.

We have concluded, for the present at least, to give up experimenting in that direction and to raise only *summer* chickens. Without doubt if hatching is deferred until the first of May, and the chickens housed during stormy weather they can be raised without difficulty even if they have no feathers, and they can be killed for the early fall market.

I think there will be a decided advantage gained in raising featherless chickens, on account of the vast amount of labor saved in picking them, for thus we shall be able successfully to compete with farmers who raise them the usual way. We can sell them much cheaper than they can and still make a good profit.

It may be a matter of curiosity to the editor of the *Leader* to know how the life giving principle is imparted to these eggs.

The human mind is ever reaching forth and grasping for new knowledge.

After the inventor of these eggs found that they would answer nearly all the purposes for which eggs are used, he began a series of experiments to bring them to such a state of perfection that they would hatch. He studied Huxley, Darwin and many other writers on the origin of life, all in vain, and after spending much time and money in his researches and experiments he had nearly given up in despair, when he learned that there was in the employ of the agricultural department at Washington a "Wiley" professor who was an astute scientist, remarkable for his wonderful attainment and profound scholarship. He also possessed the remarkable faculty of perpetrating "scientific pleasantries" to a greater extent than any other man living.

Upon corresponding with this remarkable man he learned that he also had been experimenting in the same direction, and had been successful; that he had actually fertilized the carrotic and albuminous substance of which these eggs are made, before it was placed in the shells, by subjecting it to a similar process to which fish eggs are subjected in order to fertilize them.

It was only after many trials that this Wiley professor succeeded in accomplishing his object in a cleanly way, but at last his efforts were crowned with success.

It is wonderful to read the professor's description of this experiment upon the albuminous and carrotic mass.

He says "that at the very beginning of the operation the carrotic and saffronic ingredients begin to separate from the albumen and assume the spheroidal form, and in a few moments the whole mass has the same appearance, that eggs obtained the usual way would have, if carefully broken and emptied from the shells into a vat.

Immediately after the formation of the yolks, the lime particles commence uniting in the form of slender white rings which float on the surface of the albumen. These rings grow both upward and downward, but more rapidly downward, by attracting to themselves the particles of lime which are floating in the albumen; and much quicker than I can describe the operation about two-thirds of the shells are formed, the lower ends being complete and containing a sufficient amount of albumen to float the yolks which at this stage of the process, as if possessed of life, glide quickly over the edge of the shells and fall into the receptacle prepared for them. Immediately after this part of the operation is completed, the attraction of the shells for the particles of lime is transferred to their upper edge which grows rapidly until the perfect egg is formed.

By a slight change in some of the manipulations

tions the eggs can be made to differ somewhat in size.

A stock company has already been formed, a site purchased, and as soon as the weather will admit, a building will be erected, and the eggs manufactured on an extensive scale; we expect to employ about 500 hands in the operation. We have \$2,000 worth of stock, unsold, which the editor of the *Cleveland Leader* can have at par. Without doubt there will be "millions in it."

POULTERER.

FOR THE CANADIAN BEE JOURNAL.

QUEEN AND HALF-POUND BEES.

IN regard to shipping bees by the pound or half-pound with a good queen I cannot agree with the Rev. J. K. Black. I believe it to be a success in this country if properly handled. (1) If any person purchase half pound bees with a queen on or about 24th May and supplied with three frames of brood comb with two or three pounds of honey, will be a certain success to the bee-keeper. (2) If the weather continues fine for a week or two until the queen has got to laying there is no danger of a disaster, unless there is a dearth and no honey to be gathered. (3) I have dealt with A. I. Root for three years past, the first year I purchased seven swarms $\frac{1}{2}$ pound; all did well but one; 4 out of the seven filled their hives and cast off a colony on the 15th and 20th of July. I got those bees on the 26th of May, 1883. Next year I got 55 more and those did not do as well. This last year I bought 14 swarms from A. I. Root in May last and they filled their hives and are wintering well up to the present time, with plenty of stores. Why I have met with success this last year is, I presume, because when I got my bees I gave each swarm three frames of brood comb with plenty of sealed honey, say three to five pounds, so when my bees were let loose on the combs the queen went to laying, and if the weather is not favorable every day at the outset the bees have stores to live upon.

F. W. FULFORD,

Brockville, Ont., Jan. 16th, 1886.

We have tried the plans you mention, but still find it more profitable to buy full colonies. Seasons, surroundings and care have considerable to do with the success. When properly managed, full colonies usually give sufficient surplus honey to cover first cost, and you have the colony and all increase for trouble and profit. Is that not a better percentage than is generally obtained from other investments?

QUERIES AND REPLIES.

UNDER THIS HEAD will appear each week, Queries and Replies; the former may be propounded by any subscriber, and will be replied to by prominent bee-keepers, throughout Canada and the United States who can answer from experience, as well as by the Editor. This Department will be reserved for the more important questions, others will be answered in another place.

WITHOUT UPWARD VENTILATION.

QUERY No. 55.—It is an indisputable fact that bees exhale more or less moisture in winter quarters. Another fact equally indisputable is that moisture will condense on relatively cold surfaces. How is it then that colonies sealed up fast on the top are, not infrequently, found in the spring with combs and hives dry and nice and bees healthy?

H. COUSE, THE GRANGE, ONT.—See answer to 54.

G. M. DOOLITTLE, BORODINO, N.Y.—The moisture is driven out at the bottom.

M. EMIGH, HOLBROOK, ONT.—If the hive is tight and the colony strong in bees there will be no cold surfaces. Keep in the heat and the dampness will have to get out.

G. W. DEMAREE, CHRISTIANBURG, KY.—In many cases and under many conditions the ventilation at the bottom of the hive is sufficient to dissipate the internal moisture.

JUDGE J. W. ANDREWS, MCKENNY, TEX.—In such cases the atmospheric circulation must have been sufficient to counteract the exhalation—there is air wherever there is bee life.

H. D. CUTTING, CLINTON, MICH.—I will answer this Yankee fashion by asking, "If the hive is closed on top and no heat can escape in that direction, will moisture condense inside if the colony has sufficient strength to keep up the temperature?"

P. H. ELWOOD, STARKVILLE, N.Y.—If ventilation is good so that the air surrounding the bees is relatively dry condensation does not take place so freely. If such condensation does occur in a cold spell, it may evaporate when the temperature rises.

DR. J. C. THOM, STREETSVILLE, ONT.—Although these colonies are apparently sealed fast on top, yet the amount of air received at the entrance and through the walls of the hive itself owing to the porosity of wood was sufficient to carry off the moisture exhaled by the cluster of bees.

DR. C. C. MILLER, MARENGO, ILL.—A coating of ice or frost inside a hive will do little or no hurt so long as it remains frozen. When it becomes warm enough the heat of a strong colony melts the ice, which may be seen running out of the entrance in the shape of a stream of water. The heat of the bees dries out the hive.

PROF. A. J. COOK, LANSING, MICH.—They certainly exhale a small amount of moisture, I think only a *very* small amount, if they winter well. (2) Because probably the moisture does not harm them, and if the top is a non-conductor of heat the moisture will not collect much on the top of the hive. It is the cold surface that becomes wet as it condenses the moisture.

J. E. POND, JR., FOXBORO, MASS.—I give it up. It is a well known fact that bees live under conditions diametrically opposed, and die also under the same conditions. Why it is no one can tell. The trouble is, however, I think that what we suppose, and have reason to believe are the same conditions, are really not so. If an exact answer could be given to this question the winter problem would be solved. Who will give it? I frankly own up that I cannot, and I have studied the matter for years.

S. CORNEIL, LINDSAY, ONT.—The cause tending to produce the results mentioned are: (1) Strong stocks, generating heat enough to keep the air in the hive from falling to the temperature of the dew point. (2) The walls of the hives protected so that the stratum of air in contact with their inner surface will not be reduced to the temperature of the dew point. (3) Ample lower ventilation so that by diffusion the air in the hive is constantly undergoing a gradual change, and preventing saturation taking place. When two or more of these causes are acting at the same time the results are more certain.

S. T. PETTIT, BELMONT, ONT.—The easiest answer would be to say I do not know. But my ideas are as follows: They are possessed of easy temperament and consequently "hibernate" closely and well for most of the winter and have sealed stores. They are out of heavy draughts of wind and doubtless have a regular supply of air. In the above case the action of the queen has much to do with results. If she behaves well and deposits but very few eggs or none at all, the bees will pull through much better. Then again the queen's behaviour depends largely upon the quiescence or restlessness of the bees. Hence we say all other things being equal that *temperament* decides the fate of many colonies of bees.

DR. DUNCAN, EMBRO.—The whole depends on the temperature of the hive itself and the comb viz:—The boards and whatever material they are made of including cover: one quiet frames; bees exhale moisture, but if that does not come in contact with a colder medium than the cluster of bees from which it comes it keeps in a rarified state, but if it comes in contact with a cold board on top, or cold comb outside the cluster it becomes condensed and causes dampness. Colonies that are sealed up on top preserve the animal heat and keep the air rarified. There is enough passes out at the doorway to keep them healthy. All the virtue in chaff and saw dust cushions is that they are non-conductors of heat.

ALLEN PRINGLE, SELBY, ONT.—Very strong colonies sealed up fast on top and wintered in rather cold quarters might be found "in the spring with combs and hives dry and nice and bees healthy;" but I venture to say average or weak colonies would not be so found. On the other hand weak colonies otherwise properly prepared in a proper repository of right temperature and sealed fast on top *might* come through in the healthy condition above stated. The why and wherefore of the matter is this:—The very strong colony, even in improper temperature, in virtue of the otherwise favorable conditions and surplus animal heat would be able to dissipate the moisture and exhalations below notwithstanding the *impervious top*. The weak colony in otherwise perfect condition might be able to do the same thing, while in otherwise adverse conditions its chances would be *nil*. The fact that bees will actually winter all right sometimes when sealed upon top seems inconsistent with the utility of upward ventilation, but really it is not. The thing looks anomalous at first view, but the incongruity disappears as it is understood.

BY THE EDITOR.—We believe if they produce heat sufficient, the moisture will pass out at the entrance below.

NO VENTILATION IN WINTER.

QUERY No. 56.—Bees of course require respiratory air in winter and summer. It is an indispensable condition of life. Now, this being so, explain how it is that we often hear of bees coming through the winter all right in repositories where there is "no ventilation at all—not a particle," as we are assured. If the laws of nature are inexorable and these bee-men are telling the truth. "Why is this thus?"

H. D. CUTTING, CLINTON, MICH.—We have every reason to believe it is so. But the "why" that is what we cannot explain.

M. EMIGH, HOLBROOK, ONT.—We hear a great deal in this day and age. Cork a bee up air tight in a small bottle and see how long he will live.

DR. DUNCAN, EMBRO, ONT.—Those repositories are not hermetically sealed; there is a certain amount of pure air gets through the pores of the earth.

JUDGE ANDREWS, MCKENNY, TEXAS.—These bee-men are not "telling the truth" literally, and in certain conditions very little air is necessary to sustain bee-life.

G. M. DOOLITTLE, BORODINO, N.Y.—Air penetrates nearly all things to a greater or less extent, hence air must enter a winter repository however tightly it may be closed.

DR. C. C. MILLER, MARENGO, ILL.—If "it is an indispensable condition of life," then the bees will die without it. If the bees live with no ventilation, than they must have enough air at the start to last them while confined. Bees may be in such a dormant condition as to require a very small amount of air.

S. T. PETTIT, BELMONT, ONT.—Not a question in my mind but the "bee men" above referred to believe that they are telling us the truth. But evidently they are laboring under a mistake. The bees get air in some way or other so I think at least. Hives whose parts except the entrance, which are hermetically sealed, are not always so after being exposed to the action of wet and cold.

ALLEN PRINGLE, SELBY, ONT.—The laws of nature are indeed "inexorable," and the bee-men are, we are to assume, also telling the truth so far as they know. There may *apparently* be no ventilation, "not a particle," but really there is some, more or less. Hence the question resolves itself into this: How is it that bees will winter sometimes with so small an amount of air? The answer is: Because their other conditions, including especially the thermal, are so favorable that but a minimum of air is required.

J. E. POND, JR., FOXBORO, MASS.—As air is actually and absolutely necessary to sustain animal heat, we must conclude that those who say their bees live without it are mistaken. I don't believe that a colony of bees would live if hermetically sealed up, although I know that a small amount only of fresh air is necessary for their sustenance. I don't accuse "bee-men" of

lying, but I don't believe any hive has ever yet been made so tight, that "no ventilation at all—not a particle," was found therein.

H. COUSE, THE GRANGE, ONT.—Cannot attempt an explanation. Think without a particle of ventilation "is saying a great deal, would like to know how a repository could be made which would not admit of ventilation in some way; a few colonies in a large repository without any direct or apparent ventilation might come through all right. I would not care to risk many colonies in a repository without making provision for ventilation. I would propose as an experiment that the enquirer place a small nucleus of bees together with all the other essentials into an air-tight jar and report results.

P. H. ELWOOD, STARKVILLE, N. Y.—These bee-men are *not* telling the truth. That an American bee periodical should permit some of its leading paid contributors to advocate no ventilation together with any amount of moisture in the air shows culpable ignorance. That the author of a "scientific" work on bee culture should recommend substantially the same—perhaps not much more air than the hive contains—is a direct insult to the intelligence of the beekeepers of this country. It is time that we quit paying for such nonsense. Now that physiology is taught in our common schools any school boy should know better.

PROF. A. J. COOK, LANSING, MICH.—The air respired depends on the activity. When we sleep we respire less than when awake; when in active exercise of either muscle or brain more than when quiet. So too the bee. When in winter quiet the bee is almost quiescent and breathes very slowly. As I have before stated, the vital action of bees may be kept so low in winter that possibly the air of the hive alone may serve the needs of the bee. Ventilation of repositories is not to give air so much as to secure warmth—to keep the repositories at the suitable temperature. People frequently send me live insects in boxes in which are numerous holes. It is better to shut the box entirely tight.

S. CORNEIL, LINDSAY, ONT.—It is a risky statement to make regarding any repository, to say that it has "no ventilation at all, not a particle." Air is very thin stuff, 700 times as thin as water. Coal oil will waste through the pores of the oak staves of a barrel. It should not surprise any one if air finds places for escape and entrance, in bee repositories, which, to common observers, appear to be "air tight." A large repository with only a small number of stocks may require no special provisions for ventilation. If

a fire is kept going above the bees it will cause a slow change of air, even without special outlet and inlet pipes. The ventilation of the *hive* is of much more importance than that of the *repository*.

DR. J. C. THOM, STREETSVILLE, ONT.—No ventilation at all is only comparative, there was in these repositories a constant access of air to the chamber provided by (1) brick walls and mortar if built of that material, (2) by stone and mortar if stone, (3) by wood transmitting interchange of gasses freely through its pores, (4) if the bees were in a cave a large amount of air would be transmitted to it through the earth, itself. The bee men referred to did not perceive any ventilation apparent to them and therefore concluded erroneously that none existed.

G. W. DEMAREE, ESQ., CHRISTIANBURG, KY.—Because the "this" is not "thus." When we hear of bees coming through the winter without a "particle" of air, we know that the person who tells the story was deceived in his calculations. Bees in the hibernal state, at such times as they very nearly approach the state of torpidude, require but little air, comparatively speaking. But cut the air supply entirely off and they will perish as sure as the laws of nature are unerring. Several years ago a neighbor of mine had some bees in a new fangled hive that was made water tight, except at the entrance. There came a heavy sleet and he lost several colonies. The sleet closed the entrance and the air supply was cut off and the result was death to the bees.

BY THE EDITOR.—If you mean that there is no ventilation from even the bottom of hive; in other words only the air in hive, we might say that a case of the kind, has never come under our notice. We think our bees would not winter in that way.

SUNDRY SELECTIONS.

THE HEDDON STRAIN.

ROBERT KENNEDY.—What kind of bee is that called the Heddon? Is it a better bee than the Italian and why preferred?

We have not yet seen any of the Heddon strain and cannot say from experience anything about them, but think they are a cross between the Carniolan and Italian and Mr. Heddon claims to have selected and bred from his best stocks. By sending to him for a queen you will be in a position to test their qualities.

REMOVING COMBS FOR WINTER.

Should all the frames and combs be removed from the hive except the seven or eight in the brood chamber or end beyond the division board for wintering a colony, and which end is better for brood chamber, entrance being in the end of hive?

It is better to take the surplus combs out as the moisture would likely condense in them and cause them to become mouldy. Leave the brood chamber in back end of the hive if you continue the entrance from division board to the front by fitting in a board with half inch strips on the under side, otherwise use front end.

Is a one-and-a-half story hive the best, leaving comb racks in the under part and putting boxes in the upper part, not extracting until season is nearly over, then removing upper part, extracting and leaving hive for winter; or returning lower combs until it is time to put bees in winter quarters.

We would not advise extracting from lower story late in the season. Surplus honey may be extracted from either first or second story as you desire. Extracting should commence as soon as the combs are sufficiently filled and partially capped.

Should the brood chamber be covered as far as division board to keep the queen from entering the upper part, or not?

You may if you choose, but it is not necessary unless you are raising comb honey, sometimes not then.

BEEES IN WINTER.

Should bees be looked after in bee-house by lifting the cushions or left quiet?

We never examine our bees after having once placed them in the bee-house, but always watch the temperature. You may examine them by merely raising the cushion or cloth to look, but jarring them or exposing them to light irritates them. It is better to keep the temperature above than below 45° in the bee-house or cellar.

I think I noticed that you had a way of catching swarms that were inclined to go away. Am I correct? I use the Gallup hive, would your one-piece sections fit in an upper cover or crate on this kind of hive?

Bethany, Ont., Jan. 6, 1886.

Our mode of catching swarms is described in a back number of the JOURNAL. Our sections are 3½ x 1¼. We also

make any size desired; by giving inside measurement of your surplus apartment we can make sections to suit.

REPORT FROM G. GUYER.

G. GUYER.—Well my friends: I have come to the conclusion that it is time to send in my report. Some of you may remember that when making my spring report I spoke of two colonies which were in a very weak condition, I succeeded in bringing them through the spring, one of them swarmed twice, the other not at all, but it became very strong. The seven other stocks came through the spring in very fair condition. I must say that I think "I have much to be thankful for." I have had good success since I commenced bee keeping which was in the spring of '82, having lost none as yet by wintering or spring dwindling. My honey crop this season has been below the average the cause of which I attribute to heavy increase; my health not being good at the time swarming impulse was at its height the bees had their own way rather too much the previous season. When I got around I found I had too many swarms and too light in stores. This season in this locality first swarms were very heavy and after swarms very light. Part of the month of August was very cold here which is as you know a drawback. Several of my bee-keeping neighbors had heavy losses last winter and feel quite discouraged. One of these who for some years past has kept as many as 100 colonies, now has but three or four and it is a hard matter to keep even these through the long cold winters. How is this? Another who in former years made dollars and cents in considerable numbers cannot now make even cents. He seems to be well posted on almost every point. As wintering bees is one of our most important questions in this northern locality I give you my method. I stop extracting about the 15th of August, or shortly after, weigh all my hives making a note of what is required to have them in good shape. I work to that end and by first week in September weigh them again watching every movement of bees, weather and honey flow. If the quantity of natural stores are not to be procured in time I feed sugar syrup and contract the brood-chamber in good time to suit the strength of the colony. I keep up brood-rearing as late in the fall as possible to have plenty of young bees with which to go into winter quarters.

My spring count was nine, increased to twenty-one, sold three and gave one away; doubled back to fourteen, took 540 pounds of honey, ten pounds of which was comb the balance extracted, sold the former at fifteen cents per pound and the latter at twelve and a half cents;

and could have sold as much more at those figures, I have no fear of the markets becoming over-crowded in this part of the country. The trouble with me is that I cannot produce enough to supply the demand. You will hear from me again in spring.

Port Elgin, Dec. 28th, '85.

You should show your less successful neighbors how to winter their bees. It appears that success for a few years with some makes them careless. Those who have lost through wintering should follow the methods of the successful. Your success should surely stimulate the unfortunate to greater exertions and when you tell them how you wintered they can do likewise.

THE CANADIAN BEE JOURNAL.

JONES, MACPHERSON & CO.,

EDITORS AND PUBLISHERS,
BEETON, ONTARIO.

WEEKLY, \$1.00 per Year, Postpaid

BEETON, ONTARIO, JANUARY 27TH 1886.

We have lots of most anything that will be needed to ship out immediate orders, and until we begin to be crowded our standing five per cent discount will continue.

The London *Free Press* sends us a handsome calender for 1886, the production of their lithographing department. They are to be congratulated on the splendid quality of the work, which if a sample of the general turn-out, should ensure the *Free Press Co.* a good share of patronage.

CARP FOR CANADA.

We notice in a communication from the chief of the Division of Distribution, Washington that some arrangements are being made to send a batch of carp to Canada next fall. Further particulars may be gained from the editor, *Advocate*, London.

Orders for sections are coming in very freely and we are turning out large quantities every few days. In view of the large number of nice white sections that are likely to be needed for the Colonial Exhibition, we have been putting in a heavy stock of suitable basswood and unless the orders which come in exceed 2,000,000, we can meet the demand. We will be able in a few days to furnish our customers with the V groove if they wish it. At present we make only the square groove.

A CHANGE IN THE FIRM NAME.

By reference to the advertising columns our readers will observe that the firm name of the publishers of the CANADIAN BEE JOURNAL has been changed from "D. A. Jones & Co." to "Jones, Macpherson & Co." The change is because of the organization of a joint-stock company for the carrying on of the bee, honey and supply business as "the D. A. Jones Company," and is merely a legal formality which the formation of the company necessitated. There is no change in the *personel* of the firm.

PRICE LISTS RECEIVED.

J. A. Simmers, Toronto, Ont.—Seeds of all kinds, for 1886.

Cant Bros. & Co., Galt, all kinds of wood-working machinery.

Western Bee-Keeper's Supply House, Joseph Nysewander, Manager, Des Moines, Iowa, Italian queens and bees a specialty and all kinds of supplies.

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.

R. A. BURNETT.

Chicago,

CINCINNATI.

There is a very slow demand from manufacturers for extracted honey, with a large supply in the market, while the demand is very good for clover honey in square glass jars. Prices for all qualities are low and range from 4 to 8 cents a pound on arrival. Supply and demand is fair for choice comb honey in small sections, which bring from 12 to 15 cents per pound on arrival. Good yellow beeswax is in good demand and arrivals are fair. It brings 20 to 22 cents on arrival.

CHAS. F. MUTH.

Cincinnati,

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.

FOUL 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.

WANTED!

A position as Manager or Assistant by an experienced Apiarist. Best of references.

Direct, APIARIST, care of D. A. Jones, Beeton.

VANDERVORT

Comb Foundation Mills.

Send for samples and reduced price list.

JNO. VANDERVORT, Laceyville, Pa.

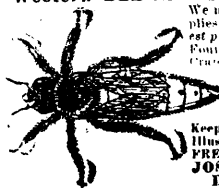
OUR FRIENDS IN CANADA.

WISHING EARLY QUEENS.

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.

J. W. K. SHAW, & Co.,
Loreauville, Iberia Parish, La.

Western BEE-KEEPERS' Supply House.



We manufacture Bee-Keepers' supplies of all kinds, best quality at lowest prices. Hives, Sections, Comb Foundation, Extractors, Smokers, Cloths, Honey Buckets, Veils, 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 NYSEWANDER, 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 of 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

Bee-Hives, Honey-Boxes, Sections.

Largest Bee-Hive Factory in the World.

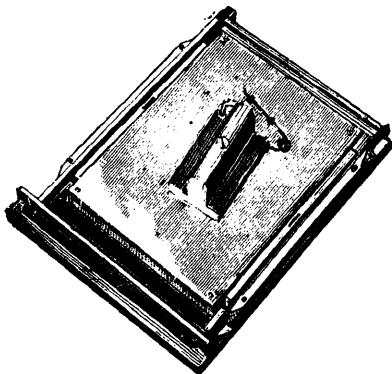
Capacity, one car-load per day. Best of goods at lowest prices. Write for price-list.

G. B. LEWIS & CO.
WATERTOWN, WIS

EASILY NAILED.

THE MITCHELL FRAME NAILER.

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



PRICES.

For Jones' Frame	\$1.25
For Langstroth's Frame	\$1.50

Ready to go by express or freight.
D. A. JONES, BEETON, ONT

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 a rival 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

P. L. VIALLOU.
BAYOU GOULA Louisiana a

GIVEN FOUNDATION PRESS

The Given Press is the only perfect machine in the Market for making wired frames of Foundations, while our customers claim its superiority for Sections. James Heddon, George Grim, Oatman Bros. and others affirm its superiority. For Circulars and Samples. Address

J. R. Caldwell & Co.,
Hoopeston, Ill., U. S. A

ONE MOMENT PLEASE

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.

F. BOOMFOWER, Gallupville, N. Y.

Beeton Printing & Publishing Co.,

FINE BOOK, JOB, & LABEL PRINTING.

Send for our FREE "Honey Label" circular. Printing furnished promptly, and neatly done. Estimates of "circular" and other work on application.

F. H. MACPHERSON,
3-1-1. Manager, Beeton, Ont.

GLASS JARS!

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

		Gross.	Half gross
"Crown" brand"	1 Pint	\$14.75	\$7.50
" "	1 Quart	15.75	8.00
" "	1/2 Gallon	19.00	9.75

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

D. A. JONES.

FRIENDS If you are in any way interested in BEES AND HONEY.

We will with pleasure send you a sample copy of our **SEMI-MONTHLY GLEANINGS IN BEE CULTURE**, with ad descriptive price-list of the latest improvements in HIVES, HONEY EXTRACTORS, COMB FOUND TION, SECTION HONEY BOXES, all books and journals, and everything pertaining to Bee Culture. Nothing Patented. Simply send your address on a postal card, written plainly A. I. ROOT, Medina Ohio

Queen City Oil Works!

The Highest Honors and Gold Medal For Our

PEERLESS OIL,

Manufactured only by

SAMUEL ROGERS CO.
Toronto, Ont.

BARNES' FOOT-POWER MACHINERY.



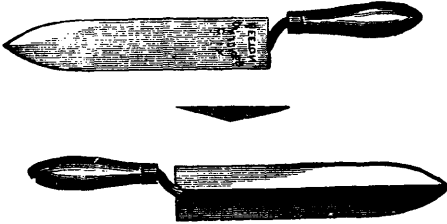
Read what J. I. PARENT, of CHARLTON, N. Y., says—We cut with one of your Combined Machines, last winter, 50 chaff hives with 7-inch cap, 100 honey-racks, 500 broad frames, 2000 honey boxes, and a great deal of other work. This winter we have double the amount of bee-hives etc., to make and we expect to do it with this Saw. It will do all you say it will." Catalogue and Price-list Free. Address, W. F. & JOHN BARNES, N 472 Ruby St., Rockford, Ill.

FLAT-BOTTOM COMB 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, mirror polish.....\$1 50
 - Ebony Polished Handle, glazed polish..... 1 25
 - Wood Polished Handle, glazed polish..... 1 00
- If by mail, add 15c extra for each knife.
D. A. JONES, Beeton, Ont.



Electrotypes

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

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

THE INVERTIBLE HIVE

INVERTIBLE FRAMES,

- Invertible Surplus Honey Cases,
- 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

J. M. SHUCK,
DES MOINES, IOWA.

BEEES AND HONEY

TO ALL that are interested in Bees and Honey, send for our Free and Illustrated Catalogue of Apiarian Supplies. Address

M. RICHARDSON & SON,
Port Colborne, Ont

APIARIAN SUPPLIES

MANUFACTURED BY

W. T. Falconer - Jamestown, N. Y.

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

DOVE-TAILED SECTION.

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

COMB HONEY PACKAGES.

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 100, \$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,
Beeton, Ont

BEE-KEEPER'S GUIDE, OR MANUAL OF THE APIARY.

11,000 SOLD SINCE 1876,

The twelfth thousand just out. 10th thousand sold in just four months. 2,000 sold the past year. More than 50 pages and more than 50 costly illustrations were added in the 8th edition. It has been thoroughly revised and contains the very latest in respect to Bee-Keeping.

Price by mail, \$1 25. Liberal discount made to Dealers and to Clubs.

A. J Cook, Author and Publisher

State Agricultural College Lansing, Mich

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 1/4 x 4 1/4 (ours), and 4 1/4 x 4 1/4 (Langstroth), and can make any other sizes to order on short notice. Prices:

- Per 1,000.....\$ 6 00
- " 5,000..... 27 50
- 10,000..... 50 00

Sample sections sent on application.
D. A. JONES,
Beeton, Ont