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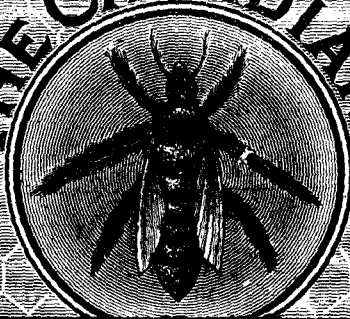
VOL. III, NO. 45

1887

FEBRUARY 1, '88.

PUBLISHED EXCLUSIVELY IN THE INTERESTS OF THE HONEY PRODUCER

THE CANADIAN



JOURNAL

THE FIRST \$

WEEKLY

IN THE WORLD

ONE DOLLAR PER YEAR

THE GREATEST POSSIBLE GOOD TO THE GREATEST POSSIBLE NUMBER

PUBLISHED BY
THE D. A. JONES CO. LTD.
BEETON ONT.

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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
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Heddon's Success in Bee Culture	1 50	1 40
"A year among the Bees," by Dr C. C. Miller.....	1 75	1 60
A Bird's-eye view of Bee-keeping by Rev. W. F. Clarke.....	1 25	1 15

"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

THE D. A. JONES CO., LD, Publishers Beeton

BEE-KEEPERS' LIBRARY.

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

- A. B. C. IN CARP CULTURE, by A. I. Root, in paper 50c.
- "A YEAR AMONG THE BEES." by Dr. C. C. Miller. Price, 75c.
- 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.
- BEE-KEEPERS' HANDY BOOK, by Henry Alley. Price in cloth, \$1.50.
- PRODUCTION OF COMB HONEY, by W Z Hutchinson. Paper, price, 25c.
- THE HIVE AND HONEY BEE, by Rev. L. L. Langstroth. Price, in cloth, \$2.00.
- A BIRD'S-EYE VIEW OF BEE-KEEPING, by Rev. W.F. Clarke. Price 25c
- FOUL BROOD, ITS MANAGEMENT AND CURE by D. A. Jones. Price, 11c. by mail, 10c. otherwise.
- SUCCESS IN BEE CULTURE as practised and advised by James Heddon—price in paper cover, 50 cents.
- BEEKEEPERS' GUIDE OR MANUAL OF THE APIARY, by Prof. A. J. Cook. Price, in cloth, \$1.25.
- 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.

SHOW CARDS.

PURE HONEY FOR SALE.

Size 12 x 18 inches.
Each.....\$0 05
Per 10..... 0 40

These are printed in two colors and are useful for hanging in the stores, where your honey is placed for sale. We have also "Bees for Sale," "Apiary Supplies," and others.

THE D. A. JONES CO., Beeton, Ontario.

MUTH'S HONEY EXTRACTOR.

Perfection Cold Blast Smokers, Square Glass Honey Jars, etc. Send ten cents for "Practical Hints to Beekeepers." For circulars apply

CHAS. F. MUTH & SON.

Cor. Freeman & Central Avenues Cincinnati

PUBLISHERS' 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. I. 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.

Subscriptions are always acknowledged on the wrapper label as soon as possible 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 us good naturedly, but if you cannot, then write to us anyway. 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 55 cents each, post paid, with name printed on the back in Gold letters.

Subscription Price, \$1.00 per Annum Postage free for Canada and the United States; to England, Germany, etc., 10 cents per year extra; and to all countries 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.

ADVERTISING RATES.

All advertisements will be inserted at the following rates

TRANSIENT ADVERTISEMENTS.

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

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

STANDING ADVERTISEMENTS.

	3 MOS.	6 MOS.	12 MOS.
6 lines and under.....	2.50	4.00	6.00
One inch.....	\$4.00	\$6.00	\$10.00
Two inches.....	5.50	9.00	15.00
Three inches.....	7.00	12.00	19.00
Four inches.....	9.00	15.00	25.00
Six inches.....	12.00	19.00	30.00
Eight inches.....	15.00	25.00	40.00

STRICTLY CASH IN ADVANCE

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

CLUBBING RATES

THE CANADIAN BEE JOURNAL

AND "Gleanings," semi-monthly.....	\$1.75
"American Bee Journal," weekly.....	1.75
"American Apiculturist," monthly.....	1.75
"Bee-Keepers' Magazine," monthly.....	1.40
"Bee-Keeper's Guide," monthly.....	1.40
"Rays of Light".....	1.20
"The Bee-Hive".....	1.20
"Beekeepers' Review".....	1.20
"Beekeepers' Advance".....	1.20

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 thorough 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

TABLE OF CONTENTS.

	PAGE
A new enemy.....	914
A lost opportunity.....	917
Bee-keepers, Haldimand.....	926
Cellar, Heating artificially.....	915
Constitution and by-laws, O.B.K.A.....	910
Diary, Extracts from my.....	912
Death by accident.....	910
Editorial.....	909
Foul brood—a new idea of curing.....	916
Hibernation theory—Stingers as trowels.....	912
Postal arrangements, New.....	909
Season at Morpeth—Honey from white beans.....	918
Tree planting and fencing.....	918

A NEW INVENTION
NO BACKACHE.
RUNS EASY



7½ Cords of Beech have been Sawed by one man in nine hours. Hundreds have sawed 5 and 6 cords daily. "Exactly" what every Farmer and Wood Chopper wants. *First order from your vicinity secures the Agency.* No Duty to pay, we manufacture in Canada. Write for Illustrated Catalogue sent FREE to all. Address **FOLDING SAWING MACHINE CO., 308 to 311 S. Canal St., Chicago, Ill.**

BEES FOR SALE.

To Be Disposed Of At Once.

We have 200 colonies more than we require, and to any one who wishes to embark in the business, we will sell in lots of fifty or over, at a very low rate, and with satisfactory security we will meet our customer as to time, should it be needed. This is a splendid chance. The price will be away down low. If you have any thought of investing, at least write us for particulars.

THE D. A. JONES CO.,
 BEETON, ONT.

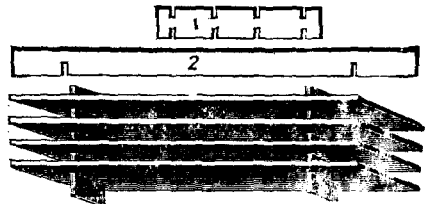
FEEDERS.



We have quite a number of the ordinary Feeders yet in stock which we will sell at 40c each per 25, \$8.75. These cannot go by mail, so must be sent by express or freight.

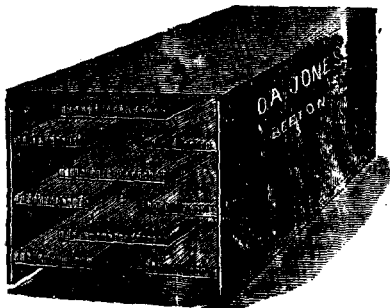
IMPROVED CANADIAN FEEDER.

This is the Feeder spoken of on page 610 of the current volume of the JOURNAL. It is arranged with the float as shown in the engraving below. Holds 12 to 15 pounds of feed, and



may be divided making two feeders if needed. The price is 50c. each, made up; per 25, \$10.00. In flat each 40c.; per \$8.75. All orders can be filled by return freight or express.

WINTER FEEDERS.



For feeding in winter, or at any time when the weather is too cold to admit of feeding liquids.

Price each, made up.....	\$0 30
Per 10, ".....	2 75
Price each, in flat.....	20
Per 10, ".....	1 75

These are placed above the cluster, filled with candy which is made by taking pulverized or granulated sugar, and stirring it into honey nicely warmed up, until the latter will not hold any more in solution. Allow the mass to stand till both are thoroughly mixed. Then place in Feeders and set over frames, packing around nicely to keep in the heat.

THE D. A. JONES CO., LD.,
 BEETON.

HONEY WANTED!

We will take all the No. 1 EXTRACTED HONEY that is offered us at
10c. PER POUND

In exchange for supplies at our Catalogue prices. The honey is to be delivered at our own station, charges paid, but where it is sent to us in our own style of sixty pound tins we will allow 30 cents each for them or we will return them to the shipper at his expense. We cannot undertake to pay for any other style of package, though we will be agreeable to return them when empty.

For No. 2—off color—we will pay 9 cents per pound, same conditions as above.

For No. 3—Buckwheat and unsaleable grades for table consumption—we cannot offer more than 6 cents, as above.

Samples had better be sent us in all cases. They can be sent us safely, in small phials, which must be packed in wool or batting and put in a pasteboard box of suitable size.

For prices where supplies are not wanted, write us.

If you are satisfied that your honey will rank No. 1, you can send it along without sending sample.

Always send us an invoice of the weight and number of packages and put your name on every package.

Where it is not convenient for you to prepay the freight, we can pay it at this end and charge the amount on account.

The D. A. JONES CO., *Ld.*, Beeton, Ont.

IF

YOU ARE A SUBSCRIBER

—TO THE—

CANADIAN BEE JOURNAL

THIS OFFER WILL INTEREST YOU.

This Special Offer is made to *Subscribers* of the CANADIAN BEE JOURNAL.

To *Every Subscriber* who will forward to us the name of a *new* subscriber, accompanied by \$1.00, before April 1st, we will send FREE a copy of Rev. W. F. Clarke's "Bird's Eye View of Bee-Keeping," price 25 cents, or W. Z. Hutchinson's "Production of Comb Honey," price 25 cts.

To those sending us the names of two *new* subscribers, accompanied by \$2.00, we will send FREE a copy of James Heddon's "Success in Bee Culture," price 50 cents.

To those sending us three *new* names, with \$3.00, we will send Dr. C. C. Miller's "A Year among the Bees," price 75 cents.

To those sending us four *new* names and \$4.00, we will send A. I. Root's "A. B. C. in Bee Culture," paper, price \$1.00.

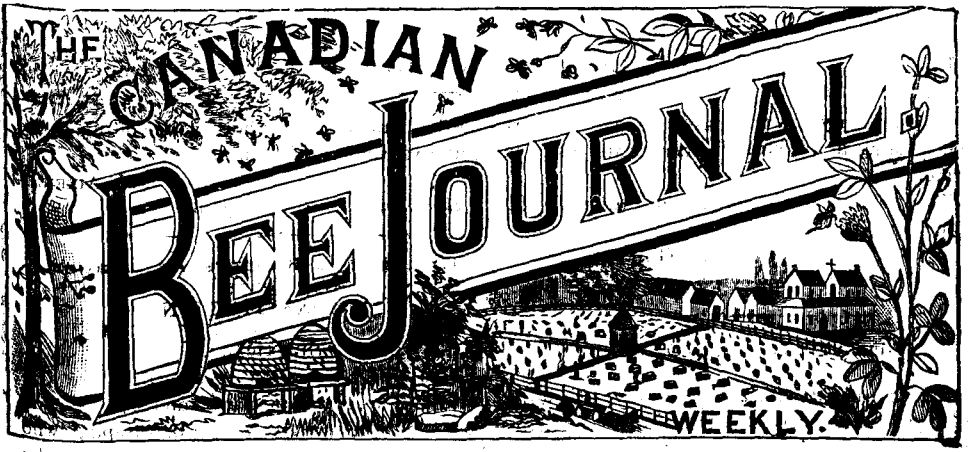
To those sending us five *new* names and \$5.00, we will send either Prof. Cook's "Bee-keepers' Guide," cloth, or Root's "A. B. C. in Bee Culture," cloth; price, each \$1.25

This offer is only to subscribers. Should anyone not at present a subscriber, wish to avail themselves of the offer, \$1.00 extra for their own subscription will make them eligible.

To all subscribers who send us ten *new* names and \$10.00, we will send FREE, Jones' No. 1 Wax Extractor, price \$4.00.

We will send sample copies for use in canvassing, on application.

THE D. A. JONES CO., *Ld.*, Beeton, Ont.



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

VOL. III. No. 45

BEETON, ONT FEB. 1, 1888.

WHOLE No. 149

EDITORIAL.

The last applicant for apicultural favor is the *Western Bee-Keeper* published by Joseph Nysewander, Des Moines, Iowa, the first number of which is before us. It is to appear monthly and is published at 25 cents per year.

NEW POSTAL ARRANGEMENTS.

We publish below the new regulations with regard to newspaper matter, etc., which have just been issued by the Post Office Department at Ottawa. It will be interesting to all of our readers we have no doubt:

POST OFFICE DEPARTMENT, OTTAWA.

In order to simplify the classification of matter passing by mail between places within the Dominion, and also the regulations relating thereto, and further to provide for including therein such articles of merchandise and other miscellaneous matter not hitherto admitted to pass by mail in Canada in open packets, all matter so passing by mail between places within the Dominion will be divided into five classes as follows:

FIRST CLASS.—Will include letters and post cards.

SECOND CLASS.—Newspapers and periodicals, printed and published in Canada, and posted under the prescribed conditions entitling them to pass free to regular subscribers.

THIRD CLASS.—Other newspapers and periodicals not entitled to free transmission, books

and printed matter generally, printed circulars, also bona fide patterns and samples, packages of seeds and other matter now authorised to pass at the prepaid postage rate of 1 cent per 4 oz. of weight.

FOURTH CLASS.—Closed parcels at parcel post prepaid rate of 6 cents per 4 oz. of weight.

No alteration is made in the postage rates or regulations now applicable to matter included in the above four classes, but a fifth class is created to provide for the additional articles hereby to be admitted to pass by mail between places within the Dominion.

FIFTH CLASS.—Will include miscellaneous matter of all descriptions not belonging to either of the above classes, and not excluded from the mails by the general prohibitory regulation with respect to objectionable matter. Fifth-class matter must be so put up as to be fit for conveyance in the mail bags, and yet admit of ready and full examination by the officers of the post-office. The postage on fifth-class matter must be prepaid by postage stamps securely affixed thereto, at the rate of 1 cent per ounce weight or fraction of an ounce. The limit of weight for fifth-class matter will be 4 pounds for any single package, and as respects dimensions, the ordinary limit of 2 feet in length by 1 foot in width or depth. Transmissions of the fifth class will be subject to the general prohibitory regulation excluding from the mails all matter liable to destroy, deface or otherwise damage the other contents of the mail bags or injure the person of any officer or servant of the post office, as well as all obscene or immoral matter. A packet of fifth-class matter may be posted for registration on pre-payment, by 5 cent registration stamp, or 5 cents in addition to the postage charge, and it

will be the duty of a postmaster to give the person posting a registration certificate for the same.

This regulation will go into operation on and from Feb. 1st next.

W. H. GRIFFIN,
Deputy Postmaster-General.

DEATH BY ACCIDENT

On Sunday the 22nd January, the wife of Mr. Henry Stennett, of the township of Blanchard, was killed by being thrown from a sleigh while returning from St. Mary's, where they had been at church. The horse became unmanageable and Mr. Stennett losing control was first thrown out. The animal then ran away and Mrs. Stennett was thrown against a post. She lived but a few moments after the accident occurred.

We regret very much to have to record this melancholy accident by which the life of one of our most prominent lady bee-keepers has been taken away. Mrs. Stennett has been eminently successful in the pursuit which she chose as her favorite. She was a sister of Mr. A. G. Willows, of Carlingford, a late director of the O.B.K.A. The sympathies of the BEE JOURNAL go with the friends who are called upon to mourn this loss. On Saturday last we received a letter from Mrs. Stennett and were more than surprised when we noticed the item in the dailies recording her death. It reminds us very forcibly of the fact that "in the midst of life we are in death." We have received the following information from Mr. Aiken, of St. Mary's:

A very sad accident occurred in St. Mary's yesterday Sabbath Jan. 22nd, whereby our sister bee-keeper, Mrs. Stennett, of this place, came to her death. She and her husband went to church Sabbath morning, and on their way home on the main street the horse became unmanageable and Mr. Stennett was thrown out of the cutter but escaped without any serious injury. A short distance farther on Mrs. Stennett was also thrown out, but coming in contact with a tie post, was instantly killed. This sad affair has cast a gloom over the whole community as Mrs. Stennett was a person highly esteemed and greatly beloved by all who knew her. A very deep and heartfelt sympathy is felt for the bereaved family. As she was well known amongst

bee-keepers perhaps a short notice of this in the JOURNAL would not be amiss.

W. AIKEN.

St. Mary's, Ont., Jan. 23, '88.

Ontario Bee-Keepers' Association.

CONSTITUTION.

ARTICLE I.

This Association shall be known as the Ontario Bee-keepers' Association and shall be composed of those interested in bee-keeping who become enrolled as members by paying the annual membership fee of one dollar.

II.

A general meeting of the members shall be held once a year and shall be known as the Annual Meeting.

III.

The time and place of holding the Annual Meeting shall be fixed by open vote of the members present at the Annual Meeting previously held.

IV.

The President, Vice-President and District Directors shall constitute the Board of Management.

V.

Five members of the Board shall constitute a quorum.

VI.

Vacancies on the Board by death or resignation shall be filled by the President.

VII.

Any county or district bee-keepers' association in the Province of Ontario may become affiliated to this Association on payment of five dollars which shall be paid to the Secretary on or before the first day of November in each year, but every local association so affiliated must have on its membership roll at least five members who are also members of the Ontario Bee-keepers' Association at the time of its affiliation and must continue to have a like number of its members on the roll of this Association while it remains in affiliation.

VIII.

Every affiliated association shall receive an annual grant out of the funds of this Association. The amount of such grant shall be fixed by the Board from year to year.

IX.

All grants to affiliated associations shall be expended in prizes for honey shows, or for shows of apianian appliances, or for lectures on subjects pertaining to bee-culture, or for advertising district or county meetings, or for any or all of these.

X.

Every affiliated association shall report to the Secretary of this Association (on a form to be supplied by the Secretary) before the first day of January in each year, which report shall be signed by the President and Secretary of the affiliated association.

XI.

This Constitution may be amended at any Annual Meeting by a two-thirds vote of the members present.

BY-LAWS.

(1) It shall be the duty of the President to preside at all meetings of the Association, to call for reports, to put motions when seconded, to decide upon questions of order and to declare the result of ballots and elections. The President, in connection with the Secretary, shall have power to call special meetings when necessary. The President shall be ex-officio chairman of the Board of Directors and shall call it together when necessary.

(2) In the event of the death or absence of the President, the Vice-President shall discharge his duties.

(3) It shall be the duty of the Secretary to keep and preserve the books of the Association. To call the roll and read the minutes at every meeting of the Association. To conduct all correspondence of the Association. To receive and transfer all moneys received for fees and otherwise to the Treasurer having taken a receipt for the same. To make out a statistical report for the Association and for the Government. To furnish the officers of county and district associations with forms for organisation and annual reports, and to give notice of Association and board meetings through the press or otherwise.

(4) It shall be the duty of the Treasurer to furnish two sureties in the sum of \$500 each for the security of the moneys of the Association. To receive from the Secretary all moneys belonging to the Association and to give receipts for the same. To pay them out on order endorsed by the President and Secretary, and to render a written report of all receipts and disbursements at each Annual Meeting.

(5) County or district associations seeking affiliation shall forward to the Secretary an application according to the following form: "We whose names are written in the accompanying form having organised ourselves into a county (or district) Association to be known as County (or District) Association No. — desire to become affiliated to the Ontario Bee-keepers' Association and we agree to conform to the Constitution and by-laws of said Association."

(6) Every affiliated association that neglects or refuses to pay the annual affiliation fee, or neglects or refuses to forward to the Secretary the annual report on or before the date fixed may be deprived of their affiliation privileges by the Board.

(7) Each affiliated association shall be entitled to the privilege of two representatives at the meetings of this Association in addition to those who are already members of this Association, and such representatives shall be entitled to all the rights and privileges of members of this Association.

(8) Each affiliated association shall be entitled to the services of an Association lecturer (when such exists) once in each year. Half the expenses connected with such lecture to be borne by the District or County Association and half by this Association.

(9) Districts or counties where no affiliated association exists, but into which an association lecturer is sent by this Association the whole expenses of such lecture shall be borne by this Association.

(10) The order of business by which the meetings of this Association shall be governed shall be in the discretion of the President but subject to appeal to the meeting when objection is taken when a majority vote of the members present shall decide on the objection and in such cases the vote of the majority shall be final.

(11) These by-laws may be amended by a majority vote of the members present at any annual meeting.

SCHEDULE OF DISTRICTS.

(1) Stormont, Dundas, Glengarry, Prescott and Cornwall.

(2) Lanark, Renfrew, City of Ottawa, Carleton and Russell.

(3) Frontenac, City of Kingston, Leeds, Grenville and Brockville.

(4) Hastings, Prince Edward, Lennox and Addington.

(5) Durham, Northumberland and Victoria.

(6) York, Ontario, Peel, Cardwell and Toronto.

(7) Wellington, Waterloo, Wentworth, Halton, Dufferin and Hamilton.

(8) Lincoln, Welland, Haldimand and Monk.

(9) Elgin, Brant, Oxford and Norfolk.

(10) Huron, Bruce and Grey.

(11) Perth, Middlesex and London.

(12) Essex, Kent and Lambton.

(13) Algoma, Simcoe, Muskoka, and Parry Sound.

FOR THE CANADIAN BEE JOURNAL.

The Hybernation Theory--Stingers as Trowels.

ON page 877 of the C.B.J., Rev. W. F. Clarke conveys the idea that the "hibernation" theory as advocated by him is gaining ground, or as he expresses it, the idea is making progress. He says "gradually the great mass of bee-keepers have become convinced that there is something in it, and there is hardly an issue of any bee journal in which some one does not more or less decidedly endorse it. As an illustration I will cite the last number of the *A.B.J.* One correspondent says:—"I have now fifty-nine colonies packed on the summer stands for wintering, and from outward appearance they are enjoying the quietude desirable for safety."

Of course "the great mass of bee-keepers" believe that bees winter best to be in a quiet condition, but they have by no means "gradually become convinced" of anything of the kind since the promulgation of the "hibernation" theory, for, if I mistake not, Mr. Clarke first spoke of "Hibernation of Bees" in the *A.B.J.* for July 9, 1884, less than four years ago, and twenty-six years ago the *A.B.J.* in its "monthly management" for December said: "The less the bees are disturbed at this season, when complete repose is so essential to them, the better." Has the correspondent quoted by Mr. Clarke made any further progress with the idea than the good old *A.B.J.* had made in the first year of its existence? Whatever change has taken place in the minds of bee-keepers generally in the last few years has been, I think, just the opposite of what Mr. Clarke intimates. I think this is shown pretty clearly in the initial number of the *Bee-keepers' Review* to which Mr. Clarke refers, and concerning which he says: "I venture to predict that 'correspondence, editorials and extracts' will all concur in advising such management as is calculated to secure the profoundest living slumber of which bees are capable." The fact is that the bulk of testimony was to the effect that disturbing bees in winter was by no means so injurious as we had years ago been taught to think, and the editor says: "Our faith in the popular belief that disturbing bees in winter is necessarily injurious has been entirely destroyed." As to the correctness or incorrectness of the "hibernation" theory I have only this to say, that I suspect that in it "whatever is new is not true, and whatever is true is not new."

Mr. Clarke in closing says: "I am not the father of the hibernation theory. It is Prof. Cook's discarded bantling." I can hardly think it kind in Mr. Clarke to persist in making such a statement, when he must know that in what

Prof. Cook considers the proper sense of the word "hibernate" that he (Prof. C.) thinks that bees never hibernate, and never did think so, and when Mr. Clarke makes use of words that Prof. Cook spoke to make them mean something that Prof. Cook never meant, is Mr. Clarke following the Golden Rule?

THE STING-TROWEL THEORY.

And now, while speaking of Mr. Clarke, I may as well refer to his theory of the bees' sting. Whether any great harm can come from publishing that bees use their stings as trowels in fashioning wax I am not prepared to say. But I think it better that no erroneous teachings shall go forth to the world as truth. If this theory were confined to bee journals it would be a matter of less consequence, but it has gone into other papers and only a few days ago I saw stated in a Sunday School paper as a positive fact that bees use their stings in fashioning their combs. So far as I can remember no proof of the truth of the theory has ever been brought forward. If there is any proof by all means let us have it. If it was only a "scientific pleasantry" then I think Mr. Clarke owes it to truth to promptly do what he can to recall the pleasantry.

C. C. MILLER.

Marengo, Ill, Jan. 24th, '88.

For the Canadian Bee Journal.

EXTRACTS FROM MY DAIRY OF 1887.

GENERAL REMARKS.

THE winter of 1886-7 was notable for its severe and long-continued cold period. From Nov. 25, 1886 to Jan. 11, 1887, inclusive, a term of 47 days, the mean temperature as indicated by the thermometer carefully noted every morning, was a fraction of one degree below zero. The coldest morning during that time was Jan 7 when it was 36 below. There were a few days from Dec. 8 to 12 when it moderated and thawed a little, otherwise the average would have been considerably lower.

The remainder of the winter was more variable and not quite so severe. In the fall of 1886 I put a few colonies of bees into my cellar to experiment with, in order to become more familiar with the necessary conditions for successful cellar wintering. The others were wintered upon their summer stands, prepared in the manner described in the *CANADIAN BEE JOURNAL*, Aug. 31, 1887, page 471. They did not get an opportunity for a cleansing flight from Nov. 9, 1886, to March 9, 1887. I examined them all at the latter date, and every colony had capped brood in three, and most of them in four combs.

I never saw bees in better condition at that season of the year. On the 10th of April they began to bring in fresh pollen, and the prospect for a prosperous season was very encouraging. But the elements seemed unpropitious. The early blooming trees and shrubs did not yield their usual quantity of nectar. During the latter part of May dandelion and apple blossoms were abundant; yet the bees gathered no surplus therefrom, although at that time some colonies became so strong that it became necessary to remove a part of their brood and give them empty combs in place thereof to prevent them from swarming. The scanty flow of nectar in the early bloom of spring proved to be a precursor of the poor season which was to follow. From recollections of past experience I am inclined to believe that by careful observation of the development of events in spring, we may be able in some degree to prognosticate the following season's results in bee-keeping. But as I am not a prophet nor the son of a prophet I will leave this point. White clover blossoms began to appear on the 30th of May, and it bloomed abundantly all through the month of June, but it did not yield much nectar. The yield from linden was also very light. Buckwheat, golden rod, celandine, and a succession of other autumn flowers gave a moderate flow of nectar all through the month of August, and most of September; the 20th of September was a good day for honey gathering; bees worked about as lively on that day as at any time during the summer, and the honey which they gathered at that time was very white, whiter than any other honey that I ever saw, and has a peculiarly pleasant flavor. I looked around considerably to see if I could discover the source from which it was gathered, and I found the bees working very lively upon a species of wild astor, (sometimes called September weed). I could not find any other flowers in blossom at the time, therefore concluded it must be astor honey. After eating of it a few times my appetite hankered for it more than for any other kind of honey. I think that if this honey could be obtained in large quantities entirely free from mixture with other varieties, it would, by common consent, stand at the head of the list, on account of its beautiful appearance and exquisitely fine flavor.

I commenced the season of 1887 with 18 colonies and increased them to 47. I obtained 450 lbs. of comb honey in sections and 600 lbs. of ejected (extracted) honey, an average of about 58 lbs. per colony spring count. And besides this each of those 47 colonies had, I think it is safe to say, an average of 30 lbs. of honey per

colony for winter stores, without any feeding back. Not so very bad, after all, for a poor year, but the most of this honey was gathered from autumn flowers. The honey flow in August and September was far greater than it was in June and July.

PREPARING BEES EARLY—LIGHT REPOSITORIES FOR WINTERING.

My bees were all prepared for winter early, and appear to be in excellent condition at this present time, so far as I can judge from outward appearances. I am quite in favor of putting bees into winter quarters early. When they have once formed their cluster for winter, they seldom come out again to fly much for several weeks after, even if the weather is warm and favorable; and when they are done flying the sooner they are protected from exposure the better. Experiments in a small way, with careful observations of results, have inclined me to believe that too much stress is laid on keeping the cellar or repository dark when the bees are therein. To test this matter still further I have seven colonies now in my cellar, some of them so placed that the light from one of the windows shines directly into the entrance of the hives. The cellar is always light enough in the day time to see to work, or to read therein if need be, and is visited at all hours of the day by inmates of the house in the routine of their daily duties. Care being taken not to jar the bees, no further caution is observed in regard to noise, or any necessary movements in the cellar or house above, and yet the bees remain still and quiet as could be desired, not one having shown its head at the entrance this winter, unless the hive was purposely disturbed. The temperature of the cellar has been quite uniform so far this winter at about 42°. The foregoing, taken in connection with similar experiments extending through a number of winters now past—all of which were attended with uniform results so far as the effect of light is concerned—has brought me to the conclusion, that, when bees are in a healthy condition, and ventilation and temperature are right, darkness is not essential to secure that quiescent hibernal state which is so conducive to successful wintering. These experiments were only upon a small scale, with a few colonies at a time. With a large number of colonies piled one upon another the result might be different. Diseased bees will, as a matter of course, become uneasy and restless, and nothing but total darkness will prevent them from leaving the hive.

THE HEDDON HIVE.

When I commenced writing I intended to say something about the Heddon hive, but I see

that to enter very much into detail now, would make this article altogether too long. Yet I will just say that having bought of Mr. Heddon an individual right to make and use said hive in my own apiary, I have given it somewhat of a trial in a small way the past season, and am really well pleased with the result. I will not attempt to enumerate herein all of the good qualities of said hive, neither do I say that it has no faults, but there is one important feature about it which I want to mention, and that is, the facility with which the brood-chamber can be contracted during the honey harvest, without reducing the upper surface capacity for surplus cases, and no bothering with division-boards or dummies. This is an advantage which I think every practical honey producer can perceive and appreciate without any further explanation, if they will only consider the construction of the hive, and its adaptability to that purpose.

JOSHUA BULL.

Seymour, Wis., Jan. 16, 1888.

36° below zero. Those Dakota blizzards and cold snaps seem to have taken a notion to us farther east. It does seem too bad that live stock should be frozen to death, but it is equally cruel to allow our bees to freeze for want of a little care. You seem to be looking at this matter in the right light and we are satisfied that your colonies will give a good account of themselves next spring. You do not tell us what you did with the brood you had to take from them. Whether you made full colonies or nucleus to be built up, or placed it in second stories in the old colonies. When there is a likelihood of honey being scarce, and when increase is not desirable, would it not be better to give the colony plenty of room to store all the honey they may gather above, using a queen excluding honey board to prevent the queen from extending her brood-nest from legitimate quarters. The swarming difficulty would in this way be prevented to a great extent and by manipulating the hive probably the production of brood could also be prevented a good deal. The white clover field in your vicinity was no exception to the general rule last season, as very few have reported good crops. Alsike yielded much better, and in this respect is considerably ahead of the ordinary white clover. There is no doubt in our mind that before long the plan of put-

ting bees into winter quarters a month or two earlier than has been our usual practice, will become much more general than it is at the present time. Is there not a probability that by putting them in early the working lives of the bees will be so prolonged that there will be less danger of spring dwindling. Here we have it from friend Bull that too much stress is laid upon the fact of keeping the repository dark, and the experiment which he is now trying will assist in proving materially whether or not we have been too strongly allied to our opinions. There seems to be no doubt in the mind of the writer that darkness is not essential.

For the Canadian Bee Journal.

A NEW ENEMY.

I SUPPOSE if it was not for the continual watching of the flock the wolves would long since have been masters of the field, and if the interests of the bee and honey producers had not had, to now and again, some one to rise up and protect them and their interests, both the hive and the honey producer would be numbered among the things that were.

How can it be possible that a man with a family of children dependent upon his labor and skill for support, can entertain for a moment such a doctrine as has been advanced lately by members of our bee-fraternity, viz.: bees for the masses. Are we a band of brother philanthropists, trying to help everyone to knit for himself, so they can starve out the professional knitter, or are we a lot of school-boys going fishing for fun.

There is an old saying, "Every man to his trade." I learned it when a little boy; I have followed it to the best of my ability during my life. I think the very foundation of all business is built on that rock. Where would your local paper be if the editor let every store-keeper come in to print his own circulars, or your village photographer teaching every young fellow in town free, how to take pictures, or your jeweller, or your doctor?

Why the thing is absurd! It is because England, Canada and the United States have allowed in late years, too short an apprenticeship to their several trades, that all this trouble among the trade unions, socialism, anarchy, and its dreadful future is staring us in the face. If you are a honey producer for sale to support your family go ahead with it, and don't go round inducing every Tom, Dick and Harry to raise his own honey. Don't go into queen-raising and

go round showing every one how to raise queens. The sound of foul brood is heard all over the land. I suppose you think the man who has only one hive will not affect you. That hive is just the exact seed you sowed and which will eventually ruin you.

You must remember, gentlemen, that the B.B.K.A. is an entirely different thing from what we have, or are trying to get. Our associations are for the interests of those interested in the production and sale of honey and bees for profit. If you want to join some philanthropic organization to show your charity, they can be found in Toronto or Montreal. But if you have a family and your children need your help, then let us have no more clap-trap.

CRITIC ON THE PATH.

Here we have a pretty strong letter from a specialist. Quite a number of new ideas are advanced, and it will be interesting to many, we have no doubt. We are not in the habit of publishing communications unless over the signature of the writer, but as this article does not, in any way, apply to any individual or is in any way personal, we forego our usual practice. The resolution which was passed at the late meeting of the Ontario Bee-keepers' Association should meet with favor in the eyes of the writer, showing friend McKnight's paper on the best method of disposing of the honey crop. The great difficulty which, it seems to us, lies in the way of the plan which was laid out so ably by Mr. McKnight, as with many of the bee-keepers who would like to buy the honey of their neighbors, is that they generally have all their surplus cash invested in their own apiary, and until they can dispose of the result of their season's work, or at least part of it, they are unable to buy and pay cash for the honey which they do not wish to come in contact with their own. It seems to us fair to presume that of necessity the practice would require to be carried on on a cash basis, as that is what the small bee-keeper gets when he peddles his honey around to hotels and elsewhere throughout the towns and villages. There is certainly a great amount of truth in what the writer of the above article says in reference to "apprenticeship," especially with regard to Canada and the United States. We do not know why England should be classed with Canada and the U.S. in that respect, as the "apprenticeship" there is

generally very lengthy and by the time a tradesman becomes a journeyman he has pretty thoroughly mastered his work. If the apprenticeship term were longer on this side of the water it seems to us that the result would be exceedingly beneficial.

For the Canadian Bee Journal

HEATING THE CELLAR ARTIFICIALLY.

WE have had a grand winter for bees so far. Those on summer stands seem to be in fine condition, but very few crawling out on the snow which I consider an indication of contentment. I winter principally in double walled hives on summer stands but have a few in the cellar. Up to within a few days the thermometer has ranged from 38° to 45°, but on the 23rd of January the temperature took a dip down to 10° below zero outside—the lowest point reached this winter. On going into the cellar I found the bees uneasy and the thermometer at 31°. Not having a coal oil stove handy and past experience having proved to my satisfaction that a lamp placed under a boiler or superannuated milk can (as advised by some) would not do at all, I tried another plan which pleased me very much, and for the benefit of others I will describe it here. Take a lamp with the largest wick you can get. Keep the wick well trimmed and turn it up as high as you dare to avoid any unpleasant smell; set it on the cellar bottom. Now get two or three lengths of stovepipe (seven inch is the best) and set it over the lamp and let the bottom edge of the pipe rest on blocks about one and a half inches high so that the cold air at the bottom of the cellar can enter the pipe. This creates a draft and a stream of hot air will pour out at the top like that from a double heater coal stove. The light from the lamp (which might otherwise disturb the bees) is shut up in a round spot on the ceiling or turned off in any direction you choose to send it by simply using an elbow. Try it.

J. F. DUNN.

Ridgeway, Ont.

Mr. Dunn here gives us a very satisfactory and handy way of increasing the temperature in the bee house. It is quite simple and any one can practice it. One of those Rochester or Wanzer lamps would soon raise the temperature up to a proper point. Probably a good many of our readers have not yet seen the new Wanzer lamp. It is used without a chimney and gives a magnificent light emitting no smell or smoke. This is prevented by a fan which is

regulated by clock work and when wound up will run six hours. This perhaps would be the best kind of a lamp to use. It would answer the purpose as well as a coal oil stove and it has one great advantage, no bad smell or smoke is emitted. The stovepipe arrangement to which friend Dunn alludes could be used to direct the light towards some particular place where it would not harm the bees (if it does). The price of these lamps all complete is, we think, about \$4.00.

For the Canadian Bee Journal.

FOUL BROOD.

A NEW WAY TO ERADICATE IT.

IN conversation with a friend a short time ago the question of foul brood was discussed, and the remark was made by him, that a friend of his, who is a bee-keeper, had studied out a theory (I designate it theory) whereby he could not only eradicate it, but could actually prevent it from entering an apiary. I was informed that it was by some mysterious mode of rearing queens, such queens and their progeny would be impervious to that dread disease which has hitherto baffled our most skilled apiarists. Now for my explanation of the term theory.

Until I see it proven by actual practical tests, that his mode of combating and conquering this disease is infallible, I must look upon it as a chimera existing only in his fertile brain. In my humble opinion, as well might he state that a child could be raised in a certain manner so that it would never be subject to the infection of small-pox, cholera, or any other of those dread maladies to which all humanity are heir. I am well aware, Sir, that on some points I am sceptical, and particularly on this one. However, I am open to conviction, and if this gentleman would ventilate his views (I do not mean his secret) in the C.B.J., it is possible I might change my opinion, especially so in reference to a question of such vital importance to every apiarist in the world.

T. J.

We do not think the queen has anything to do with this matter. How can she, when it is the food given to the larva after the egg hatches to which is chargeable the origin of foul brood. Food given from foul broody honey will start the disease. Boil the honey and kill the disease in it, and no bad results will appear from its use as food.

Cayuga, Advocate.

HALDIMAND BEE-KEEPERS.

THE annual meeting of the Haldimand Bee-Keepers' Association was held at the Town Hall, Cayuga, on Friday, January 20th, the President, Wm. Kindree, in the chair. The following members were present: James Armstrong, Wm. Atkinson, F. Rose, W. T. Anthony, F. Mehlenbacher, H. Smith, Israel Overholt, George Snider, Joseph Lovegrove, G. S. Best, Owen Fathers, Robt. Coverdale, Eli Grobb, E. Kindree, Jas. Jack, John D. Rae, and the Secretary.

The minutes of previous meeting read and adopted.

The first business was the election of officers, which resulted as follows:

President—Jas. Armstrong.

Sec.-Treas.—E. C. Campbell.

VICE-PRESIDENTS.

Walpole—Wm. Atkinson.

South Cayuga—O. Fathers.

North Cayuga—Wm. Kindree.

Rainham—F. Mehlenbacher.

Seneca—A. Simenton.

IS SALT NECESSARY FOR BEES ?

Mr. Wm. Kindree said this was a question he had never considered; he had noticed that bees were often seen around salty water, but whether it was necessary for bees he could not say.

Mr. Armstrong thought salt was not necessary; the fact that bees were hatched in winter when it was not possible to get salty water convinced him it was not necessary.

Mr. Rose thought it was difficult to tell whether salt was necessary or not; salt was spread around for cattle and the bees could get it and did get it, but whether it was a benefit or not he could not say.

Mr. Smith thought salt in the hive would have a tendency to draw moisture, which is bad for the bees and a frequent cause of loss.

Mr. Eden, of Woodstock, was of the opinion that it was necessary for them or they would not touch it.

HOW SOON SHOULD BEES BE PACKED FOR WINTER ?

Mr. W. Kindree generally examined his bees about the 1st of September, and fed them if necessary; and about the 1st of November packed them away. He preferred chaff hives for out-door wintering.

Mr. Armstrong thought bees should be packed away about the 1st of October, before any frost got into the hives; he put cushions on about that time so as to prevent moisture getting into the hive; he preferred chaff hives, the only objection to them being their extra cost.

Mr. F. Mehlenbacher thought bees were packed too late rather than too early; he preferred early packing.

In answer to Mr. Smith, Mr. Armstrong said that dampness was caused by cold air coming in contact with the hot air in the hive.

Mr. Atkinson agreed with those who favored early packing.

COMB OR EXTRACTED HONEY, WHICH IS THE MOST PROFITABLE ?

Mr. W. Kindree thought extracted honey was the most profitable. He could make more money at less cost out of extracted honey.

Mr. Armstrong raised both extracted and comb honey; those who thought there was no work in raising comb honey were mistaken. there was a great deal of work in getting good comb honey and a good deal of expense in buying sections, etc. He could make more money out of extracted honey. It was easier work and less expense in getting to market.

Mr. W. Kindree said that in order to get the largest yield he commenced early in the season to feed them and get them in good strong condition for the early honey harvest, and extract as soon as the bees commence to build comb on top of the frames.

Mr. Armstrong thought the best way to secure the largest yield of honey was to tier up as fast as the bees filled the hive; they should have plenty of room to store their honey and keep them working all the time.

Mr. Eden believed in the tiering-up system; the extracting could be done after the honey season was over.

Mr. Smith thought he could get more without tiering up, and Mr. Rose took the same view.

SPRING MANAGEMENT.

Mr. W. Kindree said he took a look at his bees as soon as it was warm, and if they were short of stores he fed them a little every day, and got them as strong as possible for the early harvest.

Mr. Armstrong said he did not touch his bees until April, and if they needed feeding he gave them enough to last until there was natural honey. He did not like to handle his bees in spring unless it was necessary. He left them packed until settled warm weather.

Moved by Mr. Atkinson, seconded by Mr. Smith, and resolved that the next meeting of the Association be held at Nelles' Corners, on Monday, 28th day of May, 1888.

E. C. CAMPBELL, Sec'y.

For the Canadian Bee Journal

A LOST OPPORTUNITY.

HAVE been wondering ever since I read that Mr. Cowan and his wife visited the Dadant's at Hamilton, Ill., whether they did or did not pass within a mile of our house. If they travelled from St. Louis to Chicago, by way of the "Buda Branch," they passed within sight of us, and might have seen a flag waving in honor, if we had possessed one and had known when to wave it. Or better still, if I had known when they were to pass, I might have gathered at Vermont, Ill., and shaken them by the hand, and perhaps they might have liked me well enough to invite me to come and visit them when I go to England, and then perhaps they would introduce me to the Queen or to the Princess of Wales, if we happened to meet them on the sidewalk anywhere, and then I should feel perfectly at home and would have something to talk about when I come home. But, alas! I never dreamed that they would pass this way, and now my one chance to know Mr. Cowan and his wife is gone forever. I wanted to see Mr. Cowan about queen bee's legs. I want to know whether in his large microscope the "rudimentary" baskets on the queen's legs show or not.

MAHALA B. CHADDOCK.

Vermont, Ill.

We think our friend Mr. Cowan did not pass over that line. Believe he went direct from Chicago to Friend Dadant's and returned to Lansing where Mrs. C. awaited his arrival. We are sure he would have been pleased to see you as he was anxious to see as many of our noted bee-keepers (especially ladies) as possible. Any who had the pleasure of a meeting will always remember his gentlemanly demeanor and unassuming manner, while he is probably one of the best informed bee-keepers in the world.

SUNDRY SELECTIONS.

BEEs WINTERING WELL.

F. W. FULFORD.—As I wrote before when I put my bees in winter quarters I would let you know at times how the bees are wintering. It is now three months since I put my first and second lots in the repository. I was through the repository to-day (24th January) and examined them by looking in at the entrance of hive, found them in good condition, i.e.: quiet and very few bees dead, whereas in former years at this period my bees began to die off at a great loss, devouring their stores up rapidly, and some had their stores wholly consumed. This year my bees are better under the circumstances, derived, I believe, from the manner in which I placed them when I put them away—dry and with plenty of stores. Hope to give you a good record next May. Temperature in repository at present is 42°.

Brockville, Jan. 24th, 1888.

COMBS MELTING DOWN IN THE FALL.

O. FATHERS, JR.—If you will kindly allow me space in your valuable JOURNAL I will endeavor to give my experience in bee-keeping. I began in the spring of 1884 with two colonies in old box hives. These I had transferred to movable frame hives and increased to four, getting about 50 lbs. of section honey. The winter of 1884-5 was a very hard one and I had the misfortune to lose all the bees that I had, but I was not easily discouraged so I purchased another colony during the next summer. This colony I brought through the winter in good shape and in the spring of 1886 I purchased another. These numbered six in the fall, and with eight others which I bought, I put into winter quarters fourteen. In the spring of 1887 I had eleven colonies, some of which were very weak. I increased them to twenty-six (lost one in the fall by the combs melting down) and extracted 850 lbs. of honey, which I think is not at all bad, considering the dry summer which we had. I have now twenty-five colonies in winter quarters and I am wintering them on their summer stands in tenement hives, four colonies under each cover.

South Cayuga, Jan. 20, 1888.

It seems rather unusual that you should lose a colony in the fall through

the combs melting down. We had no weather here that would cause such mischief. Was there not some other reason for it? You have done very well and we hope next fall to have even a better report from you.

FEEDING CANDY FOR WINTERING.

W. W. JONES.—I send you herewith my report for last season. I commenced with twenty-seven colonies in fair condition. The first part of the season was very good, but dry weather setting in about the middle of June made the latter part exceedingly poor. I obtained 1,100 pounds of extracted honey and increased to fifty colonies. The average price received for the honey was 10c. On Nov. 19th I put all my bees into the bee-house and they are doing well. On Sept. 1 I weighed them all up and found they had sufficient stores, weighed them again on the 19th November and was surprised to find that they were 250 lbs. short. I make candy for them and lay it over the cluster on the frames and they are working nicely on it. I find the C.B.J. of very much value to me and I advise everyone who is interested in bees to subscribe for it. I trust that I may be able to have a better report for you next season.

Caledonia, Jan. 20th, 1888.

We do not see that you have any reason to complain. You doubled the number you had in the spring and you took an average of nearly 50 lbs. per colony. We don't think, with all things considered, that there are many who did better. Your experience as to the amount of stores consumed, while the bees are on their summer stands patiently waiting for winter to set in, should be of considerable benefit to many who never think of weighing up their colonies a short time before putting them into winter quarters, to ascertain their standing. So long as they have sufficient honey for wintering when the honey flow is over they seem to think it is all right. We shall be glad to hear from you, how the colonies which you are feeding on candy came through the winter. The hardest time, however, is yet ahead of you. If you can get them safely through the first few weeks after they are set out you will have reason to be proud of your work, and there is no excuse for their not coming through if you give them the attention we are satisfied you will.

THE SEASON AT MORPETH—HONEY FROM WHITE BEANS.

H. B. PARKER.—I send you my season's report for 1887, its not very good, still the old proverb says its an ill wind that doesn't blow somebody

good. I didn't get much honey, but I got bushels of experience. I think now if I had managed a little differently I could have secured double the amount of honey just as well as not. I commenced the season with ten colonies; increased to twenty-five. The spring commenced very fine. Fruit trees yielded quite well for a few days; the flow was short. By the time white clover came in bloom they had used nearly all their stores in breeding. White clover was almost a failure here. The cold nights and cloudy, wet days seemed to discourage the bees; some days they hardly left their hives at all. The last few days in June seemed a little better. Some colonies stored a few pounds of surplus honey, but none was sealed over before basswood came in bloom. Basswood opened up fine; weather dry and hot, and the flow lasted about eight days. I received from ten colonies and their increase 550 lbs. of extracted honey, mostly basswood. After basswood, some seasons we have quite a flow from white field beans; there are 200 or 300 acres grown here within range of my apiary; it didn't yield much this season. Golden rod yielded very little this year, it being so dry we didn't have any rain here from about the middle of June till the middle of October. I found after the brood hatched out in October that I had to feed from five to fifteen pounds per colony. Well, I fed them all up nicely and have them now all packed in little sheds with front end exposed to the sun, back end and sides nicely packed with chaff. I tried some that way last year, and with me they started breeding earlier than those that were kept from the sun.

Morpeth, Ont., Jan. 10, 1888.

White beans.—This is the first time we have heard of a crop of honey from this source. Have frequently noticed bees working in bean bloom, but have never kept bees where it was grown in sufficient quantities to store honey from. No doubt there are many crops that might be grown, and which would produce considerable honey if we only knew what they were and could induce people to grow them in sufficient quantities to enable the bees to store honey from them. Your bees certainly did very well considering the poor season. No doubt with good management you will have a much larger crop the coming season.

TREE PLANTING AND FENCING.

J. W. WHEALY.—As this is the season for bees to "hibernate," bee-keepers and bee journals may well be excused if they occasionally take up other subjects for discussion. For instance, in the C.B.J. of Jan. 11, you give us an essay on tree-planting. I can agree with the most of this essay, but not all. With regard to fruit tree planting there are two very serious objections. (1st.) The general belief among farmers that fruit-growing will not pay. An orchard takes up land, is difficult to plow, you have to wait a long time for a crop, it may not be the kind of fruit ordered, it takes time to pick the

fruit, the picking time interferes with fall plowing, buyers will not take scabby, small or damaged fruit, and many other similar reasons are given. But the real reason is, farmers are not fruit-growers; they do not know how to raise good fruit and the majority do not care. I do not believe that the present generation of farmers can be educated to adopt the German method, although it might be "bred in" in the course of time. The second objection I see to this plan is that the bark of young fruit trees furnishes a very toothsome winter food for mice and the grass which would grow around them would furnish the necessary shelter for the vermin. In short, under ordinary circumstances, it cannot be done. Again, you say: "Take the township of Tecumseth where we now reside. It has about 120,000 rods of fencing along the road sides. Its fences cost the farmers of this township alone nearly \$100,000. Thus our township (counting a fair interest on the money) is paying over \$6,000 a year to accommodate a few bad farmers and others who allow their stock to run at large." The italics are mine. I cannot see this matter in the same light you do. How is it that editors invariably seem to consider that the only mission of the roadside fence is to keep out roadside stock and that the farmer's own stock do not need such fences at all? I have 140 rods of roadside fence and I need every stick of it to keep my own stock from getting on the highway. Roadside stock has not given me one minute's trouble in ten years, but if my fence were to be taken away where would my stock be? I have a field of 25 acres adjoining the road which can only be used for pasture. Will you just explain how I can use it without the roadside fence? Soiling is impossible at present prices and wages. The only other plan I know of is the one practised in some parts of Germany, viz.: have the cattle herded by boys. Now, right here, where are the boys? You say raise them. Exactly, but neither you nor I have done it yet and maybe never will. No sir, you must try to solve the roadside fence problem some other way.

Kintore, Jan. 23, 1888.

Of course, as you say, it might take some time to educate them to appreciate the planting of trees along our highways, but there is no reason why the pathmasters should not care for the trees here like they do in Germany. There is a good market for all the fruit that can be grown if the farmers would only study the marketing of it, but nothing will pay if neglected. If you have got a field next to the road devoted exclusively to pasture, we see no reason why you could not fence it in the same as you would one in the centre of your farm or wherever you wished to pasture the stock. There are many places in the States where fencing has become too expensive for the roadsides, and only the pasture grounds are fenced. Movable fencing can be made as cheaply as any other and it has been proved,

beyond a doubt, that permanent pasture properly put down is more valuable to the farmer than changing pasture. Once a pasture is fenced it requires no more expenditure in that direction, and how beautiful it looks and profitable it would be to have single or double rows of linden trees marking out the different fields and plots of your farm. A hundred acre farm laid out in say ten or fifteen fields or plots with a row of trees around each would yield as much more. We scarcely think we are getting as far away from the subject of bee-keeping in advocating planting lindens or honey-producing trees on the roadside as friend Whealy is in advocating boy-raising, unless he intends to make bee-keepers of them.

Convention Notices.

The annual meeting of the Western Ontario Bee-keepers' association will be held on Feb. 8th and 9th, 1888 in Tilbury Centre.

E. J. BURGESS, Sec'y.

WISCONSIN BEE-KEEPERS' ASSOCIATION.

The next annual meeting will be held at Madison, Feb. 8th. A good time is expected. The following is the program:—President's Address—C. A. Hatch, Ithaca. Notes from American Bee-keepers' Convention—F. Wilcox, Manston. Relation of producer to commission merchant—A. V. Hislop, Milwaukee. The Heddon Hive and how to use it—W. H. Putman, River Falls. How to build a bee-cellar—D. D. Damher, Madison. How to get the best extracted honey—E. France, Platteville. Comb or extracted honey, which?—F. Minnick, North Freedom.

CIRCULARS RECEIVED.

J. D. Gooderich, East Hardwick, Vt.—Twenty-four pages and cover, apiarian supplies in general, Vandervoort foundation, sections and hives being a specialty.

P. L. Viallon, Bayou Goula, La.—Twenty-four pages, implements and bee-culture generally.

A. F. Stauffer, Sterling, Ill.—Sixteen pages, apiarian supplies generally.

G. B. Lewis & Co., Watertown, Wis.—Thirty pages, bee hives, sections, etc.

G. D. Black, Brandon, Iowa—Four pages and cover. Italian bees and queens being specialties.

C. Weckserr, Marshall, Ohio—Sixteen pages and cover. Bees, queens and garden seeds, small fruits, etc.

E. H. Cook, Andover, Conn.—Twenty-four pages and cover. Bee-keepers' clubbing lists.

E. T. Flanagan, Belleville, Ill.—Ten pages and cover. Bee hives, foundation, etc.

M. H. Hunt, Bell Branch, Michigan—Twelve pages, bee-keepers' supplies generally.

EXCHANGE AND MART.

Advertisements for this Department will be inserted at the uniform rate of **25 CENTS** each insertion—not to exceed five lines—and 5 cents each additional line. If you desire your advt. in this column, be particular to mention the fact, else they will be inserted in our regular advertising columns. This column is **specially** intended for those who have bees or other goods for exchange for something else, and for the purpose of advertising bees, honey, etc. for sale. Cash must accompany advt.

WANTED.—Extracted honey to be delivered between Feb. 1st and June 1st, 1888. Give lowest cash price on cars.

EDWARD LUNAU.

Buttontville, Ont.

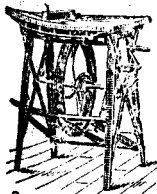
\$1.00 Will secure you by mail, post paid, 250 Noteheads and 250 Envelopes with your name, business and address printed on the corner of each. Send in your order now. **THE D. A. JONES CO.,** Beeton, Ont.

HONEY.—We can take all that offers in exchange for supplies, at prices found in another advertisement in this issue. **THE D. A. JONES CO.,** Beeton, Ont.

SECTIONS.—We have a large lot of V groove sections put up in 500 boxes in the following sizes, viz., 3½x4½x1½ 3½x4½x1¾, double slotted, which we will sell at \$2 per package, and will take as pay either honey or cash. **THE D. A. JONES CO.,** Beeton, Ont.

ADVERTISEMENTS.

BARNES' FOOT-POWER MACHINERY



Read what J. J. PARENT, of Chatham, N. Y., says—"We cut with one of your Combined Machines 1st winter 50 chaff hives with 7 inch caps, 100 honey racks, 500 broad frames, 2,000 honey boxes and a great deal of other work. This winter we have double the number of beehives, etc., to make, and we expect to do it all with this saw. It will do all you say it will." Catalogue and Price List free. Address W. F. & OHN BARNES, 571 Ruby St., Rockford, Ill. 21

BEE-KEEPERS ADVANCE

Is a Monthly Journal of 16 Pages. 25 CENTS PER YEAR. Clubbed with the CANADIAN BEE JOURNAL for \$1.10. Sample copy sent free with our catalogue of supplies. Don't forget to send name and address on a postal to

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Mechanics' Falls, Me.

-CANADIANS-

can subscribe to the

BEE-KEEPERS MAGAZINE

the only independent publication on bee culture in America, by sending 50 cents to the CANADIAN BEE JOURNAL, who are authorized to receive subscriptions for it. Sample copy sent free by addressing a postal to

BEE-KEEPERS' MAGAZINE,

Barrytown, N. Y.

CANADIANS

Want to supply their wants at home as much as possible, but heretofore they have not been able to do so, at least for bees by the pound, frames of brood, and nuclei. We have decided to furnish them at the prices as found in the following table :

BEEES BY THE POUND.

	May	June	July	August	Sept.
Bees, per ¼ pound	1.75	1.50	1.00	1.00	.90
" " pound	3.00	2.50	1.85	1.75	1.70
Frame of Brood	1.75	1.50	1.00	1.00	.90
2-frame nucleus..	4.00	3.50	3.00	2.75	2.50
3 " "	6.00	5.50	4.75	4.50	4.50

Frames of brood cannot be sent alone. Queens are not included in above prices. Choose the kind you want and add enough to price found here to cover cost of queen.

Two frame nucleus consists of ¼ pound bees, two frames partly filled with brood and honey, and a nucleus hive. If wanted in either "Jones" or "Combination" hive, add price made up, and deduct 40c. for nucleus hive.

Three frame nucleus, same as two-frame, with the addition of another half pound of bees, and another frame of brood, etc.

All prices here quoted are for frames that will fit the "Jones" or "Combination" hive.. You may have whichever style you desire. Be sure to specify when ordering.

The above must go by express.

QUEENS.

	Hornbead	Untested	Tested	Selected	Virgins
May	2 00		2 50	3 00	
June	1 50	1 00	2 00	3 00	0 60
July	1 00	90	2 00	2 50	50
August	1 00	1 00	2 00	2 50	50
September	1 50	1 50	2 50	2 75	
October	2 00		2 50	3 00	

FULL COLONIES.

	Italian	Holy Land Crosses	Garniolan Crosses	Hybrids
May	\$9.00	\$10.00	\$11.00	\$8.50
June	8.00	9.00	10.00	7.50
July	7.50	8.00	9.00	7.00
August	6.50	8.00	9.00	6.50
September	6.50	7.00	8.00	6.00
October	7.00	8.00	9.00	6.50
November	8.00	8.00	9.00	8.00

The above prices are for up to four colonies ; five colonies up to nine, take off 3 per cent.; ten colonies and over, 5 per cent. Colonies as above will each have six to eight frames of brood bees and honey, and good laying queen.

The D. A. JONES Co., Ld., Beeton.

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PRINTING

Supply Men, Foundation Dealers,
and Bee-Keepers,

SEND FOR ESTIMATES FOR WHATEVER
YOU REQUIRE IN THE WAY OF

CATALOGUES,

PRICE LISTS,

CIRCULARS,

LABELS,

OR GENERAL PRINTING.

A large number of cuts in stock of
which patrons have free use.

THE D. A. JONES CO., Ltd.,
BEETON, ONT

HEDDON HIVES !



We are the owners of the patent on this hive in Canada, and we are in a position to make and sell the hive gotten up in any shape to suit the purchaser—either in flat or nailed up.

A complete working hive consists of bottom-stand, bottom-board, entrance-blocks, two brood-cases, one honey-board, two surplus cases (in good seasons we often use three surplus cases on the hive at one time) and cover. So that if you order these hives in the flat this is just what will be sent you.

Sample hives we make with the brood-frames wired and the surplus cases supplied with fifty-six $4\frac{1}{2} \times 4\frac{1}{2}$ 7 to the foot sections. These are designed for testing the complete working hive.

In quoting prices of brood-cases and surplus cases, the set-screws, brood-frames and wide frames with their tin separators are always included, both in flat and made up. We quote the prices of sample hives made

up, and of the various parts made up, so that should there be any portions of the hive you do not wish you can easily ascertain what deductions to make.

Sample hive, made up.....\$2 90
Add ten per cent if you wish the hive painted.

PRICES OF PARTS.

	made up	flat
Bottom stand.....	12	09
Bottom-boards.....	15	11
Entrance blocks (two).....	03	03
Brood case, invertible, including set screws and frames wired when made up or punched for wiring in flat.....	60	45
Honey Board (wooden) slotted, invertible.....	10	07
Honeyboard, metal and wood, invertible	30	25
Surplus case, invertible, including wide frames and separators.....	60	50
Cover, half bee-space.....	15	12
Sections, full set of 28 in flat.....	15	15
Tin Separators, seven to each.....	10	10

The cost of one hive such as you would receive, in the flat, would therefore be (without honey boards of either description) \$2.15. Add the cost of whichever style of honey-board you prefer, and you get it exactly. If you do not designate either we shall always include the wooden-slotted one.

DISCOUNTS IN QUANTITIES.

For 5 hives or more, 5 per cent. ; 10 or more, 7½ per cent. ; 25 or more, 10 per cent. ; 50 or more, 15 per cent. These discounts are off the prices quoted above, either nailed or in flat.

INDIVIDUAL RIGHTS.

We will sell individual rights to make for one's own use, and to use the new hive or any of the special features of Mr. Heddson's invention at \$5. We do not press the sale of these rights, believing that the hives cannot be made to good advantage by anyone not having the proper appliances. We will sell however to those who wish to buy, and for the convenience of such we append a list of prices of what we would likely be called upon to furnish in any event:—

Woodscrews per 100, boiled in tallow.....	\$1 25
Tap bits for cutting threads.....	1 50
Tin Separators, per 100 proper width.....	1 50
Brood Frames per 100.....	1 25
Wide " " ".....	1 50

Heddson's 1887 Circular.

NOW READY.

ALL ABOUT THE NEW HIVE.

Canadians who wish my circular to know about the new Hive, only should send to the D. A. JONES CO. for theirs, as I have sold the patent for all the American British possessions to them, and have no more right to sell the hive in their territory than have they to sell them in the United States.

Address,

JAMES HEDDON,
DOWAGIAC, MICH.

TOOLS For BEE-KEEPERS

HAMMERS.

We shall hereafter keep in stock a full line of tools suitable for bee-keepers. For ordinary use, where a person has only a few hives, etc., to nail, we have an iron hammer (with adze eye) which we can send you at 15 cents.

Then in steel hammers we have three styles all with adze eyes, which we sell at 40c., 50c., and 60c each.

Small hammers—steel face with adze eyes, just what are needed for frame nailing, etc., No. 55, 35c.; No. 52, 50c.

SCREW DRIVERS.

With good hardwood handles and of the best steel—nicely finished, round bits, in two kinds, No. 1, 5 inch bit, 18c.; No. 2, 6 inch bit, 20c.

TWO-FOOT SQUARES.

In iron squares we have two kinds—the first of these is marked down to one-eighth of an inch, and is marked on one side only, the price is, each, 20c.

The other style is marked on both sides down to one-sixteenth of an inch—price, each, 35c.

We have a splendid line in steel squares which we can furnish you at \$1.35. They are well finished and are usually sold in hardware stores at \$1.75.

TWO FOOT RULES.

A splendid line in rules we offer at, each, 18c. Then we have a nice box-wood rule at, each 25c.

HAND SAWS

Just at the present we have but one line in these—26 inch long—A. & S. Perry's make—usually sold at 75 cents we offer them for 55c.

PANEL SAWS.

These are what are often called small hand saws, and for the finer classes of the bee-keepers work are indispensable. We have started out with two lines in these. The 18 inch are of good steel (Shirley and Dietrich) and can be sold by us at 50c.

The 20-inch are finer steel—same make—that money.

PLANES.

Iron block planes, just the thing for dressing off hives, each, 75c.

Wooden smoothing planes—the best of the kind, 85c.

All the above goods are sold at prices 20 to 25 per cent. below the ordinary retail price, so that when ordering other goods you may just as well have any you want as the cost of transportation will not be any greater. These will be included in the next revision of our price list.

THE D. A. JONES CO., LD.,

BEETON, ONT.

RAYS OF LIGHT.—A new publication devoted to Bee-keeping and Poultry-raising. A number of the leading, most practical and successful Bee and Poultry-Keepers have already been secured as regular contributors. Its principal aim will be to advance progressive ideas upon the various topics of modern scientific Bee-culture and Poultry-Raising. Subscription, 50 cents a year. Sample copy free.

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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.

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and numbers of other dealers. Write for SAMPLES FREE and Price List of Supplies, with 150 COMPLIMENTARY and UNSOLICITED TESTIMONIALS from as many bee-keepers in 1885. We guarantee every inch of our Foundation equal to sample in every respect.

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

Promote a Home Market!

By a judicious distribution of the Leaflet,

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never fails to bring results. Samples sent on application. Prices printed with your name and address. 10c 80c.; 250, \$1.25 500, \$2.00; 1,000, \$3.25.

The D. A. JONES CO., Ltd., Beeton, Ont.

APIARIAN SUPPLIES

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Are unsurpassed for Quality and fine Workmanship. A specialty made of all sizes of the **Simplicity Hive**. 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. Also manufacturer of **FALCON BRAND FOUNDATION**. Dealer in a full line of **Bee-Keepers' Supplies**.

Send for Illustrated Catalogue for 1888. Free.

W. T. FALCONER.

BEE-KEEPERS' GUIDE

—OR—

MANUAL OF THE APIARY

15,000 SOLD SINCE 1876.

The fourteenth thousand just out. 15th thousand sold in just four months. More than 40 costly illustrations were added to 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.

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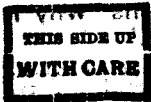
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These are for pasting on the tops of cases.
Price, per 10, 5c. by mail, 6c.
" 100, 25, by mail, 27
" 1000, 1.50 by mail, 1.60

The D. A. Jones Co., Ltd., Beeton, Ont.

NO BEE-KEEPER SHOULD BE WITHOUT

Clarke's Bird's Eye View of Bee-keeping

68 pages, bound in cloth; profusely illustrated; price 25 cents.

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FRIENDS. IF YOU ARE IN ANY WAY INTERESTED IN

BEEES AND HONEY

We will with pleasure send you a sample copy of our **SEMI-MONTHLY CLEANINGS IN BEE-CULTURE**, with a descriptive Price-list of the latest improvements in Hives, Honey Extractors, Comb Foundation, 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.
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High Side Walls. 4 to 14 square feet to the pound. Wholesale and Retail Circulars and samples free.

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10 Per Cent Discount

On sections until March 1st. Send for free price list of everything needed in the apiary. Foundation wholesale and retail. Alsike clover seed cheap. Sample section on application.

M. H. HUNT,
Near Detroit.
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OUR 60 LB. TINS.

We have already sold enough of these to hold a crop of over 100,000 lbs of honey. They are better made than ever, and are encased in our new style of wooden case. Have a large screw top, as well as a small one, and are thus excellent for granulated as well as liquid honey. The prices are:

- Each..... \$ 0 50
- Per 10..... 4 80
- Per 25..... 11 25
- Per 100..... 42 00

"Charcoal" tin used in these. As a rule "coke" tin is used.

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