

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 checked="" 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. |

VOL. III, NO. 47

1887

FEBRUARY 15, '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.
BOSTON ONT.

ADVERTISEMENTS

WE CLUB

The Canadian Bee Journal and.....		
Cook's Manual, cloth.....	\$2 25	\$2 00
A B C in Bee Culture, cloth.....	2 25	2 00
Quinby's New Bee-Keeping (cloth)	2 50	2 25
Alley's Handy Book (cloth).....	2 50	2 25
Langstroth on the HoneyBee (clh)	3 00	2 75
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 Hutchin- son. Paper, price, 25c.
- THE HIVE AND HONEY BEE, by Rev. L. L. Langs troth. 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 JamesHeddon—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 Bee-Keepers." 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. 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.

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 any way. Do not complain to any one else or let it pass. We want an early opportunity to make right any injustice we may do.

We can supply Binders for the JOURNAL 55 cents each, post paid, with name printed on the inside 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.....	\$1.0	\$6.00	\$10.00
Two inches.....	5.50	9.20	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".....	1.25
"Beekeepers' Review".....	1.40
"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
An Essex experience.....	959
Bee-keepers, Ohio.....	955
Bee Journal, Hutchinson's new.....	951
Chapman honey plant.....	953
Critic o' the path. Reply to.....	954
Dry season, A.....	959
Editorial.....	949
Honey, Buckwheat.....	954
Honey dew, How to tell.....	959
Mel Sapid Omnia.....	952
Objects to Vipers' Bugloss.....	933
Salt as a lubricant in making foundation.....	950
Poor season in Quebec.....	956
Wintering in a light cellar.....	954

ADVERTISEMENTS.

BEES

ITALIAN BEES and Queens, 3 frames nuclei, full colonies at the very lowest rates and safe delivery guaranteed. Send for catalogue to E. T. Flanagan, Belleville, Ill.



7 1/2 Corus 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: **HOLING SAWING MACHINE CO., 808 to 311 S. Canal St., Chicago, Ill.**

THE BEE-KEEPERS'

REVIEW.

For January is now out, and contains the following original articles: Disturbance not Necessarily Injurious, R. L. Taylor; Bees are "Summer Birds," E. M. Hayhurst; Disturbing Bees in Winter, James Heddon; A Niche that needs Filling, M. M. Baldrige; Daily Visits no Disturbance, J. H. Robertson; Bees Winter well in a Swinging Tree-top, F. Boomhower; Keep the Bees quiet in Early Winter, H. E. Bowdman; Continued Disturbance Injurious, J. H. Martin; Light not a Disturbance, Dr. A. B. Mason; Disturbance not Injurious if Other Conditions are Right, Eugene Secor; Bees Undisturbed by Light, H. D. Cutting.

Following the above come editorials upon: Price of the REVIEW; Wood or Tin for Separators; is the latter "colder" than the former? "Not according to Nature," Mr. Heddon and the REVIEW, Disturbing Bees in Winter Seldom Injurious, Temperature to be the Special Topic of the next issue. Unfinished Sections vs. Foundation, A Modern Bee-Farm.

After the editorials, room is given in the following extracts: Modern Bee Journalism, M.; Brine for Dipping-Boards, M. M. Baldrige; Bees afraid of Disturbance, Dr. C. C. Miller; Injured by Passing Trains, G. M. Doolittle; Stamping on the Floor above a Bee-Cellar, Dr. A. B. Mason; Disturbing Bees Out of Doors G. M. Doolittle; Handling Bees in Winter, F. Boomhower.

Price of the REVIEW 50c. a year in advance. Samples free.

THE PRODUCTION OF COMB HONEY.

A neat little book of 45 pages, price 25 cents. The REVIEW and this book for 65 cents. Stamps taken either U.S. or Canadian. Address

W. Z. HUTCHINSON,

Flint, Mich.

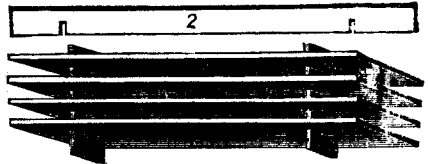
FEEDERS.



We have quite a number of the ordinary Feeders yet in stock which we will sell at 4c each per 25, \$8.75. These cannot go by mail, so must be sent by express or freight.

IMPROVED CANADIAN FEEDER.

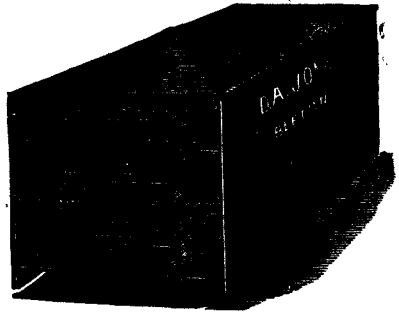
This is the Feeder spoken of on page 610 of the current volume of the JOURNAL. It is arranged with the float as shown in the engraving below. Holds 12 to 15 pounds of feed, and



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 80
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

100. 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., Ltd., 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., Ltd., Beeton, Ont.



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

VOL. III. No. 47

BEETON, ONT FEB. 15, 1888.

WHOLE No. 151

EDITORIAL.

THE publishers of the *British Bee Journal* are of the opinion that it will be a good thing for the English cottagers to have a bee journal of their own, specially devoted to their interests and treating of the subject from the cottager's stand point, and to this end a monthly edition of the best things suitable to the requirements of that individual will be published about the 1st March. The size will be equal to one number of the present weekly issue with the same number of pages, and the price is to be 2s. per year post paid. In England they seem to think that their "novices" are not receiving proper attention, while in the U. S. they seem to think that the novice gets more than his share. Thus the world wags.

The Bee-keeper's *Advance* has made a slight change in its name and style. It has now tacked "poultry" on to its platform, and will hereafter be known as the "Advance and Poultrymen's Journal." Its columns still are graced with good articles.

THE NEW PARCEL POST.

The parcel post system which is to come into operation shortly (March 1,) is now being brought down to detail. It will be of interest to those who will be able to take advantage of the new facilities to know that no sealed packages will be accepted either by the

Canadian or American authorities. They must be protected in such a way as to allow the customs officers to make their inspection without any obstruction.

We regret to learn that Mr. W. Z. Hutchinson, has been sick for a week or more with bilious fever, hence his journal will be a little late in coming out this month. Mrs. Hutchinson writes that their little girl has also been down with the same fever two weeks. Both are now improving.

On page 930 of C.B.J. you will notice in making up the JOURNAL, by mistake Root's comments on Foster's article are omitted, and he is credited with a part of our own comments. Then again, on the second line, page 931, the word "their" should have been omitted, the presence of which changes the sense entirely.

We congratulate the publishers of the *Canadian Live Stock and Farm Journal* upon having secured the services of Mr. Allen Pringle, of Selby, as a contributor to their columns, on the subject of bee-culture. They could have obtained no more able, practical and interesting writer in Canada.

The new "Constitution and By-laws" of the Ontario Bee-Keepers' Association have just been printed at this office and will be mailed at once to all who have already become members by the

Secretary, Mr. Couse, of Streetsville. We hope that all the past membership has been renewed, and we should be glad to learn that many new ones have been added. The membership of this Association should be at least 1,000, and we hope to see it that before many years.

MR. MCINALLY'S BEE CELLAR.

Mr W. J. Foot, in writing on other matters, says: "Mr. McNally's description of his bee-cellar is most valuable and interesting. There was only one slight omission. Does Mr. McNally leave the covers on or off; if the latter what is put on in place of them? Allow me to say that there is scarcely a number of the JOURNAL that has not an article in it worth more than the year's subscription." If our memory serves us rightly, Mr. McNally said that he wintered with the covers *off*, and with the ordinary cotton quilt over the frames, but placed on sufficiently long to give the bees a chance to fasten the edges to the top of the hive. If we are wrong Mr. McNally will please correct us. Let us thank you, Mr. Foot, for the most excellent recommendation you give the CANADIAN BEE JOURNAL. Coming from a "charter member" on our subscription list makes it all the more valuable.

Salt as a Lubricant for Making Foundation.

IN a late number of *Gleanings M. M.* Baldrige related a circumstance regarding the value of salt when used in solution for the removal of wax from the dipping-board, and as a lubricant for the rollers, when the dipped sheets are being run through the foundation mill. The publishers of *Gleanings* at once set to work to test the matter, and as the results of their experiments are so valuable, we give them in full.

"Our first experiment with the salt was to add a little of it in the vats of water referred to, in about the proportion of a quart of salt to five gallons of water. The rolls were then thoroughly drenched in briny water—no starch or other lubricant being used. Upon trial the sheets went through the rolls with little if any sticking. It soon became evident that the brine alone was not sufficient. As prescribed in friend Bald-

ridge's letter, we then mixed a little of the brine in the starch paste, in the proportion of 1 of the former to 20 of the latter. In connection therewith the brine water was used in the shallow vats as before. Foundation was then rolled out with little if any trouble from the sticking, and the results were highly satisfactory indeed. There is not only much less trouble in picking the first end of the sheet off the rolls, but a much larger quantity of foundation can be turned out in the same time. Said our Mr. Kimball, on the first day's trial, as I watched the nice sheets peel off the rolls with so little trouble, "See here; we have run off as much foundation so far this forenoon as we did all day yesterday. How is that for salt?" It was then, I think, 11 a.m., and on the day previous no brine had been used. It seemed to me hardly possible that it could do this right along; but the foreman assures me that since that time, with the salt he has averaged about as well.

Mr. Baldrige also mentioned the lease with which sheets could be removed from the dipping-boards when the latter were soaked with brine water. We have carefully tested the matter and find it just as friend B. states. We now keep the "sheeters" or dipping-boards, when not in use, soaked continually in brine water. Without the addition of the salt in the water, the boards would roughen and become totally unfit for use.

Mr. Baldrige, in the card referred to in this article, does not claim to have originated the idea, but says he got it from a friend. In a card received since, this friend writes, telling how he accidentally made the discovery. It reads as follows:

Mr. A. I. Root:—On page 944, Dec. 15, I see Mr. M. M. Baldrige gives the use of salt brine to prevent sticking to the dipping-boards. In the spring of 1883 my brother and I purchased of you a fdn. machine. Your directions were to use starch, which we tried, also soap; but stick it would, till we gave it up in disgust. Later on some sheets of wax fell into a pork-barrel, and we found to our delight that they ran through the mill like a charm. We then used salt thereafter, and we never again had foundation stick. Finding that friend Baldrige had trouble with the sheets sticking, I gave him the secret. Let the people have it. It is worth money to anyone having foundation to make. E. A. MORGAN, Columbus, Wis., Dec. 28, 1887.

Friend Baldrige, thinking the "secret" was too good to keep from the brethren at large, "let the cat out of the bag."

Oh, yes! The little evaporated particles of salt which will adhere to the foundation will in no way make it less acceptable to the bees, but if the theory is true that the bees require salt, then the value of the foundation so made is enhanced."

While we believe we have been about as successful as most folks in getting nice sheets of wax from our dipping-boards and in running them through the rolls, without having the edges cracking and breaking, still our boys have very often felt inclined to say "bad words" when everything was not just right, so that things worked on smoothly. If this "wrinkle" does turn out all that is claimed for it, and doesn't have any "set-backs" it will, perhaps, have the result of reducing the price of foundation. We have had just the same difficulty friend Root mentions with our dipping-boards. It seems that while the boards are perfect in every other way, yet sometimes they will get rough and uneven, and it seems exceedingly likely that this same application is going to be the remedy. We will try it anyway.

FOR THE CANADIAN BEE JOURNAL.

Mr. Hutchinson's New Bee Journal.

THE initial number of *The Bee-keepers' Review* only reached me yesterday (Feb. 2) owing to my having, for the present, a change of P.O. address. After a careful and critical perusal of it, I confess to a feeling of disappointment. The main feature of the new journal, according to the advertisement that heralded it, was to be "the reviewing of current apicultural literature." Well, the *Review* does not review. The only article of that complexion is the one on Simmins' new bee book, and, at the outset, the editor says: "Now, instead of reviewing this work in the regulation way, suppose we briefly mention some of the points that especially pleased us as we scanned its pages." The article is a synopsis of the Simmins' book, under two heads: First, what friend H. agreed with, and second, what he differed from. Now, the editor had advertised a journal that would review current apicultural literature, "in the regulation way," and the sample number fails to "fill the bill," or to attempt doing so.

I do not believe there is a bee journal editor on the continent of North America who has the moral courage critically and impartially to review "current apicultural literature." The spirit of the age is against it to begin with. A certain writer of note says: "Oak has given place to willow; everybody has grown limp. Out of the generality of limpness has come an admiration of it. A man cannot speak a plain word without being accused of bitterness; and if

he denounces an error or a wrong he is called narrow minded; for all must join the Universal Admiration Society, or be placed under ban and howled down." In this limp age the limpest people I know of, take them as a class, are bee-keepers. The coo of the dove is their native language. They slobber over one another, distribute taffy, and "brother" one another to a most ridiculous extent. No, friend H. the "brothering" wouldn't stand a "review" properly so-called. Better let the title of your journal continue to be a misnomer, than spoil your chances of getting a paying subscription list by handling a free lance of honest, outspoken criticism. It will take a bolder man than you to do that sort of thing.

I am also disappointed in the literary calibre of the *Review*. We were led to expect the *creme-de-la-creme* of apicultural journalism. The editor blows his own trumpet with a pretty loud "toot" in the introductory article. Mr. Heddon labels the *Review* in advance the fanning mill among bee-journals, which is to "winnow from the common mass" the "golden grains of truth." Mr. Baldrige commends the new comer in the same figurative way—great minds flowing in the same channel. The *Review* is to "get all the wheat from the bee-papers put in proper shape in just one." There are other "toots" from the editorial horn on page 6 and 7, proclaiming the super-excellent literary and other features of the new journal. And now, in all candor, is this initial number any better than a good average number of any one of our leading bee-journals? Is it absolutely free from chaff? It endorses the complaint that in other journals "too much is heard from the novice." Well, not a novice "peeps or mutters" in the *Review*. It is like a house that hasn't a baby in it, nor a boy with his jack-knife, nor a girl with her doll. Such a house may suit sour and surly old bachelors or "pernickety" old maids, but I prefer a house that has some young life in it.

I am further disappointed in the discussion of the special topics chosen for the first number. It decides nothing. It throws no new light on the subject. The word "disturbance" is used very vaguely. Generally it means just taking a look at the bees, which certainly is not disturbing them particularly. Raising the chaff cushion for a peep at an out-door colony, or taking a few moments' tour through the cellar with a light, is no disturbance of bees that are snugly hibernating. As to disturbance, properly so-called, the "doctors differ." Some think it very injurious, while others take the opposite view. On the whole, disturbance is discouraged.

I am one of those who consider the needless

multiplication of bee journals an evil. If those we have on the continent of North America were boiled down to about three or four they might all be first-class. The *Review* quotes with commendation an article from the *Bee-Keepers' Magazine* on this subject, but I do not see how its appearance helps the matter in the least. There is nothing in this number of the *Review* that any one of the leading bee journals would not have gladly welcomed to its columns. Friend H. will not be able to furnish pure wheat without any admixture of chaff. He tried to make the Detroit Convention the most sober, practical, hardworking assembly of bee-keepers that ever met anywhere. It turned out the most merry and hilarious one ever held, and yet everyone admitted that it was a very profitable occasion. You cannot feed any animal wholly on highly-condensed victuals. Horses and oxen must have some coarse fodder, and Burdette never said a truer thing than when he affirmed that the man who was destitute of humor and facetiæ might safely write himself down "an ass."

It is too much the case that whenever a man begins to think himself something of a bee-keeper he must invent a hive; and whenever a bee-keeper begins to think himself a writer he must start a bee-journal. "Next!" Of course in this free country every man's at liberty to constitute himself an editor if he wants to; and equally of course, every man is free to express his opinion as to the wisdom, or otherwise of the step. He must take the consequences of his frankness, however, as I am prepared to do. I suppose if I had patted friend H. on the back, and said "Go it, W.Z., the more the merrier!" he and his admirers generally would have liked me better, but I can't help it. I ain't in the taffy business, but notwithstanding what I have said, I am one of Mr. H's warmest friends, and sincerest well-wishers.

W. F. CLARKE.

St. Thomas, Ont., Feb. 3rd, 1888.

From our British Correspondent.

MEL SAPIT OMNIA.

MR. Demaree, on page 813, wonders why our "Standard frame" has a top-bar 17 in. long. I am sorry I have not made the reasons clear to him on page 738 probably a cut would have done so. It may interest him to know that many hives are made to take "Standard" frames with a 15½ in. top-bar, but these hives are "single-walled" such as Fig. 1 on page 790. Mr. Cowan's hive also has a short top-bar. I omitted to mention the fact when I gave a description of it. For myself, I

prefer the 17 in. top-bar with all diffidence to the remarks of the editor of the C.B.J. on page 650, while my MSS were in his pigeon hole.

May I add my congratulations to yours, Mr. Editor, to our friend Dr. Mason on his appointment to the presidential chair. I hope he will settle the question of naming *lime* honey, *alias* basswood, *alias* linden, to his satisfaction.

Yesterday eve I was up to the quarterly *conversazione* of the B.B.K.A. We were rather a small company, but very enthusiastic. Mr. Grimshaw opened a discussion on "specialization." This led to a somewhat desultory but very animated conversation. It developed into a very chatty and decidedly good-natured meeting. "Sending queens by mail" was especially lively and interesting. I think your readers are aware bees are not allowed to travel through the post by our authorities, and official stupidity will hear no appeal from us. We recounted some of our experiences and attempts to evade the regulations. I strenuously advocated fighting the official stupidity, but everybody else said, "go slow" especially the chairman for the evening, (Mr. Cowan, of course, is in Switzerland). I still maintained my ground, remarking: England is a reproach amongst nations for government official stupidity, and what our officials wanted teaching, was that they existed for the country, not the country for them. Now, that sentiment is downright radicalism and rebellion. Ah! I fear I am becoming utterly demoralized by my Republican and semi-monarchical associates.

Yesterday's daily papers were full of harrowing accounts of the "blizzard" in Uncle Sam's country. I thought of our bee-keeping friends there many times. I shall look for my bee-papers from the States with painful interest. "A touch of nature does make all flesh kin."

Our winter, on the whole, has been very mild and favorable. I presume most of my queens are breeding, probably all, as they are all young, but, of course, I have not examined any of them. The bees have flown many days as if it were summer.

AMATEUR EXPERT.

England, Jan. 20th, 1888.

You have made a few mistakes in my articles which I must ask you to correct if you have not done so before you get this:

Page 738, second column.—Standard frames can be made from boards nine inches deep, etc.—after the board is placed, should be planed.

The labor price of metal ends is 2½ pence per gross, not 2 shillings and 2 pence.

The metal end, Fig. 4 is upside down.
Neighbour's hive, page 792, should be Fig. 4 not Fig. 2. Abbott's hive, page 793, should be Fig. 5 not Fig. 4.

For the Canadian Bee Journal

Chapman Honey Plant.

SUPPLIED FREE BY THE U.S. GOVERNMENT.

THE "Chapman Honey Plant" has been placed by the Dept. of Agriculture upon the "free list." All residents of the United States who desire to procure the seed can do so by addressing Hon. Norman J. Colman, Commissioner of Agriculture, Washington, D.C., or it can be procured through their representatives in Congress.

My object in notifying apiculturists and others who get the benefit of your valuable journal, of this opportunity to get this seed gratis is that I have been paid for the seed I furnished the Dept., and I want our tax-payers to get the benefit due them, and not permit the seed to waste in the Seed Dept. at Washington. Your most excellent JOURNAL is, I conceive, read very extensively in the United States, hence you will confer a favor upon your "Yankee" readers by noticing this in your JOURNAL.

H. CHAPMAN.

Versailles, N.Y., Feb. 2, 1888.

We are glad to observe that the Chapman honey plant has been taken hold of by the United States Government, and it shows the extreme unselfishness of friend C. that he should be anxious to let every U.S. bee-keeper know this. By so doing he is virtually putting lots of money out of his own pocket which otherwise he might receive.

For the Canadian Bee Journal.

OBJECTS TO VIPERS BUGLOSS.

ICANNOT refrain from addressing a few lines to you sir, in protest, when I find you recommending on page 938 a pestilent weed like Vipers Bugloss to be sown as a honey producer on the waste rocky lands of Muskoka, and I may also add elsewhere, for it is not the first time the great influence you possess as an authority on everything pertaining to bee culture, has been used in bringing this weed into notice. Now I hold that however important the honey interest may be it will never justify the spreading of weeds known to be injurious to the agricultural interests of the country. I am informed that this is the noted blue thistle of the Shenandoah valley, and if so we do not want it in Canada. About ten years ago I noticed, while driving in the country, on the roadside a patch of this plant and as bees (principally wild bees) and insects seemed to visit the flowers freely I took some of the young plants home; in course of

time the seeds were scattered. I am informed that the owner of the farm adjoining the garden where it was planted, had been, trying to eradicate it from his fields for several years past.

I submit, Mr. Editor, that Canadian bee-keepers ought to rest and be thankful for the pest which is already so abundantly scattered without their aid. I refer to the Canada thistle and refrain from being the means of adding another to the already too long list of foes, which Canadian farmers have to contend against. Would our Minister of Agriculture give his sanction to the purchase by the Bee-keepers' Association of the seeds for distribution?

To conclude I am afraid, Mr. Editor, when you read this you will recall my promise to write no more on bee matters, but I cannot refrain from warning an old friend when I have reason to tear he is on the wrong switch.

J. C. THOM.

Streetsville, Feb. 10th, 1888.

Whether this is the blue thistle of the south or not we are not prepared to say. We believe the botanical name is Vipers Bugloss and are convinced of its honey bearing qualities. It is a biennial and we have sown and grown it in our own fields and garden and had no difficulty in killing it when we wanted to, in fact with us it is as easily killed as clover or more so. You mow clover off before it seeds and it will grow up year after year, while to mow V. Bugloss will prevent it from seeding for one year and destroy it forever. It is perhaps one reason why so many people object to it. The seed remains on the stalk during the fall and winter, and shells out from time to time. We have known it to blow on the surface of the snow and drift along as it were and scatter in this way some distance from the old plants. We think if you had travelled through many parts of Muskoka where we were you would come to the conclusion that farming was practically out of the question. There are thousands and perhaps millions of acres that are only fit for raising bee plants and shrubs. It would not be difficult to find some burnt districts where a person could walk ten miles without crossing five acres of tillable land. We think even Vipers Bugloss would not thrive in many places for want of soil; but from the experience we have had with it it does not seem to be any more of a pest than our mullein or cow thistle (not Canadian.)

For the Canadian Bee Journal

Reply to "Critic on the Path."

OUR friend the "Critic on the Path" (I suppose he means war path) seems greatly alarmed that there will be too many bee-keepers. I judge from the spirit of his article that if he could obstruct the road to glory he would do so, thinking the conditions would be too crowded for his comfort when he arrived there. His alarm has no foundation except in his own selfish nature. Here in the State of Michigan wherever you find one successful bee-keeper you will also find from fifty to a hundred others in the same vicinity who have embarked in the business and given it up in disgust. This makes good Mr. Doolittle's statement that there is but one person in five thousand that is adapted to bee-keeping. Well, enough of this "let us all go fishing."

JOHN DEITZ.

Ellington, Mich.

For the Canadian Bee Journal.

BUCKWHEAT HONEY.

ON page 815, Vol. III., CANADIAN BEE JOURNAL, in his article, "Too much poor honey sold," Mr. McEvoy speaks of buckwheat honey as "black trash" and says he does not want any of it about him. Now, while I do not doubt that friend M. is sincere in what he writes, yet it seems to me he must have a very poor locality for the production of buckwheat honey. It is a well known fact that some districts are not favorable to the production of buckwheat honey. Here we seldom fail to get a fair yield from buckwheat, and some seasons we get an immense flow and it is far from being black trash. It is light in color, sometimes only a shade darker than basswood, and as to flavor, many of our customers prefer it to linden or clover.

We have tested it for wintering and when well ripened—and honey of any kind should never be used for winter stores that is not well ripened—we have found nothing better. In many localities buckwheat honey is gathered so late in the season that it does not have time to ripen before winter, and is thin, watery, and neither fit for winter stores nor for table use.

What Friend M. says in regard to poor honey hurting the market, we have found to be true, and I believe it would be better if none but first-class well ripened honey were put on the market.

O. G. RUSSELL.

Afton, N.Y., Jan. 13, '88.

The difference in honey from various districts is noticeable and especially so with buckwheat, some being quite light.

Many prefer it to other flavors when they become accustomed to it. One of our best customers who always ordered the best clover, linden or thistle, sent for a can of buckwheat last time as his good lady liked the flavor. Heather honey brings half a dollar a pound in the London market. Its taste is more decided than our buckwheat, and were you to hand it to some of your friends they would wonder what trash that was, yet it is sought after and highly prized. No doubt early gathered, well ripened buckwheat would be appreciated by those accustomed to it. See how smokers appreciate a special brand of tobacco or cigar, yet how many of us there are who could not be hired to taste it. Custom has much to do with it.

For the Canadian Bee Journal.

WINTERING IN A LIGHT CELLAR.

FRIEND BRIDGES' SUCCESSFUL EXPERIMENT.

NOTICE that some of the readers of the C.B.J. are making inquiries about wintering bees in a light cellar, and as my name was mentioned in the last number with reference to the subject, I will give you my experience. I gave you an article last winter on that subject, which will be found on the 23rd Feb., 1887. I wintered my bees last winter in a light cellar and they came out in good condition, not losing so much as one colony. I have 93 colonies in my cellar this winter, and they are in the light. The question will be asked, Do they not fly to the window? Yes, they do, and if they were kept in total darkness as all bee-keepers direct, they would die in their hives. It is a common thing to take out hives in the spring, half full of dead bees, with the combs mouldy and rotten. This would not be the case if they were in a light room. There are very few dead bees in my hives, for when they get ready to die they come out and fly to the window if they are able to do so—if not, they fall to the floor. My bees are dying considerably faster this winter than they did last winter, which can be easily accounted for. Last winter they went into winter quarters with young bees, this winter they went into winter quarters with old bees. No man can put 100 colonies of bees into a cellar in the fall and bring them all out in the spring; they will be sure to die off more or less any winter; simply keeping them in a dark place will not keep them from dying. My experience is that they can be put in a light room with a temperature under 47°. I aim to keep mine as near 45° as pos-

sible. I put them in on Dec. 1 this winter, and there was very mild weather for two weeks, and the bees raised the mercury to 52° and it remained at that for two weeks, notwithstanding the window was open night and day. I found them going too fast for the window at that temperature and I partly darkened the window until winter set in in earnest. My belief is that in less than five years all bee-keepers will be wintering their bees in a light cellar. I am perfectly satisfied that they are as quiet in a light cellar as in a dark one. Last fall I boarded the walls of my cellar with rough boards, leaving a small space between the stone walls and the boards, then I lined the board walls with building paper and laid a board floor on the bottom of the cellar, leaving a two-inch space between the bottom and the floor. This makes the cellar very dry and warm; no frost can possibly get in. We have had two weeks of the coldest weather here that I ever recollect seeing. The mercury has been as low as 30° below zero, and the mercury has been from 40° to 43° in the cellar, with no heat but that from the bees. I think this inside wall will prove to be a good investment, for I never could have kept the frost out during such a cold spell without artificial heat. I would just say to those who intend to try my plan of wintering in a light cellar, that they will find it necessary to partly darken the window after the 1st of March if the weather is mild, as the bees generally begin to get uneasy about that date.

I suppose I might send you an article occasionally that might be of some benefit to my brother bee-keepers, but you will see at a glance that I am not competent to get up an article for the press. My education is a very limited one and it keeps me from writing for the press. There is another thing that we must not lose sight of. That is, we cannot afford to spend all our time on bee-keeping or any other wordly pursuit. We are all pilgrims in this world and we are traveling to a world from which no traveller has ever returned. The good Book tells us that to be carnally minded is death, but to be spiritually minded is life and peace.—Rom. viii-5. We must not not overlook in our knowledge of bee-keeping that we have a soul that needs daily food as well as our bodies.

I have got familiar with the names of quite a number of our able bee-keepers by reading the bee journals. It is not likely that I will meet with many of them in this world, but I am in hopes of meeting with some of them, at least, in the better land.

A. BRIDGE, P.M.

West Brook, P.O., Co. Frontenac, Ont.

We thank you for so promptly

answering our request, and for the information you have given us. It does begin to look as though we have been *too particular* about having the repository "pitch dark" all the time, but even yet we must be "slow to make haste" until we have yet more positive assurance. Let us know in spring just how your bees come out, and how they stand the first few weeks. The effect of these weeks in spring when the colonies are liable to "spring dwindle" should be carefully noted. We have printed your letter pretty much as it was received, just to let our friends see that you are thoroughly capable for writing for the press, and we hope that you may help us a little more by your letters than you have in the past. You know how to write *understandingly* and that is what we want. High-flown verbiage is all right in its place, but some of our best writers use very simple language, and their articles are always looked for eagerly on this account.

OHIO BEE-KEEPERS.

Written for the Canadian Bee Journal by F. A. Eaton.

THE convention was held at Columbus, Ohio., on Jan. 10th and 11th, 1888, and opened at 9 a.m. President E. R. Root in the chair.

After the routine business of reading the report of the last meeting, and the reports of the officers, the first topic was announced for discussion, viz :

BEE-CONVENTIONS, HOW TO MAKE THEM A SUCCESS AND THEIR VALUE TO BEE-KEEPERS.

A. I. Root—It pays to hold and attend conventions. It has been hard work to get me out. I owe a debt of gratitude to Prof Cook and others for getting me started; it does me good and I am thankful that I have been induced to attend conventions. I learned of a new 5-cent comb honey package at Manistee by going to the Michigan convention and getting out among folks last month. He spoke of the joint meeting of the horticulturists and bee-keepers of Michigan; of a two-hours' address by a professor—but when it came to the bee-keepers' time they were up and alive, speaking briefly and to the point, and they had lots of intelligent fun.

Dr. Mason—It does not pay me in dollars and cents for we can get the best thoughts and the valuable suggestions of our best men who attend the conventions, in the published reports of the meetings, but it pays socially.

Dr. Besse—It pays me by learning of new appliances, getting new ideas, mental culture, etc. I have got my pay already, and the convention has only just started.

H. R. Boardman—It pays the specialist financially, and always pays all socially.

N. Hutches—It has paid me well. I have kept bees 49 years, but I used to keep them in the old "box" and "gum" hives, but from attending conventions I have learned of bee periodicals and all that I know about keeping bees in the right way. I have forty colonies in good condition; three years ago I cleared \$300.

Dr. Tinker—I feel that it pays, and that these gatherings are of value and interest to the bee-keeping fraternity.

The general impression was that it paid to attend conventions, and that those depending upon the published reports lost a great deal.

Dr. G. L. Tinker, of New Philadelphia, Ohio, then read the following essay:

THE SECTIONAL BROOD CHAMBER AND ITS ADVANTAGES.

If it had been announced that I was to discuss the advantage of sectional hives we should be dealing with a practical subject, one with which every bee-keeper in the land should be familiar. But the subject in hand is one in sore need of discussion, since, for some cause, very little has appeared in our bee periodicals to enlighten us concerning it.

My first season's experience with sectional brood chambers seemed very favorable. It happened to be an extraordinary season with us, and any hive with good management would have made a fair record. The past season was not a good one, and the defects of the new hive were apparent in many things. As compared with the Simplicity hives, of which I had seven in use, they were a marked failure. The bees in the Simplicity hives of my neighbors also did better. They not only had more bees all through the season, but had more surplus and stored enough for winter, while the bees in the sectional brood chambers had to be fed for winter.

I am reluctantly compelled to make this confession, partly because of my own disappointment in these hives, and partly because of the kindly feeling I entertained for the inventor.

I will give in detail my experience with the sectional brood chamber, and my reasons for abandoning it. In the first place, the horizontal half of a brood chamber is too small for a swarm, too small for a colony in the fall and too small for wintering. It is too small for a swarm since, with a queen-excluding honey board the bees will store much pollen in the surplus sections and soon dwindle down to the size of a good nucleus. It is too small in the fall, since the bees are limited in space for stores and brood and become too weak in numbers to winter to the best advantage. It is too small for wintering, since it will not contain sufficient stores to winter the colony and make a respectable start in brood rearing in the spring.

Thus it will be seen that one of the cases of such a hive, by itself, is of no value in the hands of the practical honey-producer. It is required that both parts of the brood chamber be used together to make anything like a success of it. But if they are so used the following difficulties arise:—In the spring the colonies breed up slowly, and without much attention will not get ready for the harvest. When at last it does get ready, if the honey flow is extra good, the bees proceed to fill up the horizontal space with brace combs and fill in with honey. The bee-keeper now thinks of interchanging the sections

and bringing the brood to the top, but finds a lever is required to pry the hives apart. He quickly finds he can neither interchange the parts nor close the hives without killing hundreds of bees. They pile upon the broken surfaces and a smoker is required in order to cut away the honey.

If robbers are troublesome, it becomes a serious matter, and the bee-keeper soon gives up the interchanging business as a bad job. It seems that bees do not build brace-combs to the same extent between whole brood-chambers, tiered one above the other, as between these shallow cases. After all, there is no advantage from interchanging the sectional parts since the bees will carry the brood upward and breed just as rapidly where no interchanging is done, as where it is. As the season advances, the bees put all the honey, or nearly all, in the upper case, so that the whole brood-chamber is required for winter.

The "shake-out" function is a good deal easier to talk about than to carry out in practice. With black bees and a little smoking it may be done, as it does not take much shaking to get them out. With Italians, Syrians and Cyprians, it is a very difficult matter, and the bee-keeper is easily persuaded not to try it again.

Finally, sectional brood-chambers are objectionable because of the extra expense of so much rigging for the amount of honey they contain, and there are no advantages to compensate for the extra cost.

The sectional, or storifying hive, will be the hive of the future. By this I do not mean a hive with a sectional brood-chamber, for one of the parts of such a hive is only half as large as the standard brood-chamber, whose capacity, as fixed by Fathers Langstroth and Quinby, is 2000 cubic inches of space, which will contain, in suspended brood-frames, about 1,350 square inches of comb. I have already shown that the half of such a brood-chamber is too small to be of any practical use by itself. Nothing less than a capacity for 800 square inches of brood-comb is deserving the name of brood-chamber, and such a one may be successfully used. I mean instead, a hive made up of two, three, or more brood-chambers tiered up one upon the other, or, as our English brethren term it, "storified." As this latter term is more elegant and expressive, I shall use it.

"Storifying hives" have many advantages over other kinds of hives. I have no doubt that the popularity of the Simplicity hives is due more to this one feature than any other. We have had them in use in this country for many years, but it is only within the last few years that we have fully appreciated this admirable function. It is highly significant that our English friends are placing so much stress upon this point. Of late they have given no premiums to any but storifying hives.

In this connection I have but one suggestion to make, and I have done. It is, that, if the Simplicity hives were cut down to take a 7-inch brood-chamber, it would be nearly perfect as a storifying hive. It would then be just right for a swarm with a queen-excluding honey-board; it would be just right for wintering, and it could be "storified" at any time in the working season, to make a large hive according to the necessities of the bee-keeper.

DR. G. L. TINKER.

H. R. Boardman—I have made and used sections and supers five inches deep before I ever heard of such things.

A. I. Root spoke of queens laying in a circle, and thought that deeper frames like the Langstroth, were more desirable than sectional, on that account.

H. R. Boardman—I have known a cross-bar in the centre of a comb, to stop the queen from laying on the opposite side. I cannot look favorably upon the sectional hive; perhaps from prejudice, but I think not.

The Secretary—I used a sectional hive last season, but I find enough disadvantages to deter me from changing the present mode of it.

E. R. Root—What about the thumb-screws? Is there not a difficulty in the manipulation of frames?

Dr. Tinker—I find no trouble to manipulate Meddon's frames, after getting the first ones out; but frequently, that is quite difficult.

Dr. Mason—I do not think that the sectional brood-chamber is a practical success. I like to have my frames so that I can lift them out and look at them. What are the advantages of reversing?

Dr. Tinker—The only advantage of reversing, is to get the frames filled with comb; if not filled, queen-cells will be built at the bottom, during swarming time; but if filled, they will be built along the centre.

E. R. Root—I think it quite an advantage to have full frames of comb.

A. S. Goodrich—I have had experience with full frames; used wired frames, and let the foundation come to the bottom-bar.

H. R. Boardman—Comb fastened at the sides, is sufficient for extracting.

A. S. Goodrich—If three sides fastened, make the combs quite secure, will not four sides fastened make them more so?

Dr. Tinker—I like to have the combs fastened to the bottom-bar nearly the whole length, leaving holes enough for the bees to crawl through.

G. R. Morris—When the foundation is fastened to the bottom-bar, the bees cut it out.

H. R. Boardman—I do not want combs fastened to the bottom-bar, as the combs will be sure to sag or bulge just above the bar. Reversing the brood-chamber is entirely impracticable. In reversing in hot weather the comb would be soft and drop over.

Dr. Tinker—I can reverse brood-chambers in April, and have the frames filled without danger of falling over.

Henry Bates—I want the combs down to the bottom-bars, and no wires.

Dr. Mason—Do you run for comb honey?

Henry Bates—Yes.

Dr. Mason—You have no experience then in handling combs?

Adjourned to 1.30 p.m.

The afternoon session was called to order by President Root, and the topic for discussion was,

BEE-KEEPING IN CONNECTION WITH OTHER PURSUITS.

Frank A. Eaton led the discussion as follows: Bee-keeping as a pursuit is of such magnitude, and requires so much attention and thought, that to couple it successfully with other avocations, requires rare business qualities and good judgment. The question as stated leaves it open,

as to whether bee-keeping shall have the dignity of business, or be simply an adjunct, or a recreation. I take it that the question this convention chooses to consider is the keeping of bees in such numbers as to raise it above a mere play thing.

To keep bees at all, means time and work, and as the number of colonies increase, so must the other business be neglected, and those professions and callings which afford and give the most time and leisure are the best suited to go hand in hand with bee-keeping.

Perhaps the best idea I can give of how bee-keeping can be carried on in connection with another pursuit would be to cite my own case. I manage from 75 to 150 colonies of bees each season; they require my entire time and attention from March until October. I prepare my hives, sections, and in fact make all preparations for the busy season during March and April, as I ship bees and queens, beginning by May 1.

I also run my apiary for both comb and extracted honey (principally comb), and in that my time is most busily occupied until the first of October. Then I am to get my honey nearly all marketed by the first or middle of November.

The bees have now occupied my entire time from eight to eight and a-half months of the year, leaving from three and a-half to four months that bee-keeping alone cannot fill.

Having been in the music business prior to my keeping bees it gave me considerable experience in this line, so that at the close of the bee and honey season I lay in a stock of pianos and organs on consignment for the holiday trade. I realise several hundred dollars each season from those odd months, and thereby fill in the year. The supply business goes well with bee-keeping at all times of the year.

Small fruit and market gardening are well suited to bee-keeping, but as the care of each come about the same time, help will be required. However, the benefit bees do to the fruit bloom in the way of fertilization more than pays for any extra help needed.

Another pursuit that is generally conceded to go hand in hand with bee-keeping is farming, but I am of the opinion that this is not true. I do not believe that any man can be a successful bee-keeper and farmer at the same time, as the requirements of each are numerous and require the most care and attention at the same time. If one is cared for the other is sure to be neglected.

Dr. Mason—When I farmed I made a success of both.

A. I. Root—It is not best to put all your eggs in one basket. I recollect how a man once wrote to me for prices of forty colonies of bees. I advised him to buy only two or three; and better still, only a nuclei and stick to his other business. He accepted the advice and finally made a success of bee-keeping.

C. E. Jones—I cannot quit farming nor keeping bees; they go well together. I get everything ready for the bees in the winter. There is more profit in my bees than in my farm, but I want both.

A. S. Goodrich—I made a success of farming but failed with bees, except to get honey enough for home use.

N. Hutches—I made a success with the bees.

on a 200 acre farm. I would rather be a bee-keeper than a United States Senator.

A. I. Root—If a man is enthusiastic enough, many can make a success of both.

A. Benedict—I have made a success of bee-keeping and general farming for forty-five years.

Dr. Mason—I have a neighbor that has 100 colonies of bees and a good farm, and makes a financial success of both.

S. R. Morris—I started in keeping bees and farming, but made a failure of it until I had help; now I make a success of both.

S. Hains—I farm and keep from fifty to a hundred colonies of bees. I want both. The best my bees have ever done was to give me 150 pounds of extracted honey per colony.

The next topic was entitled "Bee-keeping as an exclusive pursuit," and an essay by Dr. C. C. Miller was read.

H. R. Boardman—If a man puts his whole soul into bee-keeping he will succeed but he must not divide his soul up into two pursuits.

Dr. Mason—I differ with Mr. Boardman.

H. R. Boardman—By putting my whole energy into my business the past year, I succeeded in getting a fair crop; had I done anything else in connection with bees, I would have failed.

A. I. Root—I believe that if a man has his bees in first class, condition and makes an effort by sowing, he can get a good crop in any season.

BEE PASTURAGE.

C. E. Jones—It will pay to keep 100 acres of land to farm, and 100 colonies of bees and sow for honey production. I have sown two acres of sweet clover on good land and made it pay.

H. R. Boardman—I have been in the habit of furnishing my neighbors alsike clover seed at cost. They make a success with it as a grass crop. In this way I have succeeded in getting over two hundred acres in my neighborhood.

S. R. Morris—I furnish alsike in the same way.

A. S. Goodrich—I have the hay to sell to my neighbors when they get out and they sow the seed.

Dr. Mason—I think the Chapman honey plant is superior to any other, and will pay much better than sweet clover. The honey tastes and looks very much like linden.

A. I. Root—The Chapman honey plant yields day and night and is a pure sweet; but I doubt if it pays to sow two or three acres of good land with any plant that is good for honey only. I think, however, it would be a good plan to have the commissioner of agriculture distribute the seed among bee-keepers.

C. E. Jones—Buckwheat pays, but must be sown at the right time and in the right way.

On being questioned by Dr. Mason, he said, sow in April on good, well prepared soil and roll well. It blossoms with white clover, and does not injure clover honey. It gets ripe, and should be sown again about June 20th. I get two crops of honey and seed on the same ground in one season.

Dr. Mason—Two years ago there was buckwheat near my apiary. The bees mixed the buckwheat with my white honey, and spoiled the whole crop.

C. Culp—My father had his neighbors sow considerable buckwheat one season, and got a good yield; but the honey was dark and strong, and did not sell well.

THE ELECTION OF OFFICERS,

for the ensuing year, resulted as follows: President, Ernest R. Root; Vice-President, H. R. Boardman; Secretary-Treasurer, Frank A. Eaton.

On motion a cordial invitation was extended to the North American Bee-keepers' Society to change the location of its next meeting to Columbus, Ohio, during the Ohio State Centennial Exposition between Sept. 4th and Oct. 19th, 1888.

It was voted that when this Convention adjourns it shall be, to meet at the same time and place, and also with the next meeting of the N. A. B. K. Society.

EVENING SESSION.

Dr. H. Besse opened the next topic on "Wood vs. Tin Separators; is it profitable to dispense with either?"

A. I. Root—By fastening foundation at both top and bottom, you can dispense with separators.

H. R. Boardman—I tried some of the Heddon cases without separators and failed; then I tried broad frames, with separators, and succeeded. The loss of time in looking after the sections, without separators, amounts to more than the loss of honey with them. I prefer wooden ones. I leave my honey on until the flow is over. I very much favor saving and using the partly-filled sections of the previous year.

Dr. Tinker—I find that the bees will fill and finish partly-filled sections from the previous year. Separators are a hindrance to sections without side openings, but I want separators with side-opening sections.

Mr. Loomis, an editor, was present, and being called up, gave a brief talk, and asked as a novice, "Must I try all these things and find out?" Several in reply said, No; consult good bee-keepers, and read bee periodicals.

QUESTION-BOX.

1. Which of the following methods of working bees are the most profitable: selling queens, bees, or producing comb or extracted honey? A. I. Root—Whichever the market demands, or all four, if you have a demand. It would be impossible to decide definitely.

2. How can swarming be best controlled, when working for comb honey alone? H. R. Boardman—By shaking bees into empty brood-frames with sections.

3. Which is the best mode of ripening extracted honey: artificially or with the bees? Dr. Mason—Leave it with the bees.

4. How old may queens be kept and remain profitable? A. I. Root—Sometimes four years, but not often. A. Benedict—The more space the queen uses the shorter time she will live.

5. Is it best to assist the bees in cleaning up their hives in the spring, or should they be left to do their own work? Frank A. Eaton—Help them, if they need help.

6. Give a remedy for spring dwindling. H. R. Boardman—Winter properly.

7. Should colonies wintered in cellars be put back on the same location they occupied in the previous season? A. Benedict—Set them where they were the previous season. Dr. Besse—Set them anywhere, at night. H. R. Boardman—You cannot tell how the weather may be the

following day. If set out at night it might prove disastrous. Dr. Mason—Set them out anywhere. A. S. Goodrich—Set them out where they were. I lost 30 colonies by setting them out in a hap-hazard way. S. R. Morris—Put them where they were.

8. Which is best, to have new swarms on full frames of foundation, drawn out comb or starters only? Dr. Mason—On starters, with surplus above, and a queen excluding honey-board.

9. Can worker bees be reared in drone comb? A. I. Root—Yes, in some instances.

10. Has the queen full control of the fertilization of the egg? Dr. Tinker—Yes.

11. Is the progeny of a drone-laying queen of any value as drones? A. I. Root—Yes. Dr. Tinker—No. A. Benedict—No.

12. What should be done with colonies that get damp when wintered in the cellar? A. I. Root—Let them alone. Dr. Mason—Give warmth and ventilation.

A. S. Goodrich asked, what ails my bees? Half of them are dead, and the balance will die as soon as they get strength enough (laughter). I fed them up for winter on granulated sugar syrup, with a little tartaric acid in it. A. I. Root—What sort of vessel did you mix it in? A. S. Goodrich—Galvanized iron. A. I. Root—They were killed by poison from the action of the acid on the zinc. Adjourned.

WEDNESDAY MORNING SESSION.

The first topic was, "Extracted honey; its production, and the best method of marketing it," by Dr. A. B. Mason.

The Doctor having urged in his essay the putting of nothing but the best extracted honey on the market. A. I. Root asked him what he would do with the bad honey? He replied, make it into vinegar.

H. R. Boardman—I started in with producing extracted honey, but had to conform to my trade.

E. R. Root—Can candied honey be melted and remain as good as before? Dr. Mason—Yes, but great care must be exercised. Messrs. Boardman and Morris thought not, but Frank Eaton and others agreed with Dr. Mason.

An essay by Chas. F. Muth was then read on, "The commission man and his relation to the honey-producer, as affecting the sale and price of honey."

A. I. Root—We cannot spare the middle-man, especially such a broad-hearted man as C. F. Muth.

C. E. Jones—The middle-men are all right; the trouble lies with the producer.

The association passed a vote of thanks to Dr. C. C. Miller and Chas. F. Muth for the valuable papers they furnished in their absence.

H. R. Boardman then read an essay on "In-door vs. out-door wintering of bees and the advantage of the former."

S. R. Morris asked Mr. Boardman if it is advisable to set bees out during the winter for a flight?

H. R. Boardman—Sometimes, but the bee-keeper must be the judge.

S. R. Morris—Will they dwindle in the spring worse when wintered in the cellar? Mr. Boardman—Not as badly.

FRANK A. ELTON, Sec.

SUNDRY SELECTIONS.

READ THE JOURNAL WITH PROFIT.

A. MURPHY.—I have read your BEE JOURNAL for one year, and I think, with some profit. It contains a great amount of valuable information in bee-keeping, but I am not much of a bee-man, having only a few colonies. Last year was very poor in this section, being very dry. Bluevale, Ont.

POOR SEASON IN QUEBEC.

S. MIREAULT.—The last season has been a good one for *bad* reports. We seem to get so very few *good* ones, the drought making such a havoc everywhere. In the Province of Quebec, we have secured an average yield of 50 lbs. per colony, spring count. We lost, however, very heavily the winter before. In spite of all this, however, we are still "steadily clinging to the mast," and we hope to weather the storm.

St. Jacques, Mont Co., Que., Feb. 1, '88.

A DRY SEASON.

DAVID GANTZI.—I will give you my report for the past year. I had 28 hives in the fall of 1886 packed with flax-chaff, and in the spring of 1887, I had 16 left, so you see I lost heavily. I sold 5 of the best I had left for \$62, and sold 7 first swarms for \$56. I did not get much honey this year for it was too dry. We got 350 lbs. of extracted honey; I have now 24 hives in the cellar, but some are very short of stores. Will you kindly advise me how to feed them; they appear to be very quiet; the temperature is ranging from 38° to 44°; I never kept any in the cellar before this winter, and so far I like it better than out-door wintering.

Cross Hill, Ont.

HOW TO TELL HONEY DEW.

J. FOOT.—How can I tell if the bees are gathering honey dew so that I can extract and replace with good stores. See C.B.J., page 812.

Halifax, N.S.

By inserting a straw into a cell a portion of the contents may be removed and examined. The odor will lead you to readily detect it and you can tell at once if you know whence your bees gather it. The willow is the only source of honey dew in this section. In warm weather the smell of honey dew is quickly perceptible in the evening when the bees are fanning.

AN ESSEX EXPERIENCE.

DANIEL STUART.—The summer of 1887 was a very poor one in the county of Essex. In general bees came out of winter quarters in splendid condition, but our hopes were blasted by the poorest honey season we ever had here. Fruit trees bloomed early and in abundance but the flow was short with a break between it and white clover to give the bees time to rest, eat their honey, and steal a little if they could. The most of the white clover was winter killed so that when it did come there was very little honey. They got some from dandelion and other flowers, but hardly enough to keep them

DETROIT HONEY MARKET.

Best White Comb Honey in one pound sections 18 to 20c. Extracted 10 and 11c. Beeswax 22 to 23c.

M. H. HUNT.

NEW YORK HONEY MARKET.

Our market for honey is opening up earlier than usual, and at higher prices. We quote as follows until further notice:—Fair White, one lb. sec's., 16 to 18c.; Fair White, two lb. sec's., 13 to 14c.; Fair to Good, 1 lb. sec's., 13 to 15c.; Fair to Good, two lb. sec's., 10 to 12c. White Clove extracted in kegs and bbls. 7 to 8c. Beeswax 21 to 22c.

McCAUL & HILDRETH BROS.

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 each insertion. 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 **especially** 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.

\$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., $3\frac{1}{2} \times 4\frac{1}{2} \times 1\frac{1}{2}$ $3\frac{1}{2} \times 4\frac{1}{2} \times 1\frac{1}{8}$, 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.

Headquarters in the West

for the manufacture and sale of **BEE-KEEPERS' SUPPLIES.**

CHAFF AND SIMPLICITY HIVES, SECTIONS, FDN., SMOKERS, ETC.

furnished at a great reduction in price. A full line of supplies always on hand. I also have on hand for sale at all times, Pure Italian Queens, Bees by the pound, Nuclei and Full colonies at very low prices.

Send for Catalogue. **A. F. STAUFFER,** Sterling, Ill.

READ THIS.

25 PAPERS GARDEN SEEDS AND THE BEE-KEEPERS' ADVANCE.

One year for only \$1. These seeds are just such seeds as everyone having a garden wants and buys, paying 10c. to 15c. per package, the retail price of the seeds is \$1.75. We give away our paper and sell you the seeds at about half price to introduce both to Canadians. Seeds will be sent post paid and we guarantee satisfaction. Address,

J. B. MASON & SONS, Mechanic Falls, Maine.

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	Aug st	Sept.
Bees, per $\frac{1}{4}$ 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 $\frac{1}{4}$ 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.

	Homebred	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	Carmolan 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.

PRINTING

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

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.

Bottom stand.....	made up flat	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
Honey board, 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. Heddon'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

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 4½ x 4½ 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

'Practical Hints to Bee-Keepers'

Sent free. Address
American Apiculturist,
Wenham, Mass, U.S.

Have You Seen It?

THE BEE-KEEPERS ADVANCE

—AND—
POULTRYMEN'S JOURNAL.

Only 25 cents per year, sample copy free. Address
J. B. MASON,
McFalls, Maine.

APIARIAN SUPPLIES

MANUFACTURED BY

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

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. 10th thousand sold in just four months. More than 50 pages and 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.

A. J. COOK, Author & Publisher,

State Agricultural College, Lansing Mich

250 ENVELOPES

—AND—

250 NOTE HEADS

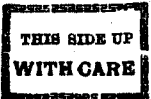
FOR \$1.

On good paper, printed with name and address, post paid.

CANADIAN BEE JOURNAL OFFICE,

BEETON ONT.

SHIPPING LABELS.



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., Ld., 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.

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

BEEES AND HONEY

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

M. RICHARDSON & SON,

Port Colborne, Ont

THE

CANADIAN *POULTRY* REVIEW

IS THE ONLY PAPER PUBLISHED IN CANADA IN THE INTERESTS OF THE

Poultry, Pigeon and Pet Stock Fraternity.

Circulation always on the increase. Subscription only \$1.00 a year. Address,

H. B. DONOVAN,
20 Front St. East, Toronto.

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 GLEANINGS 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.

A. I. ROOT, Medina, Ohio.

Patent Flat-Bottomed Comb Foundation I

High Side Walls. 4 to 14 square feet to the pound. Wholesale and Retail Circular and samples free.

J. VAN DEUSEN & SONS,

(SOLE MANUFACTURERS),

41-3m SPROUT BROOK, Mont Co., N. Y.

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.

Bell Branch, Mich.

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 43 00

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

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

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. They are well finished and are usually sold in hardware stores at \$1.75.

TWO FOOT RULES.

A splendid line in ruler—each offer at, each, 18c. Then we have a nice box rule at, each 25c.

HAND SAWS

Just at the present time we have but one line in these—26 inch long—made by S. Perry's make—usually sold at 75 cent—each offer them for 55c.

PANTRY 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.

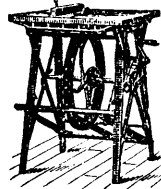
Wooden smoothing planes—the best of the kind, 85c.

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.

BARNES' FOOT-POWER MACHINERY



Read what J. J. 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, 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. & J. J. PARENT, 21

JOHN BARNES, 574 Ruby St., Rockford, Ill.

- 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,

tf.

Barrytown, N.Y.

D. A. JONES, Pres.

F. H. MACPHERSON, Sec-Treas.

The D. A. Jones Company, Ed.

BEETON, ONT.,

MANUFACTURERS OF AND DEALERS IN

APIARIAN * SUPPLIES.

Our Circular sent free on application.

PUBLISHERS

THE CANADIAN BEE JOURNAL

FINE BOOK & JOB PRINTERS.

Sample copies free on receipt of name and address. tf

DADANTS FOUNDATION

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

T. G. NEWMAN & SON, Chicago, Ill.

C. F. MUTH, Cincinnati, O.

JAMES HEDDON, Dowagiac, Mich.

F. L. DOUGHERTY, Indianapolis, Ind.

CHAS. H. GREEN, Berlin, Wis.

CHAS. HERTEL, Jr., Freeburg, Ill.

E. L. ARMSTRONG, Jerseyville, Ill.

ARTHUR TODD, 1910 Germantown Ave., Philadelphia

G. B. LEWIS & CO., Watertown, Wis.

E. KRETCHMER, Coburg, Iowa.

E. F. Smith, Smyrna, N.Y.

EZRA BAER, Dixon, Lee Co., Ill.

J. B. MASON & SONS, Mechanic Falls, Me.

M. J. DICKASON, Hiawatha, Kans.

ED. R. NEWCOMB, Pleasant Valley, N.Y.

J. W. PORTER, Charlottesville, Va.

ASPINWALL & TREADWELL, Barrytown, N.Y.

BARTON FORSGARD & BARNES, Waco, Tex.

W. E. CLARK, Oriskany, N.Y.

PAUL L. VIALON, Bayou Goula, La.

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.