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

VOL. I.

BEETON, ONTARIO, DECEMBER 23, 1885

NO. 39

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All advertisements will be inserted at the following rates :

TRANSIENT ADVERTISEMENTS.
 10 cents perline for the first insertion, and 5 cents per line for each subsequent insertion.
 Space measured by a scale of solid nonpareil, of which there is twelve lines to the inch, and about nine words to each line.

STANDING ADVERTISEMENTS.

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

TERMS—STRICTLY CASH.

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PUBLISHER'S NOTES.

CLUBBING RATES.

THE CANADIAN BEE JOURNAL

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

TO CONTRIBUTORS

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

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

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

Reports from subscribers are always welcome. They assist greatly in making the JOURNAL interesting. If 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.

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 us a premium one C. B. J. Binder.

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

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

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

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

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

We can supply Binders for the JOURNAL at 25 cents each post-paid, with name printed on the back in Gold letters.

Subscription Price, \$1.00 per Annum Postage free to Canada and the United States; to England, Germany, etc, 20 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.

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.

"FOUL BROOD"

Its Management and Cure.

BY D. A. JONES. NOW READY.

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

Price, 10 Cents. By Mail, 14 cents.

D. A. JONES & CO., PUBLISHERS,

Beeton, Ont.

FEEDERS!

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

CANADIAN BEE FEEDERS

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

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

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

J. P. CONNELL, Hillsboro, Hill Co., Texas, can fill orders for **Pure Italian Queens** by return mail. Untested Queens, \$1.00. Tested Queens, \$2.00. Send me your order and send for my circular of Queens. Nuclei and bees by the pound

FARMERS BUY THE CELEBRATED LARDINE MACHINE OIL,

—AS IT—
EXCELS ALL OTHERS.

Manufactured solely by
McCOLL BROS.,
Toronto

DADANTS FOUNDATION

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

- A. H. NAWMAN, Chicago, Ill.
- C. E. MULLER, Cincinnati, O.
- JAMES HILDON, Dowagiac, Mich.
- DOUGHERTY & McKEE, Indianapolis, Ind.
- CHAS. H. GRIFFIN, Berlin, Wis.
- CHAS. HERTZEL, Jr., Freeport, Ill.
- E. L. ARMSTRONG, Jerseyville, Ill.
- ARTHUR TODD, Germantown, Philadelphia Pa.
- E. WETCHUMER, Coburg, Iowa.
- E. C. SMITH, Springdale, N. Y.
- C. F. BAILEY, Moxtonville, Ky.
- LIZKA BAKER, Dixon, Lee Co., Ill.
- CLARK JOHNSON & SON, Covington, Ky.
- KING, ASPINWALL & CO., 10 Thomas Street, New York.

C. A. GRAVES, Birmingham, O. and numbers of other dealers. Write for SAMPLES FREE and Price List of Supplies, accompanied with.

150 COMPLIMENTARY

and UNSOLICITED TESTIMONIALS from as many bee-keepers in 1883. Write for a copy of each of our Foundation equates ample in every respect.

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

Beeton Printing & Publishing Co.

FINE BOOK, JOB, & LABEL PRINTING

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

F. H. MACPHERSON,
Manager, Beeton, Ont.

3-41.

120 Colonies For Sale!

Having too many colonies on hand I will sell the above number, all in movable frame hives, in first-class condition for wintering, and insured against fire. Purchaser can winter them in my cellar without extra charge. Address

J. B. LAMONTAGNE,
Box 964, Montreal.

Queen City Oil Works!

The Highest Honors and Gold Medal For Our

PEERLESS OIL,

Manufactured only by
SAMUEL ROGERS & CO.
Toronto, Ont.

GLASS JARS!

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

| | | Gross. | Half gross |
|----------------|------------|---------|------------|
| "Crown" brand" | 1 Pint | \$14.75 | \$7.50 |
| " " " | 1 Quart | 15.75 | 8.00 |
| " " " | 1/2 Gallon | 10.00 | 5.75 |

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

D. A. JONES.

WINTER FEEDERS.

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

DIRECTIONS FOR MAKING THE CANDY.

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

| | |
|--------------------|------|
| Each, made up..... | 75 |
| Per 10..... | 70 |
| Each, in flat..... | 20 |
| Per 10..... | 1 75 |

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

Five Per Cent. Discount.

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

D. A. JONES, Beeton, Ont.

THE CANADIAN BEE JOURNAL.

PUBLISHED BY

D. A. JONES & CO., BEETON.

WEEKLY - - \$1.00 PER YEAR

THE NORTH AMERICAN CONVENTION.

THE Sixteenth Annual Convention of the North American Bee-Keepers' Society met at Detroit, Mich., on Tuesday, Dec. 8th, at 10 a.m., President L. C. Root in the chair. Quite a large number of bee-keepers were present from 10 States and Canada; all were very enthusiastic, and as "sweet as honey."

After an impressive invocation by the Rev. L. L. Langstroth, the Secretary called the roll of members for last year. Those present paid their dues and received their badges, among them being six ex-presidents of the Society.

The Treasurer reported \$48.90 in the treasury. It was voted to omit the reading of the minutes of the last meeting, as they had been published in all the bee-papers, and it was not necessary to lose time in reading them.

Mr. A. F. Manum, Vice-President for Vermont, reported the honey crop of that State, for the present season, to be 160 tons.

Mr. Wm. G. Gibbons, Vice-President for Delaware, in his report, says:

The year 1885 has been an exceedingly unpropitious one for bee-keepers in this part of the country. The warm weather which usually sets in by April 10th, was procrastinated until near the beginning of May, and during both April and May cold rain-storms were frequent. The result was that the bees got to work 15 days later than usual. The white clover, which is in this section the best and almost only bee-pasturage, did not seem to be well supplied with nectar, and the season of its bloom was exceptionally short: consequently the colonies gathered a very small supply of surplus honey, and few swarms issued. Generally the colonies are in good condition for entering upon the coming winter, and seem to be healthy.

Mr. Arthur Todd, Vice-President for Pennsylvania, made the following report for the year 1885:

The winter of 1884-85 proved disastrous to many bee-keepers in the State of Pennsylvania, and as regards a honey harvest—practically there was none. The fall crop of honey has likewise been a complete failure, and bees go into winter quarters in bad condition, unless fed on sugar syrup. I have taken pains during my business journeys, and in my correspondence, to

learn the actual results of bee-keeping this year in this State for many a mile distant from Philadelphia, and I think that the word "disastrous" will best express the general feeling as to the results.

I regret that I am unable to meet the brethren in convention assembled; it is a great disappointment to me.

Mr. H. F. Hunt, Vice-President for Quebec, Canada, reported as follows:

The knowledge of bee-culture, by the improved methods of manipulation, is still in its extreme infancy in Quebec, and has only within the past few years begun to be disseminated among the people, the southern and south-western parts having more bee-keepers than the other parts. There are numerous box-hive bee-keepers throughout the country, who still take their honey by the old-fashioned method of "brimstoning"—a method which I hope is now on its "last legs." My report, therefore, will not bear comparison with that of our sister Province—Ontario—but I hope that in the not far distant future, we shall be able to make as good a showing. The success attending the labors of bee-keepers in Ontario, will act as a stimulus to those in Quebec.

In common with the rest of the North American Continent, the losses last winter were heavy, but bee-keepers, as a rule, have not been much discouraged, and are hoping for better success this winter. Our losses were not so heavy as those farther south, which I attribute to our being compelled to protect the bees well, on account of the severe cold which once or twice every winter touches 30° below zero, the average being 5° to 10° above.

I have not received as many responses as I could wish, to my request for reports, but I generalize from what I did receive. The past season has been a very poor one indeed, owing to the extraordinary cold season, which seriously curtailed brood-rearing and the secretion of nectar, in some parts of the Province, notably in the vicinity of Lake Megantic, and in the county of Beauce. The spring was so dry that certain crops had to be replanted, and would, no doubt, have acted unfavorably to the secretion of nectar in the white clover. Some honey was gathered from basswood, which yields more freely to the south than to the north of the St. Lawrence. Fall flowers also have not given much, and many colonies have had to be fed for winter.

The following persons were recorded as members for the present year:

G. A. Adams, Perrysburg, O.
J. H. Andrus, Almont, Mich.
Geo. H. Ashby, Albion, N. Y.
H. J. Ashley, M. D., Machias, N. Y.

C. S. Avery, Millard, Neb.
 Richard Bangham, Windsor, Ont.
 Ira Barber, De Kalb Junction, N. Y.
 O. J. Bedell, Kawkawlin, Mich.
 A. D. Benham, Olivet, Mich.
 E. Berkey, Savannah, O.
 H. R. Boardman, East Townsend, O.
 Sam'l H. Bolton, Benton, O.
 F. C. Burmaster, Irving, N. Y.
 W. H. Burr, Detroit, Mich.
 Mrs. V. E. Burton, Detroit, Mich.
 Hiram Chapman, Versailles, N. Y.
 A. B. Cheney, Sparta, Mich.
 L. T. Christancy, Toledo, O.
 F. S. Clark, Bowling Green, O.
 W. E. Clark, Oriskany, N. Y.
 Rev. W. F. Clarke, Guelph, Ont.
 F. S. Comstock, North Manchester, Ind.
 B. F. Conley, Brighton, Mich.
 A. J. Cook, Agricultural College, Mich.
 E. J. Cook, Owasso, Mich.
 Henry Cripe, North Manchester, Ind.
 H. D. Cutting, Clinton, Mich.
 C. P. Dadant, Hamilton, Ill.
 G. M. Doolittle, Borodino, N. Y.
 Frank A. Eaton, Bluffton, O.
 Will Ellis, St. Davids, Ont.
 Martin Emigh, Holbrook, Ont.
 Jas. Forncrook, Watertown, Wis.
 A. M. Gander, Adrian, Mich.
 F. A. Gemmill, Stratford, Ont.
 H. C. Gibson, Burr Oak, Mich.
 Geo. B. Goodell, McGee's Corners, N. Y.
 John G. Gray, St. Catherines, Ont.
 A. W. Greene, Florence, Ont.
 J. B. Hall, Woodstock, Ont.
 Benj. Harding, Kent, O.
 Mrs. L. Harrison, Peoria, Ill.
 M. Higgins, Windsor, Ont.
 Geo. E. Hilton, Fremont, Mich.
 E. L. Hubbard, Water Valley, N. Y.
 M. H. Hunt, Bell Branch, Mich.
 H. F. Hunt, Villa Mastai, Quebec.
 W. Z. Hutchinson, Rogersville, Mich.
 C. R. Isham, Peoria, N. Y.
 August Keoffen, Flint Mich.
 A. W. Kistenbroker, Oak Park, Ill.
 Otto Kleinow, Detroit, Mich.
 Rev. L. L. Langstroth, Oxford, O.
 Silas M. Locke, Wenham, Mass.
 N. W. McLain, Aurora, Ill.
 James McNeil, Hudson, N. Y.
 J. J. McWhorter, South Lyon, Mich.
 A. E. Manum, Bristol, Vt.
 J. J. Martin, North Manchester, Ind.
 Dr. A. B. Mason, Wagon Works, O.
 D. F. Moe, Parma, Mich.
 Elias Mott, Norwich, Ont.
 C. F. Muth, Cincinnati, O.
 Thomas G. Newman, Chicago, Ill.
 S. F. Newman, Norwalk, O.
 Geo. A. Ouram, Berlin Heights, O.
 S. T. Pettit, Belmont, Ont.
 Thos. Pierce, Gansevoort, N. Y.
 P. M. Phul, South Toledo, O.
 John Rey, East Saginaw, Mich.
 M. G. Reynolds, Williamsburg, Ind.
 J. A. Robison, Findlay, O.
 L. C. Root, Mohawk, N. Y.
 C. M. Ruland, Rockton, Ill.
 George Schook, Three Rivers, Mich.
 C. W. Shephard, Le Roy, N. Y.
 Geo. Smith, Amadore, Mich.

G. W. Stanley, Wyoming, N. Y.
 James P. Sterritt, Sheakyleville, Pa.
 R. L. Taylor, Lapeer, Mich.
 Mrs. R. L. Taylor, Lapeer, Mich.
 F. J. Temple, Ridgeway, Mich.
 E. W. Thompson, Hinsdale, N. Y.
 N. O. Thompson, Cold Water, Mich.
 W. O. Titus, Toledo, O.
 James Ure, East Saginaw, Mich.
 J. Vandervort, Laceyville, Pa.
 J. Van Deusen, Sprout Brook, N. Y.
 T. L. Von Dorn, Omaha, Neb.
 E. Walker, Berlin Heights, O.
 Byron O. Walker, Capac, Mich.
 Mrs. Byron Walker, Capac, Mich.
 H. L. Welis, Defiance, O.
 W. C. Wells, Phillipston, Ont.
 M. S. West, Flint, Mich.
 L. C. Whiting, East Saginaw, Mich.
 Edwin Willetts, Agricultural Coll., Mich.
 Wm. Wilson, Burr Oak, Mich.
 A. D. Wood, Rives Junction, Mich.
 L. C. Woodman, Grand Rapids, Mich.
 Mrs. L. C. Woodman, Grand Rapids, Mich.
 M. D. York, Millington, Mich.

The Rev. L. L. Langstroth was called upon for a speech, and upon arising he was greeted with a storm of applause. He gave a very interesting account of the rise and progress of modern bee-culture in this country, and of the invention of the movable frame-hive.

Pres. Root appointed the following committees.

On Finance.—G. M. Doolittle, W. F. Clarke and Prof. A. J. Cook.

On Statistics.—Thos. G. Newman, D. A. Jones and Silas M. Locke.

On Resolutions.—Prof. A. J. Cook, W. F. Clarke and, R. L. Taylor.

On Exhibits.—Dr. A. B. Mason, J. B. Hall and G. M. Doolittle.

Thereupon the meeting adjourned until 2 p. m.

AFTERNOON SESSION.

Pres. Root called the meeting to order at 2 p. m., and announced that the first business would be the address of welcome by Edwin Willetts, Esq., President of the Michigan Agricultural College. President Willetts, on arising was greeted with enthusiastic applause. His address was as follows:

MR. PRESIDENT, LADIES and GENTLEMEN:—
 It becomes my duty, and it is a pleasure, to welcome you to the State of Michigan. I know of no reason why I should be asked to do so, save, perhaps, because for fifty years I have been a citizen of the State, and at present represent the Michigan Agricultural College, which institution makes a speciality in Bee-culture and instruction in the habits and propagation of bees.

We have those present who can more fitly represent that feature of the institution than my-

self, but neither they nor any one else can welcome you to our State with a more hearty greeting than can I. We are glad to see you in our midst. There is a growing interest here in the industry that you represent to-day. Michigan easily ranks high in the production of honey. The breezes are tempered by our inland seas, and our soil is generous in foliage and flowers. We are not in the path of the extreme drouths and pestilential moisture. We are not in the path of the blizzard or the tornado. Nearly every foot of land in our Southern Peninsula takes kindly to the plowshare, and rejoices in a fertility that responds heartily to the demands of the husbandman. We are a busy people, in busy homes, and we harmonize easily with the "busy bee." We understand each other—we and the bees—and each pursue our vocations without antagonism. Hence there is room for both, without hostility and mutual profit; and all we need is the dissemination of such information as you can give, to lead us to a more general pursuit of your industry.

We shall expect an impulse in that direction as the result of your deliberations. You represent no mean vocation. Ever since and before Jacob sent as a present to propitiate the hard master in Egypt, a little balm, and a little honey, spices and myrrh; ever since Columella wrote, and Virgil and Horace sang, the sweet elixir has tempted the palate of mankind. There is no substitute for it: the analysis of the chemist is unable to produce it: man cannot make it, or grow it, or rectify it, and till Millennium's dawn it will be nectar to men and gods.

Yours is no insignificant industry. You represent 3,000,000 colonies, of bees with an annual product of surplus honey of 100,000,000 pounds. Under the impulse of this and kindred associations, the product is increasing annually. The cheap sugar of to-day has no perceptible influence upon the demand or the price of the commodity. As the country increases in wealth and luxury, the demand grows with its growth, and increases with the means to gratify the appetite. The best minds in the field of science have contributed to the more successful promotion of the industry. Aristotle, Virgil, Columella, Pliny, Swammerdam, Ray, Latreille, and a host of others, ancient and modern—not to forget Langstroth, Cook, Quinby, Root, and others of our day—have studied, observed, experimented and written about bees and their habits, till we know how best to rear them, and how best to utilize their harvest of sweetness; so that to use the words of a learned Judge of one of our Courts, who said, "In modern days the bee has become almost as completely domesticated as the ox or

the cow. Its habits and its instincts have been studied, so that it can be controlled with nearly as much certainty as any of the domestic animals."

You have almost taken it out of the class *fera natura*. The propensity to mischief has been so diminished, that serious injury is almost as rare from a bee as from the horse, and far less than from the dog. The Courts take kindly to the bee. They look with favor upon animals or insects that are useful to man; with disfavor upon such as are purely noxious or useless. There is no question of the utility of bees. I note this fact, as I observe a little apprehension among apiarists, about the attitude of Courts occasionally, and the fear that there may grow up some legal limitation or liability that shall destroy your industry. Bees were here before Courts or juries, and they have the right of way, and will keep it so long as their product is desirable. The recent case that has caused some apprehension, will be found, I hope, to be based upon an utter misconception of the bee and its habits. It will be found, I have no doubt, that a sound grape is absolutely armor-proof to the attack of the bee. It is only when the armor is broken that the attack is made. A grape with a broken shell is practically valueless—worthless, except for the wine-press; and for one, I frankly say, gentlemen, that as between the wine-press and the bee—as between alcohol and honey—I am for the bee and for the honey, and I believe the Courts will give the bee the case.

But, gentlemen, I am not here to keep you from your deliberations. I again welcome you to Michigan, and trust that your stay with us shall be so pleasant that your recollection of it shall be a life-long joy.

Pres. Root said that he strongly advocated the location of this meeting at Detroit, and he was fully satisfied that there was wisdom in the choice. He had always been much interested in Michigan bee-keepers, and was very glad to meet with so many of them here. The matter of defense of our rights as bee-keepers had been mentioned by Pres. Willetts, and he was much in favor of unitedly defending our rights. As Mr. T. G. Newman was General Manager of the Bee Keepers' Union, an organization created for this purpose, he would call upon Mr. Newman to make a statement concerning what had been done, and what was expected to be done in the future, by the organization of which he was manager. Mr. T. G. Newman then delivered the following address on the

NATIONAL BEE-KEEPERS' UNION.

During the past year it has become necessary to form a Bee-Keepers' Union. As this societ

is a Continental one, it would seem to be appropriate that some notice should be taken of it by this Convention. With your permission I will state a few facts, and leave it to those present to say whether the work of the Union shall be approved by them or not.

Last June Mr. S. I. Freeborn, an extensive apiarist of Wisconsin, was sued by a neighbor, who kept a flock of sheep, for alleged annoyance to his sheep by trespassing bees.

It was understood that this was to be a "test case," and if the plaintiff succeeded in obtaining a verdict in his favor, either by the ignorance or prejudice of a jury, other bee-keepers would be likely to be sued to recover damages done to pastures, vineyards and gardens by bees; and any one owning a few square rods of land, devoted to almost any purpose, may try to recover damages from all the owners of bees in the vicinity.

Mr. James Heddon suggested the formation of a Bee-Keepers' Union in defense of their rights, and to protect their interest. Such a Union was formed, and officers elected as follows:

President—James Heddon.
 Five Vice-Presidents—G. M. Doolittle,
 G. W. Demaree, A. I. Root,
 Prof. A. J. Cook, Dr. C. C. Miller.
 Manager, Sec'y & Treas.—T. G. Newman.

The officers were made an Advisory Board, with full power to act.

This Union, as soon as organized, employed attorneys, obtained "opinions of law" from bee-keepers who were also attorneys, and made *such a stir* in the sheep-bees case, showing such fighting enthusiasm, that the Judge made a thorough examination of the laws of the State, and concluded that there existed no laws or rulings upon which he could instruct the jury; and bee-keepers have cause for *pride* in the success that attended their efforts in this matter.

In California a suit has been tried in a Justice's Court against Mr. Bohn for alleged damage done to grapes by his bees. This suit was lost in the lower Court, because witnesses were obtained who testified that they had seen the perforation and destruction of the grapes done by Mr. Bohn's bees. In vain did the defendant's attorneys prove by a score of witnesses that the bee's tongue could only be used to extract sweets from the flowers—not to bore after them. The evidence of the eye-witnesses of the plaintiffs had weight with the jury, and they accordingly returned a verdict against the defendant for \$75 and costs of suit, which amounted to over \$60. The damages claimed were \$299.

The National Bee-Keepers' Union advised Mr. Bohn to appeal from the decision of the Justice's Court, and assured him that the Union would stand by him, and aid in the appeal by

sending money, obtaining legal advice, depositions from scientific experts as to the incapability of bees to puncture grapes, etc. The appeal has been taken, and our California brethren are now busily at work getting members for the Union there.

A California apiarist says: "If it goes against us in the higher Court, there will be no end of the trouble that will arise, and our bee-industry will receive a death-blow in Southern California."

An apiarist in Anaheim, Calif., had the fence around his apiary torn down, all his bees killed by sulphur, the hives piled up under a valuable pepper-tree and consumed by fire. Another apiarist was threatened with hanging—all because some fruit-growers had moved into the neighborhood after his apiary had been established several years, and they wanted to compel him to move away with his bees.

As a Continental body of apiarists, have you no word of encouragement for an organization created for the purpose of defending the rights and protecting the interests of the bee-keepers of America? Do you say: "Let us co-operate, and, if necessary, maintain our rights as bee-keepers in the highest courts of the land?" That can be done only by having sufficient money to defray the expenses, and such are usually very high. To be sure, it will be a small matter, if all will bear their part of the burden. One thousand dollars of expenses when divided between 1,000 persons, is only a dollar for each, and can easily be borne; but when one has to pay it all, it becomes a heavy burden; and, to many, one that would be impossible to bear. United effort is essential to successfully defend our chosen pursuit!

The National Bee-Keepers' Union needs strong hearts, willing hands, and many shekels. Are you willing to help? Is your name enrolled among the "National Guards?" If not, lose no time in becoming a member, and thus help to fight the battles of our pursuit in defense of its rights! If we can raise a column of patriots sufficiently strong to present a formidable front, we shall *dare* the envious ones to "bring on their lawsuits," and by "an imposing array" and "unbroken front," gain a lasting and permanent victory!

Mr. S. T. Pettit said that it was necessary to band together to defend ourselves.

Rev. W. F. Clarke said, "United we stand." He would prefer to have the National Bee-Keepers' Union consolidated with the North American Bee-Keepers' Society if it is possible. He was one of the first in Canada to join the Union, and said that if it was not consolidated, we must co-operate with the Union in the

most decided way.

Mr. W. E. Clark said he agreed with the last speaker—if it can be done, he was in favor of consolidation.

Mr. C. R. Isham said that the great fight for the Union was to be fought in California in the raisin district. We must sustain the Union and defend our pursuit.

Mr. T. L. Von Dorn said that the bee-keepers of Lower California were in danger of being entirely driven out by the raisin-growers.

Mr. C. F. Muth remarked that the matter was one for the Courts to decide—not that of one pursuit against another.

Prof. A. J. Cook said that it was a case of bee-keepers and fruit-growers on one side, and ignorance on the other. The bees are the best friends to fruit-growers, to fertilize the flowers, and thereby produce the fruit. In the spring when there are but few insects to fertilize the flowers, the bees are very valuable.

Mr. H. R. Boardman advised conciliation, when there are complaints against bees by fruit-growers and others. A crate of honey given to such complainants, will do much to cause them to feel differently.

Rev. W. F. Clark said that in Court, a crate of honey would do no good—law must decide the case. He then offered the following resolution.

Resolved. That a committee of seven be appointed to consider and report upon the best methods of protecting the interests of bee-keeping from legal attack prompted by ignorance.

The resolution passed, and the committee was appointed as follows: W. F. Clarke, T. G. Newman, W. E. Clarke, James Heddon, C. F. Muth, S. T. Pettit, and Prof. A. J. Cook.

The President's annual address was then given as follows:

BROTHER BEE-KEEPERS OF NORTH AMERICA:

—We have assembled here at our annual convention to consider that which pertains to the best interests of our pursuit. I shall not occupy your time with an exhaustive address, for the programme is full, and very complete, and our time is short at best to consider the many important subjects which will be presented. I am here as a member of this Society to assist as best I may in throwing light upon the topics brought before us. I take it as an expression of good-cheer and great generosity in those who have arranged the preliminaries for these meetings, that everything for the comfort of us all has been so amply provided, and that all arrangements are so thorough and complete. Let us see to it that we endeavor to perform our part in as faithful

and unselfish a manner as our Committee has done.

We have reached a crisis in the history of bee-keeping which must be met by those who are interested in the pursuit, in a broad, honest, and unselfish way. Every well-informed bee-keeper is reminded in the most unmistakable manner that the time when large profits may be realized from keeping bees, has passed. Each year, the prices of our products have been reduced, until at the present time we find many of our markets overstocked, and our honey selling at rates which allow us little profit for producing it. These are stern facts which must be fairly met. It is not my purpose to attempt to instruct those who are already experts in the business. Their lessons have been taught them by dearly bought experience, the results of which are due to the beginner, and to those whose experience has been more limited.

We have passed through a period of great enthusiasm, and have indulged in much that has been unwarranted and injudicious. We have been far too selfish. As supply-dealers and publishers of bee-literature, we have been far too anxious to present the bright side of our calling. If we have been unwise in the past, we should be thankful that by the light of these past experiences we are able to see more clearly our way for the future. Many years ago, beginners were heard to ask if it were advisable to engage in bee-keeping as an exclusive business. The answer should have been then as now—"Commence moderately, and let experience decide as you advance." The real question now seems to be, "Shall we commence at all?" or "Shall those of us who are already engaged in it, continue?"

In answer to such questions I would offer the following suggestions: 1. Our calling is an honorable one, and is an essential branch of agriculture, in that the honey-bee is indispensable to the fertilization necessary in the vegetable kingdom. Wherever civilization advances, there the honey-bee is found. 2. Honey is a wholesome and desirable article of food. 3. It is furnished to us at our very doors, and if we fail to preserve it, the odor of wasting sweetness constantly reminds us of our neglect and loss.

With these points in view, is it not evident that a great work is to be accomplished in applying the lessons of economy and industry taught us by the bees themselves, to the accumulation of this freely-given production in the most desirable and profitable way?

We have been extravagant in many of our expenditures. These we must endeavor to reduce, to correspond as much as possible with the re-

duction in prices. We have incurred a large expense by the great amount of labor which we have required in unnecessary manipulation. In this I anticipate a change as we advance, which will result not only in economy of time and labor, but also in avoiding many serious consequences. It is evident that we yet need much light upon many of the simple and practical, as well as on the scientific phases of our calling. With every advance made in apiculture, it becomes more apparent that there are new fields of investigation and research, which promise to yield information, and are destined to work marked changes in our methods of managing bees. Only those will succeed who are willing to practice the most rigid economy, and who will be satisfied with moderate pay for honest work performed.

It is evident that the effort has been too much in the direction of increasing the production, rather than to create a corresponding demand for the same. I think I am safe in the assertion that no effort of ours is needed which shall tend to an increased production of honey for our present, general, overstocked market. Last season extracted honey was shipped to New York from California by car-loads. The market was already overstocked with the best grades of Eastern honey, and the result was such that California bee-keepers will hardly care for a repetition of the experience. The present season has afforded another illustration. Honey has been shipped very largely from the Eastern and Middle States to New York, and the outcome of this has been that the choicest white honey in sections has sold at ruinously low rates, and some of it has actually been returned to grocers in our own vicinity. By these methods we practically establish these unprofitable prices ourselves.

The resource seems to be that we must enlarge our field of consumption. This can be done by each bee-keeper, by encouraging home consumption in his own immediate vicinity, and also by opening up new avenues for the uses of honey. A demand thus created would measurably relieve the over-burdened city markets; and in this way we would be able in some degree to maintain reasonable prices. With the present facilities for disposing of our products, it is difficult to avoid the conclusion that there is an over-production. Whether this will grow to become a positive fact, or whether bee-keepers will succeed in causing the demand to keep pace with their success in producing, is the problem to be solved in the near future.

Much will depend upon the answer to still greater questions which are agitating the best minds of the day. If the thousands of dollars which are annually spent in nearly every com-

munity for that which tends to degrade, and to the production of evil, could be turned to the purchase of that which is wholesome and beneficial, the danger of over-production in this, as in other useful callings, would be little to be feared. My faith in the fact that in the end the right will prevail, leads me to the conclusion that any calling which presents such a wide field for the intelligent and patient worker, and student of nature, and which is so productive of a harvest of good, must always command those who will find it pleasant and profitable to continue in the work until the harvest is complete.

Mr. C. F. Muth remarked that in New York they principally demanded honey in glassed sections or in paper-boxes. In the West, such are unsalable. We, here, require it in unglassed sections with the crates glassed.

Mr. C. R. Isham said that our honey-producers can sell all their honey in glassed sections, and it is desirable to do so in order to preserve its beauty and purity.

Mr. Thompson said that he wrote to New York asking for a bid for best glassed honey, and he was offered only 10 cents per pound for it delivered in New York.

Mr. J. B. Hall proposed a vote of thanks to Pres. Root for his able address.

Mr. G. M. Doolittle then read an essay on

THE PRODUCTION OF COMB HONEY

He said that there were four things important in the production of comb honey: First, a good queen; second, the getting of the bees at the right time to secure the harvest; third, a skillful apiarist; and fourth, the right kind of a hive. Remarks were made on each of these points, and Mr. D. said that we could divide and sub-divide these four heads, especially the last three, yet the fundamental principles would not be changed.

The discussion on comb foundation took a general and rather desultory course. Mr. J. B. Hall was asked to state his method, and confined himself to his experience with comb foundation.

Rev. W. F. Clarke said that Mr. Doolittle's essay was professedly on the production of comb honey, but what he said was just as applicable to the production of extracted honey. A good queen, plenty of bees to gather in the honey harvest, a skillful apiarist, and a good hive—were not these just as needful for the production of extracted as comb honey? What we want is the points of a skillful apiarist required to get large crops of comb honey. We want to know how to do it. Our most successful producers of comb honey rather tell us "how not to do it." They appear not to like to explain things. They take Burns' advice to his friend Andrew:

"Still keep a secret in your breast
Ye never tell to any."

For several years at these conventions he had tried to get Mr. Hall to explain how he gets such large crops of splendid comb honey, but he had never done it.

Mr. Hall : " I should have to make the man. "

Mr. Clarke : " Well, here he is ; take the raw material and make the man. That's just what I want. "

Much amusement and bantering of Messrs. Doolittle and Hall to explain the *how*, but the wily veterans did not come to the scratch.

Amid much laughter the subject was laid on the table, and the next order of the day taken up, viz : an essay by Mr. C. P. Dadant, on

EXTRACTED HONEY.

Nothing is more appetizing than a pretty section of white comb honey. But comb honey will always be a fancy article and will have to sell much higher than extracted honey in order to pay the bee-keeper that produces it. The aim of bee-culture in its present progressive condition is to produce honey for the masses, for the laborers, who cannot afford to pay for it any more than they can pay for the average grades of sugar.

Besides, comb honey, although it is a ready selling article, will not fill the place of the liquid honey in a great many circumstances ; to make pastry or cakes, or to use in teas, in case of sickness. It is therefore an evident fact that the sale of comb honey will always be limited, and that the sale of extracted honey will increase in proportion to its production, provided the bee-keeper will take pains to introduce the use of it among his neighbors. This we have ascertained personally by our own sales. In 1868 our sales of extracted honey of about 500 lbs. were difficult and slow. Now, our crops of 10 to 35,000 lbs. are easily disposed of, and although the prices are lower than formerly, yet we find the raising of it to be a remunerative business. We sell more honey to-day in our little town of 1500 inhabitants than we could sell 20 years ago in the city of St. Louis.

We consider the raising of extracted honey, exclusively, as of much advantage to bee-keepers for a number of reasons. In the first place the apiarist who aims to raise honey only for his own use can raise much more of this honey than of comb.

2nd. The outlay of combs, crates, and boxes is not an oft repeated expenditure, since when once supplied the stock remains.

3rd. The bees need much less watching. The almost total prevention of swarming by the raising of extracted honey is no longer a matter

of doubt. For this purpose, it is only necessary to provide the colonies with a large quantity of empty combs ahead of their needs. These combs are not wasted, but are preserved from year to year.

4th. By the production of extracted honey, exclusively, an apiarist can take care of more than four times as many colonies, as he can by the production of comb honey, thereby enlarging his profits greatly, even if he has to sell the extracted honey much cheaper than comb honey.

It would be a great mistake to imagine, as some have asserted, that there is already an over-production of honey. Honey of all grades, is really only getting to be a staple. We do not have to look back many years to the time when its sale was so insignificant that it was only occasionally quoted in the market reports of the large dailies. When honey is found as often as sugar, or as molasses, or as butter on the tables of the average farmer and of the average laborer, when it is found by the barrel or by the keg in our wholesale and retail groceries, then and only then can we say that we are producing as much honey as the country can use.

The "revolution in bee-keeping" of which father Langstroth speaks in his book, has taken place, but the bee-keeping fraternity is only beginning to find out all the advantages and all the growths which the bee-business must derive from this revolution.

Dr. Mason described his method of getting extracted honey, but complained that he could not get more than 65 pounds per colony. He was asked how many combs he used, and replied, "eight."

Mr. C. F. Muth could not comprehend how the Doctor could manage with so few frames. He wanted at least 10 frames for the brood-nest, and then another story for extracting. Even his bees, kept on the house-top in the city of Cincinnati, had given him averages double and even treble what Dr. Mason had obtained, and from hives in the country where they had not so far to fly, he got far more honey.

Mr. W. E. Clark said that the President had been the most successful producer of extracted honey in the East, and he would call on him to explain his methods.

Pres. Root, in response, said that it was perfectly true, as Mr. Clark had said, that Mr. Doolittle's requisites for producing comb honey were just as applicable to the production of extracted honey. A good queen, for example, was just as necessary for the one as the other. In both cases wise manipulation was needed, and it took a large amount of study to know what is wise manipulation. Certainly we must have large

colonies of bees to gather the honey, then we must extract it at the time when it could be done to the best advantage and with the least hindrance to the bees. It was hard to lay down specific rules—every bee-keeper must be a law to himself, and find out the methods best adapted to his own locality. Experience must be bought by practice, and at considerable expense; he only hoped that it would not cost others as much as it had cost him. Pres. Root gave the stereotyped directions for the production of extracted honey, but said that these were subject to modification in individual cases.

Mr. S. T. Pettit gave his experience in producing extracted honey. He had missed it by not leaving the honey in the hive long enough to ripen. One season his honey was all of an inferior quality, owing to this cause. He did not believe that we could ripen the honey as well as the bees themselves do it. He said that we should have at least one-third of the honey capped before extracting, and he believed it was better if all was capped over.

Rev. L. L. Langstroth did not know that he could add much to the ocean of intelligence that was tiding all around, but he wished to say a word or two. He believed there were many things that the bees could do—certain things better than we can—and ripening honey was one of them. There was too much artificial work in bee-keeping. One bee-keeper had invented nippers to pull dead bees out of the cells, but live bees would do it better.

Dr. Mason said that the "big bugs" of the Convention had been poking fun at him for getting only 05 pounds of honey per colony, but they would find it impossible to get an average of 300 pounds in his locality—a city on one side and a wilderness on the other. Small as his average yield was, it was larger than that of any of his neighbors. He wished that his critics would show him how to produce 300 pounds per colony, but the trouble was as Mr. Clarke said, they did not disclose their secrets.

Rev. W. F. Clarke wished to ask if formic acid in honey was not the element which gave it its keeping qualities. He put the question to Prof. Cook. For his own part, he believed that the formic acid was added by the bees in the capping process, which was carried on mainly by the use of their tails—the sting—being the last polishing tool. It was because the formic acid was thus added that honey must be one-third capped to be good, and all capped to be first-rate.

Prof. Cook thought that no one knew how or when the formic acid was added. He was also of opinion that too much stress was laid on the matter of taste. Few could discriminate as thoroughly as had been suggested.

The Convention then adjourned until 7.30 p.m.
EVENING SESSION.

The meeting was called to order at 3 p.m., by Pres. Root. An essay was read as follows, by Mr. R. F. Holterman, of Brantford, Ont., on the

CARE OF HONEY FOR MARKET.

I bring this subject before you, fully aware that it is not of as great importance as many others, being indirectly connected with the production of honey; but on that account it has perhaps not received that public attention which it merits. It is our duty when blessed with the means to procure a crop of honey, that we should acquaint not only ourselves but every bee-keeper with what will secure to us the article in the highest state of perfection, and place it thus in the consumers' hands. Have we, as a body, endeavored to do so? Looking at it from a business standpoint, past experience has taught us that in order to realize the best results financially, from any article extensively produced, it is necessary not only to better our own but we must better that of the entire land.

Let us imagine the land completely destitute of vegetation. Here is a heavy soil, in the distance is a sandy one, and between, all grades of soil. Here is a hill, there a swamp, and at other distances, intermediate elevations. Now, could our eye stretch from north to south within the honey-producing area, and were this area to be decked with our present vegetation, which of the aforementioned conditions would influence the quality of honey? The heavy soil would give us a richer honey than the lighter; the more extremes of cold climate would give a better quality than the more equable. Would the high and the low land influence it? We know that honey from every species of flower has its peculiar flavor, no matter how indistinct, and that the season, its winds, temperature, and degrees of moisture, influence not only the quantity, but the quality of our honey.

The progress bee-keeping has made, and so many making a specialty of it, has enabled us in a measure to conduct ourselves accordingly; but to the ordinary bee-keeper most of the previously named conditions cannot be controlled. But, how much lies within our power!

One of the first questions, would be when shall we extract? Shall we extract before or after the honey is sealed? What are the advantages and disadvantages of the two systems? If entirely sealed, we require to uncap a large surface, the bees must with the ordinary appliances be cramped for store-room, the brood-nest becomes contracted, not alone meaning loss of time until extracted, but many think they do not

regain their old energy for the remainder of the season. The advantages would be, honey called ripe, subject to the before-named conditions.

When is honey ripe? With the system of extracting when the honey is unsealed, there is no uncapping, and bees have plenty of store-room, but the quality is inferior and right here a friend would step in with his ripening can. But we have made no light mistake; for in the past our honey has been handled too much, as if it could lose nothing by having it come in contact with the air. What imparts that peculiar aroma to honey, and gives each kind of honey a distinct flavor? Is it not largely a volatile oil? Do we not know it is being distilled from every flower, as we pass through a clover-field in blossom and in evaporating and otherwise coming in contact with the air, we lose this.

Many find that to extract honey when one-third capped, answers well; the honey to be put into deep tanks or barrels holding about 600 pounds each, and left for a week. This causes the light, thin honey, to rise to the top—generally it is not 10 per cent., and this can be disposed of a little cheaper—and the rich, ripe honey remains. One week more of exposure is ample for clover, and it becomes sweet without the flavor; basswood longer, according to the taste. Thistle honey has a very distinct odor and taste, but it is very volatile, and requires but little exposure. If we handled our extracted honey thus, would it not take the place of comb honey more?

What is meant when consumers say that they miss a peculiar richness in extracted honey, which the comb will give them? Is it all fancy? How many beekeepers have greeted you with the remark, after tasting your basswood honey, "Ah, that is pure honey." How many have thought after tasting the long exposed clover honey, "That is sugar syrup." The former loses its flavor less readily; the latter more readily.

Has our comb honey been handled with proper care? Should it not always be kept not only dry, but at a temperature that the delicate scales of wax—cell caps—never crack from too low a temperature? Does honey ferment in the cells and crack the wax, or does the cell break, permit access to moisture and atmosphere, and that cause the honey to ferment?

Mr. Boardman considered this matter of great importance. That honey was often deteriorated by keeping was undeniable, and he would like to know how it happened so, that it might be guarded against.

Mr. Jones said honey thickened by evaporation, and that it was liable to be injured by evaporating too fast or too slowly.

Prof. Cook explained the difference between evaporation and crystallisation. Honey can only thicken by evaporation, and to evaporate it must have air; therefore the sealing is not air-tight. Crystallisation is a different affair and is akin to the formation of ice, resulting from the cooling process.

A member said he thought that honey thickened with age.

Mr. Doolittle gave an instance in which honey was spoiled by moisture swelling the honey, so that the cells were broken, and the honey turned sour in the course of a few months.

Mr. Thompson, of New York, said that he had been greatly troubled with the moth getting into comb honey. He had tried sulphur fumigation with them, but had not succeeded as he could have wished.

Mr. J. B. Hall, of Ontario, on being called upon gave his experience and practice. He said that the moth would give no trouble unless there was bee-bread in the sections. He was in the habit of fumigating a room 8x10 feet with a pound of sulphur, as a precaution against the moth, and then kept up an even temperature. He had kept it two years as good as new.

Mr. Heddon said that there was but little danger of deterioration if honey was taken proper care of. It should be kept in a temperature higher than the common atmosphere, else it would attract and absorb moisture, and thus be injured. He had no trouble with the moth-worm, and did not believe that the moth would live on pure beeswax. There must be some pollen—some nitrogenous matter in order to form animal tissue.

Mr. C. P. Dadant would confirm the statement that the moth-worm could not exist on pure beeswax.

Mr. Jones asked if any had been troubled with the moth in parcels of wax forwarded for manufacture into comb foundation. He had.

Mr. Heddon said that there was always more or less pollen in such beeswax.

Prof. Cook said that there could not be animal life without nitrogen, and there could not be putrefaction without nitrogen.

Mr. Heddon said that we should take such precautions as would keep out flies, wasps and other insects. By this means the moth-worms would be effectually excluded. He had his honey-house protected with wire-screens, and the moth gave him no trouble.

Some other observations were made on the subject, when the convention adjourned until 9 a. m. of the following day.

SECOND DAY—WEDNESDAY.

MORNING SESSION.

The Conyention was called to order at 9.30 a.m., by Pres. L. C. Root, who announced the following as a committee to answer, any questions that may be placed in the question-box: S. F. Newman, S. T. Pettit and H. R. Boardman.

Miscellaneous discussions being next in order, considerable disapprobation was manifested by many members, over the report of Prof. H. W. Wiley, of the Department of Agriculture at Washington, giving his analysis of different samples of honey furnished him by bee-keepers. In his annual report he put down many samples as "apparently pure," and many as "probably impure." It was the general opinion that if he could not analyze such products to a certainty, he should say so in his report.

The friends of Mr. A. I. Root, having learned that his 46th birthday occurred on the second day of the Convention, it was suggested that those who desired to do so should, during the intermission, contribute 10 cents each, to Mr. Muth, with which to purchase a birthday present for Mr. A. I. Root. A copy of "Milton's Paradise Lost," beautifully printed, bound and illustrated, was purchased, and the Rev. W. F. Clarke was selected to present it to Mr. A. I. Root during the morning session, which he did in a very pleasant way. Some other friends also presented him with a bouquet of flowers. Mr. Root replied briefly by thanking those who had been so thoughtful. He valued the kind thoughts much more than the gift, though that was beautiful. He felt that such kindness was undeserved.

Mr. C. F. Muth, of Cincinnati, O., then gave an address on "Marketing Honey." He referred to the low price of honey, which was caused by the cheapness of other sweets, adulteration of honey, and ignorance of the many uses of honey. To secure the best price, we must practice the most scrupulous cleanliness in every manipulation. Extracted honey is often damaged by being put into whiskey barrels. There is charcoal on the inside edges of the staves, and specks of it get into the honey, spoiling its appearance. Clean barrels should always be used. Comb honey must be white, well-capped, and put up in a neat attractive manner. Only thus need the top figure of the market be expected.

A discussion arose as to the most salable size of sections. There was a very full expression of opinion, which was strongly in favor of one-pound sections. It was not deemed advisable to

make any size exclusively, as there was a limited demand for other sizes, particularly in certain markets.

An address was then delivered by Thos. G. Newman, on

PASTURAGE FOR BEES.

which we published last week.

Mr. S. F. Newman spoke of the great reduction in the number of basswood trees, owing to the demand for the timber by those who were manufacturing sections. Ten years ago there were 60 large basswood trees within sight of his apiary; now, all but 5 were gone. He had, however succeeded in getting them more than replaced by giving away young basswood trees to all who would plant them and care for them.

As the hour of adjournment had arrived, the election of officers was postponed until 2 p.m. when the following were duly elected:

President—H. D. Cutting, Clinton, Mich.
Recording Secretary—Frank L. Dougherty, Indianapolis, Ind.
Corresponding Secretary—Mrs. Cass Robbins, Indianapolis, Ind.
Treasurer—C. F. Muth, Cincinnati, O.

VICE-PRESIDENTS.

Alabama—Nelson Perkins, Princeton.
Arkansas—Geo. B. Peters.
Arizona—Jas. H. Brown, Prescott.
British Columbia—U. Spears, New Westminster.
California—R. Wilkin, San Buenaventura.
Colorado—Philip Reardon, Jamestown.
Connecticut—H. L. Jeffrey, Washington Depot.
District of Columbia—Rev. J. A. Buck, Washington.
Dakota—J. H. Townley, Ashton.
Delaware—Geo. Remington, Wilmington.
Florida—W. S. Hart, Hawk's Park.
Georgia—Dr. J. P. H. Brown, Augusta.
Illinois—Mrs. L. Harrison, Peoria.
Indiana—J. Scholl, Indianapolis.
Iowa—J. M. Shuck, Des Moines.
Kansas—Charles Smith, Marysville.
Kentucky—J. M. Egbert, Salvisa.
Louisiana—P. L. Viallon, Bayou Goula.
Maine—J. B. Mason, Mechanic Falls.
Manitoba—Hon. J. H. Wallbridge, Winnipeg.
Massachusetts—S. M. Locke, Wenham.
Michigan—Miss Lucy Wilkins, Farwell.
Missouri—E. M. Hayhurst, Kansas City.
Mississippi—Dr. O. M. Blanton, Greenville.
Minnesota—C. F. Greening, Grand Meadow.
Maryland—Dr. W. G. Phelps, Galena.
Montana—Charles Bruce, Wickes.
Nebraska—T. L. VonDorn, Omaha.
Nevada—A. A. Leeper, Carson City.
New Jersey—E. Terryberry, Highbridge.
New York—Ira Barber, DeKalb Junction.
North Carolina—H. H. Watson, Sladesville.
Nova Scotia—C. T. Jones, Waterville.
New Hampshire—M. Harie, Kenosha.
Ohio—A. I. Root, Medina.
Ontario—J. B. Hall, Woodstock.
Pennsylvania—Arthur Todd, Germantown.
Prince Edward Island—Jas. Gourlie, Sum-

merside.

Quebec—H. F. Hunt, Quebec.
 Rhode Island—Wm. J. Tracy, Burrillville.
 South Carolina—S. C. Boylston, Charleston.
 Tennessee—W. P. Henderson, Murfreesboro.
 Texas—W. H. Andrews, McKinney.
 Utah—O. H. Morgan, Salt Lake City.
 Virginia—J. W. Porter, Charlottesville.
 Vermont—A. E. Manum, Bristol.
 West Virginia—A. W. Cheney, Kanawha Falls.
 Wisconsin—Christopher Grimm, Jefferson.
 Wyoming—James Fields, Fort Laramie.
 Washington—H. A. Marsh, Fidalgo.

[CONTINUED NEXT WEEK.]

BEE PLANTS.

THE bee plant which Mr. Geo. Hilton, of Fremont, Michigan, exhibited at Detroit and the beautiful honey from which he also showed, proves to be *Galium triflorum*.

The common name is Sweet Scented Bed-Straw. It is abundant northward. Michigan has nine species of this genus. All are probably good honey plants. *Galium aparine* is another which has a suggestive name. It is known as Cleavers or Goose Grass. These belong to the Family Rubiaceæ or Madder family, which includes Button bush, Partridge berry and other well-known bee-plants.

Dr. Beal informs me that the other plant, the one exhibited by Mr. Chapman, of N.Y., is such a famous honey plant coming just after bass-wood, and giving an excellent quality of honey is *Echinops Sphærocephalus*, a native of Central France. It is a composite and may well be investigated.

A. J. COOK.

Lansing, Mich., Dec. 15, 1885.

The last named honey plant exhibited by Mr. Chapman at Detroit created considerable interest; he is, we believe, propagating it for sale; he has promised us some plants in the spring and we expect to have it in bloom in our home apiary during the summer and shall be able to publish any remarkable features in connection with it.

KIND WORDS.

REV. E. T. ABBOTT.—You are making a good paper out of the JOURNAL and I hope you may have a large list.

St. Joseph, Mo. Dec. 7th, 1885.

ALLEN PRINGLE.—The "Binder" for the CANADIAN BEE JOURNAL is received, and it certainly fills the bill as a beautiful *beau idéal bon ami* of a bee-binder. Now just please bear in

mind this alliteration is not to be taken in any figurative or poetical sense, but in the literal sense for all it is worth. Every subscriber without a single exception ought to procure a "Binder" and thus preserve the C. B. J. as a legacy to his descendants who will in consequence hold him in still kinder remembrance for his thoughtful frugality. The utility of the "Binder" will, however, be first realized by himself, as by keeping reference memoranda he can at any time refer to any facts, information or data he may require. Bind and preserve your JOURNALS by all means.

Selby, Dec. 12th, '85.

SUNDRY SELECTIONS.

TRYING SEVERAL KINDS OF CUSHIONS.

JNO. MONTGOMERY.—I have four kinds of cushions on my hives as I wish to see which is the best—one sawdust, one chaff, one planings of wood, and one of oat seed (that is oat hulls which come off when hulled for meal.) They are perfectly dry. I think that the latter will prove the best, they do not pack tightly, they are always dry and are good absorbents of dampness or moisture. I know this as I am a miller by trade. The wood however seems to keep the most heat in the hive.

Appleton, Dec. 11th, 1885.

SIZE OF FRAME—OVERSTOCKING.

CAMILLE LEGARE.—What is the best size of a brood frame for Canada? Is it a deep or a shallow frame for wintering out-doors? (2) What number of colonies may be kept in the same yard without fear of over-stocking and what do you think of the overstocking idea?

There are a great many opinions about what should be the right size, everybody thinking his own size the best. We believe it is generally admitted that bees winter better on deep frames, but many use the shallow ones. The frame we use is about 10¾ by 12½ inside measure and probably there are more of this size in use in Canada than any other. No difference what size of frame is used, strong colonies should be kept, weak colonies or nuclei mean failure and disappointment. (2.) We do not think that over-stocking is likely to occur very much in Canada. We have kept from one to three hundred colonies in a yard and could not see any difference be-

tween the one hundred and the three hundred. Sometimes we have had nearly five hundred in one yard but we prefer to keep only one to two hundred in each unless the bee-range is an extra good one. There *are* localities that would be as much over-stocked with 50 colonies as others would be with 500. So that it all depends upon the locality you may say.

QUERY 49.

WM. McEVoy.—I am very much pleased with the way the boys in your school handle Queries and Replies. Query No. 49, "Judging Honey." Will you tell the boys through the C. B. JOURNAL that I always want clover honey to have 100 points for color and 100 for texture and then the flavor will be right 999 times out of 1000 unless it gets too much air. Clover should never get any air. I want Basswood to have 100 for color, 100 for thickness and it will be all right, but should have some 3 days air, but no more.

Woodburn, Dec. 18, 1885.

QUEEN NURSERY—GLASSING SECTIONS.

K. E. KARDNER.—The more I read the CANADIAN BEE JOURNAL the more I prize it and better I like it. I would not be without it for twice its cost. I see by the C. B. J. that the size of your frame is $10\frac{1}{2} \times 12\frac{1}{2}$ inches—a nice size I think. I am using part L. and part F. Boomhower's hives, which I like very much indeed, the frames of the latter are $10\frac{1}{2}$ inches deep by $15\frac{1}{2}$ inches long outside measure, they are nice to handle and are good wintering hives. By the way, any one wishing bees can do no better than send to F. Boomhower, his stock is No. 1 in every respect, and he is a straight honorable man to deal with; I speak from experience as I have done considerable business with him. My bees have done well this season, they have doubled spring count and have given a good yield of surplus honey. I have now 25 full colonies and 6 nuclei. I only allow my bees to swarm once, unless of course they get the start of me. Give me a clipped queen every time. I live but 30 or 40 miles from our esteemed bee-friend G. M. Doolittle, though so near I have not had the pleasure of meeting him, much as I would like to. Please send price of Queen Nursery which you mention on page 243 (July 15th) of the C. B. J. How do you glass those sections shown on page 3 (April 1st)?

Delphi, N. Y., Nov. 20th, 1885.

You ought to pay Friend Doolittle a visit. We are sure you would be delighted to meet him. When we met him and got talking about bees, we almost forgot everything else. We chatted away (we were going to say all night) but if we remember rightly he left for home which cut our conversation short sometime after midnight. The price of the queen nursery you mention is \$2.50. The sections you speak of can be glassed by using thin points if necessary.

BEE-KEEPING AS A BUSINESS.

G.—Do you consider bee-keeping a safe and profitable business to embark in for a person possessing a few hundred dollars capital and having a fair knowledge of bees, and intending to devote his whole time to the business; his sole object being the production and sale of honey exclusively. Would you consider it a safe investment to purchase thirty (30) colonies in the spring to commence with? Describe the style and dimensions of hive which you would recommend to give the best results in the production of extracted honey, without meddling with the brood combs.

Ingersoll, Ont., Dec. 14th, 1885.

From what you say we think you might safely invest in fifty colonies instead of thirty and the profits would be proportionally large on account of your ability to attend to fifty colonies as well as thirty. We know of no business more suitable for any person who has a liking for it, and the profit will compare favourably with those of any other, if properly and judiciously managed. We make two hives for extracted honey—a one story and a two story, as you choose to use them. We prefer the hive we use ourselves. We would adopt any other if we could make more profit by doing so. It is well for a person starting in the business to follow the beaten paths of the more experienced and not try any new-fangled fixtures unless he has had experience.

Any person not a subscriber, receiving a copy of this paper, will please consider it an invitation to become a subscriber to it.

THE CANADIAN BEE JOURNAL.

D. A. JONES.

F. H. MACPHERSON

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EDITORS AND PUBLISHERS.

BEEOTON, ONTARIO.

WEEKLY, \$1.00 per Year, Postpaid

BEEOTON, ONTARIO, DECEMBER 23RD, 1885

Dr. Thom will please excuse the omission of his name as author of "Notes for November" page 585, present volume.

The Convention report takes nearly all our space this week. We have lots of other interesting matter waiting space.

Subscribers are coming in apace—and are even in excess of last week's record.

The Binders for the C. B. J. are moving out rapidly—the price is very low. Reports of those received by subscribers are flattering.

HONEY MARKET.

CHICAGO.

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

R. A. BURNETT.

Chicago, Nov. 27, 1885

CINCINNATI.

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

CHAS. F. MUTH.

Cincinnati, O. Nov. 10, 1885.

BOSTON.

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

BLAKE & RIPLEY.

Oct. 21, 1885.

THE BEEKEEPERS' LIBRARY.

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

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

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

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

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

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

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

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

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

ADVERTISEMENTS.

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

MUTH'S HONEY EXTRACTOR

Is second to none in the market. Square Gears, Honey Jars, Tin Buckets, Langstroth Bee Hives, one-piece Sections, etc., etc.

Circulars mailed on application. Send ten cents for "Practical Hints to Bee-Keepers." Address

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

We will with pleasure send you a sample copy of our SEMI-MONTHLY GLEANINGS IN BEE CULTURE with descriptive price-list of the latest improvements in HIVES, HONEY EXTRACTORS, COMB FOUND SIGN, 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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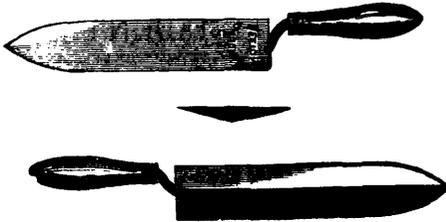


Read what J. J. PARENT, of CHARLTON, N. Y., says—We cut with one of your Combined Machines, last winter, 50 chaff hives with 7-inch cap, 100 honey-racks, 500 broad frames, 2000 honey boxes, and a great deal of other work. This winter we have double the amount of bee-hives etc., to make and we expect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

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

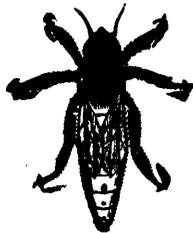
We have just to hand a large shipment of honey knives from the makers, Lockwood Bros. Sheffield, England. These are undoubtedly the finest we have had, and yet being the most perfect in shape and neatness of manufacture.



These Knives are made of the Finest Razor Steel.

- Ebony Polished Handle, mirror polish.....\$1 50
- Ebony Polished Handle, glazed polish..... 1 25
- Wood Polished Handle, glazed polish..... 1 00

If by mail, add 15c extra for each knife.
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We call these in our price list "Honey Boxes for Sections." Each box has a nice tape handle and when adorned with labels "A" or "B," which are made to fit this package, they look exceedingly attractive. The price for boxes is: per 1000, \$20.00; per 500, \$12.50. The price of labels will be, extra, per 1000, \$3.50; per 500, \$2.00; per 100, 45c.

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

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

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

Sample sections sent on application.
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