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VOL. III, NO. 36

1887

NOVEMBER 30

PUBLISHED EXCLUSIVELY IN THE INTERESTS OF THE HONEY PRODUCER

THE CANADIAN



JOURNAL

THE FIRST \$

WEEKLY

IN THE WORLD

ONE DOLLAR PER YEAR

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

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

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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.

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7% Cords of Beech have been Sawed by one man in nine hours. Hundreds have sawed 5 and 6 cords daily. "Exactly" what every Farmer and Wood Chopper wants. First order from your vicinity secures the Agency. No Duty to pay, we manufacture in Canada. Write for Illustrated Catalogue sent FREE to all. Address **FOLDING SAWING MACHINE CO., 303 to 311 S. Canal St., Chicago, Ill.**

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To Be Disposed Of At Once.

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

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

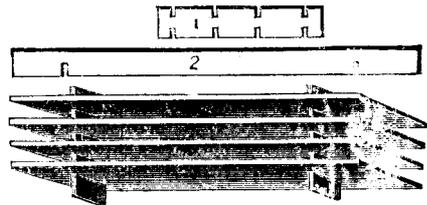
FEEDERS.



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

IMPROVED CANADIAN FEEDER.

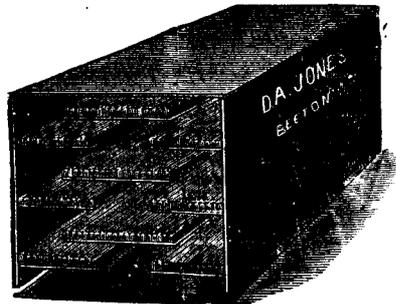
This is the Feeder spoken of on page 610 of the current volume of the JOURNAL. It is arranged with the float as shown in the engraving below. Holds 12 to 15 pounds of feed, and



may be divided making two feeders if needed.

The price is 50c. each, made up: per 25, \$10.00. In flat each 40c.; per \$8.75. All orders can be filled by return freight or express.

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

- Price each, made up.....\$0 30
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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.

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HONEY WANTED!

We will take all the No. 1 EXTRACTED HONEY that is offered us at

10c. PER POUND

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

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

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

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

For prices where supplies are not wanted, write us.

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

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

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

The D. A. JONES CO., 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. 36 BEETON, ONT., NOV. 30, 1887. WHOLE No. 140

THE O.B.K.A. CONVENTION.

A MEETING of the committee on program was held at Woodstock on the 19th inst. There were present the President, the vice president, the secretary and Mr. F. Malcolm. The following program was arranged for, providing we suppose, that the assistance of the parties named can be secured, which we have no doubt will be the case.

- 1st.—Paper by Dr. C. C. Miller, Marengo, Ill., on the subject "Can honey be produced more cheaply by the specialist than by others, if so why?"
- 2nd.—Paper by P. C. Dempsey, Trenton, "Is bee-keeping beneficial or injurious to other industries?"
- 3rd.—Paper by James Heddon, Dowagiac, Michigan, on "Overstocking localities."
- 4th.—Paper by F. Malcolm on the "Best method of producing extracted honey."
- 5th.—Paper by J. B. Hall on the "Best method of producing comb honey."
- 6th.—Paper by Allen Pringle, he to choose the subject.
- 7th.—Paper by R. McKnight, he to choose the subject.

Question drawer under the charge of Messrs. Emigh, Alpaugh and Ellis.

The hours for meeting for the first day will be at one and seven p.m., for the second day 9 a.m. and one p.m. The session at which the officers will be elected will be decided on at the meeting. The place of the meeting will be given at a later date. The secretary

advises us that reduced rates have been secured from the proprietor of the O'Neil House as follows:—Two persons occupying one bed at the rate of \$1.00 per day each, one person occupying bed \$1.25 per day. Persons desiring railroad certificates to enable them to secure reduced rates to attend the meeting should apply to the secretary-treasurer, W. Couse, Streetsville, at an early date. Messrs. Corneil and Chalmers have been asked to form a code of by-laws for submission at the meeting.

THE NORTH AMERICAN BEE-KEEPERS' SOCIETY.

THE North American Bee-keepers' Society held its eighteenth annual meeting, in conjunction with the Northwestern Bee-keepers' Association, on Nov. 16th, 17th and 18th, 1887, at the Commercial Hotel, Chicago, Ill.

About 75 bee-keepers were present and the meeting was a very pleasant and enthusiastic gathering, nearly all the topics discussed being of a practical nature.

First came an essay by James Green, Dayton, entitled:

THE PRODUCTION OF COMB AND EXTRACTED HONEY IN THE SAME APIARY.

One of the growing tendencies of the time is toward division and specialization in all departments of labor. That this principle is, in the main, correct, there can be little question. As the field of knowledge is widened, or as competition increases, and the struggle for success grows keener, no man can afford to divide his energies and so weaken his powers.

It has been truly said that there is such a thing as momentum in mind as well as in physics and that many a man has just missed becoming a great man by splitting into two middling ones.

In bee-keeping, as in other occupations, the greatest average success will be gained by making a speciality of it, even though an occasional season such as the past may bear heavily on some. Yet this principle may be carried too far. We already have bee-keeping as a speciality, divided into the sub-specialities of honey production and the rearing of queens and bees for sale, while some would insist that honey production should be divided and a speciality made of either comb or extracted honey. In most cases, though a judicious combination of the two will give the best results.

In the first place, study your market. There will be found almost everywhere, some who use large quantities of extracted honey at its lower price, when they would hardly touch the more expensive comb. Supply the demand. There are others who will use only a definite amount whether comb or extracted. It is folly to sell extracted to these—that is, at ordinary rates. This applies almost as well to the wholesale as to the retail market.

Comb honey, we all know, sells largely by its looks. A poor article that looks well will sell better than a good article that looks badly. If there is any part of your honey crop that does not look well in comb, secure that part in the extracted form. With a good market for dark extracted honey, it will pay to sell all light honey in the comb and all dark as extracted. You may have colonies that do not produce nice comb honey. Pinch the heads of their queens as soon as convenient, but in the meantime secure their honey with the extractor. Let it be your aim to have every pound of comb honey first class. Poor extracted honey can be sold for manufacturing purposes, but poor comb honey is hard to sell anywhere and spoils the market for what is good.

It sometimes happens that honey comes in faster than the bees can build combs in which to store it. At such times a few cases of empty combs judiciously distributed among your best colonies will pay an enormous profit.

The production of extracted honey may be combined with that of comb so as to get rid of much trouble, expense and loss, inseparably connected with the sole production of comb honey and at the same time improve the quality of all the honey produced.

To accomplish this result a large number of extracting combs are needed—at least one set for each colony. When the honey flow begins give each colony a set of combs.

We all know that bees will begin work sooner on empty combs than in empty sections and most of us appreciate the importance of having the very first of the honey flow go into the surplus department. If you are one of those who never have any trouble inducing bees to start work in the sections just as soon as there is any honey to gather, this part of the program may be omitted, and with a short and sudden honey flow it might not be advisable. As soon as the bees are well at work above remove the extracting combs from as many colonies as you want to run for comb honey and give them sec-

tions. Pile up the supers of partly filled combs over other colonies. The honey so piled up will become thoroughly ripened and a much finer article than that produced by ordinary methods.

Whether for economy or excellence of product there is no way of producing extracted honey equal to that of giving the bees plenty of room in which to store honey and then plenty of time to ripen it.

Along toward the close of the honey flow instead of putting on more sections, which are not likely to be finished, take all the sections from a part of your colonies, giving them empty combs instead. Use the partly filled sections instead of new ones on other hives.

Let us now recount some of the advantages of this system. First, getting the bees started without delay in the surplus department. Second, a superior article of extracted honey is produced. Third, there are but few unfinished sections in the fall. This is the greatest advantage of all and brings about another that is important. Having few unfinished sections in the fall, you have few old sections the next spring and for that reason you will have nicer comb honey. Honey stored in combs built the year before is never equal in quality or appearance to that made new.

To carry out this system, all parts of the hive should be easily and quickly removable and interchangeable and capable of being handled by cases instead of by frames or sections. Section cases should be only one tier deep and extracting supers should be shallow—not over six or seven inches deep—and both capable of being tiered up to any desirable height. Queen excluder honey boards are a great convenience—in fact, almost indispensable.

J. A. GREEN.

In reply to a question Mr. Green said that he could secure about twice as much first-class extracted honey as comb honey. Of such extracted honey as is usually produced he could secure three times as much.

H. R. Boardman preferred wide frames, either one or two tiers of sections high, to cases, while Mr. N. N. Betsinger said that the case system would hold its own and wide frames must go.

Mr. C. F. Hopkins said the honey stored in old combs was inferior, why was not extracted honey taken from old combs.

Mr. Green thought that honey stored in old combs would be of good quality if left upon the hive long enough.

H. W. Funk thought the reason why honey stored in deep cells was less perfectly ripened was because the cells were deep, and evaporation was slower than when the cells were drawn and filled simultaneously.

Mr. Betsinger explained that honey would granulate more quickly when stored in a vessel, (let that vessel be a tin can or a waxen cell), from which granulated honey had been removed. The trouble is that bee-keepers do not have the combs properly cleaned out the previous autumn.

The next topic taken up was

LEGISLATION FOR BEE-KEEPERS.

The President opened the discussion by explaining that, at the last meeting, a committee had been appointed to consider the question of legislation. He had not corresponded with the other members of the committee, but, as the chairman, he must report that he supposed the report must be an adverse one. He felt, however, that the matter had been entirely misunderstood; everyone had seemed to believe that he wished a law that would recognize the rights of priority, and all arguments were based upon this assumption. He had not yet reached the stage of saying what ought to be done, but, from the bottom of his heart, he believed that legislation was desirable, although it might not be feasible.

Dr. A. B. Mason sympathised with the President in his views.

Frank Wilcox failed to see how legislation could be feasible, unless bees should be exempted from taxation and then the business licensed.

Mr. J. Bull objected to this plan on the ground that some millionaire might buy the license to a whole state.

President Miller remarked: "How about farming, can't a man control as much land as he can pay for?"

Prof. Cook, thought, as the matter now stood, no legislation was needed. Were the business carried on by specialists legislation might be desirable, but at present, specialists are few and scattering, and legislation would be superfluous, and he offered the following resolution: "That in the present stage of bee-culture, legislation is neither desirable nor feasible." The next topic was a paper entitled:

OBJECTS AND METHODS OF A THOROUGH ORGANIZATION OF THE BEE-KEEPERS OF NORTH AMERICA.

A philosopher once said, "My object is not to make people read, but to make them think." My desire is to cause them to act—for action gives results! I would endeavor to inspire you to undertake a "progressive step" in the direction of organization! I intend to merely outline the benefits to accrue from united effort, and to state very briefly the probable effects of the plan proposed. Said one of old, "I believe, and therefore have I spoken." I, too, have believed in the exalted possibilities of the North American Bee-Keeper's Society, and have for nearly a dozen years labored zealously for the realization of the fond hopes so long entertained.

The pursuit of modern and progressive apiculture is yet in its infancy. It has grown rapidly and its development has been accompanied by science, art and invention at every step; so that to-day (even in its infancy) it is really a giant! standing almost without a parallel in the history of industrial pursuits—its devotees in North

America to-day numbering 7,300,000 persons; and its annual product of honey amounting to 100,000,000 of pounds, and its value being about fifteen millions of dollars.

Is it not true that our national government is founded upon the principle that "in union there is strength?" And after passing the ordeal of the greatest "civil war" of modern times, is today the strongest and best in the world? Its constitution and laws are "the bulwark" of all our privileges and liberties! It guarantees to us also the full benefit and peaceful enjoyment of our organized labors!

What we need is organized effort, unity of labor, and concert of action, upon all matters where "our interests are in common!" To accomplish this we ought to patriotically sink all our minor differences and organize to defend our pursuit, watch our interests, and defend our rights. A thorough organization is our only "strong tower of defense," and will command lawful attention and commercial respect.

But some may ask, "what do we desire to accomplish?" To answer this let us enumerate some of the suggestions during the intervening year, since last we met:

Has not a "honey producers' association" been proposed to control the selling prices of the honey product? A strong but conservative society would best serve that purpose.

Have we not heard about the necessity for obtaining reliable apicultural statistics? What could be better adapted to this purpose than an Inter-national Society?

Has not a proposition been made to ask for legislation in favor of granting protection to bee-keepers within a certain territory? What could authoritatively decide whether such legislation is desirable or not, but such an apicultural organization?

Some of our principal wants are a systematic encouragement of bee and honey shows at fairs; providing bee-tents for such bee-exhibitions; inaugurating a system of education of bee-keepers, and by certificate or otherwise guaranteeing to those who wish to hire assistants, that they possess a practical knowledge of the business for which they are wanted.

These "wants" could all be provided for, and satisfied in a better manner, by a well-organized society, than in any other way.

Then again, it has often been advised that the constitution of this society should be amended so as to make it a representative society. In the minutes of a former meeting we find the following:

The committee on revision of the Constitution find that the North American Bee-Keepers' Society should be composed of delegates from all the local societies,

throughout North America. They would, therefore, recommend and urge that the local societies carry out this feature, and send delegates to the next meeting of this Society.

At another very important meeting of this Society, the chairman of "the committee on the best means of promoting and advancing the interests of the National Society, and to increase its usefulness," reported, making the following recommendations:

1. That the Society be made a representative body and that delegates from local societies be sent to the National Society with instructions as to the needs of apiculture at large.
2. That it should encourage a local State exhibition once a year, having public manipulations with bees.
3. That the National Society award suitable medals for the best exhibit of honey in the most marketable shape and a diploma for the most expert public handling of bees.

The Convention also recommended that a Vice-President be elected in every state and territory, to co-operate with the Society in awarding prizes at these bee and honey shows. It also recommended that a representative of this Society attend these bee and honey shows and that his travelling expenses be borne by this Society, and that a committee be appointed to procure medals and diplomas.

To make this a representative body is not a difficult task. The Constitution can be revised and amended, and when this meeting adjourns it can direct that at the next annual meeting representatives from auxiliary societies and members of the parent society only will be allowed to vote, hold office, etc. Of course all apiarists will be admitted, as heretofore, and be entitled to take part in the deliberation by purchasing an annual ticket of the Secretary, the proceeds to be used in defraying the necessary expenses of holding the annual convention.

It is a self-evident proposition that apiarists, like every other professional or industrial class, have the right to organize for their own interests and advantage, and to select such forms of organization as may best suit their purposes. And it is likewise *the duty* of every apiarist in North America to sustain that organization by every means in their power, and to stand shoulder to shoulder in creating and upholding it, as well as in making it one of permanent interests. That organization must enlist the highest intelligence, as well as possess the strictest integrity in order to make it of permanent value to the industry.

It is generally known that the "Bee-Keepers' Union" has been formed, and for three years has made its power felt in defending the rights of its members. It is now a power in the land, and asks no assistance from any other organization; but it is not worthy of consideration, however, to ascertain if it would not be advisable to have it as an "auxiliary" under the protection

and patronage of this Society? If desired it *might* be induced to become an integral part of an organized body.

In London, England, they have a "Honey Company" which receives and sells at the highest market prices, the honey belonging to its members, either by sample or in bulk, and such a company may also be deemed desirable in America, and some arrangements may be made perhaps whereby the company could make advances on consignments, and thus help producers in more ways than one. This might also be made a feature of the proposed organization if deemed desirable by the members of this convention of American apiarists.

To accomplish the latter it would be necessary to incorporate the society and sell sufficient capital stock to give ready funds to make advances and control the honey product. This suggestion I leave for the consideration of the Convention or a committee of its creation. But to facilitate matters, I will here submit for your approval or rejection the draft of a new constitution and by-laws to include all of the suggestions made; your committee can easily exclude, revise or or make new provisions to suit their own views.

CONSTITUTION.

ARTICLE I.—NAME.

This organization shall be known as "The Inter-National American Bee-Association," and shall include in its territory all of the United States and Canada.

ARTICLE II.—OBJECT.

Its object shall be to promote the general interests of the pursuit of bee-culture throughout the North American continent; to form a fraternal bond of Union for the instruction and protection of its members; to diffuse a general knowledge of the value and uses of honey both for food and medicine; to create a market for this God-given sweet, and to assist in its distribution evenly over the American continent—thereby enhancing its commercial value.

ARTICLE III.—MEMBERSHIP.

1. This Association shall consist of its officers, life members, annual members, honorary members, delegates from affiliated local associations, and ex-presidents.
2. Any person interested in apiculture may become a life member, upon the payment to the Secretary of the sum of ten dollars, and receiving a majority vote at any annual meeting of this Association.
3. Any person interested in apiculture may become an annual member upon the payment to the Secretary of one dollar, and receiving a majority vote at any annual meeting. Ladies interested in apiculture may be admitted free upon a majority vote.
4. Annual members shall be entitled to vote, hold office and discuss any question before the Association, subject to the by-laws of the Association.

5. Any persons interested in bee-culture may become honorary members by a majority vote at any regular meeting.

6. Delegates from affiliated local associations shall be admitted free and have all the rights of annual members.

ARTICLE IV.—OFFICERS.

1. The officers of this Association shall consist of a President, First Vice-President, Secretary and Treasurer, and their term of office shall be one year, or until their successors shall be elected and installed.

2. The Presidents of all the local associations, in affiliation with the Inter-National Association shall be "ex-officio" Vice-Presidents of this Association.

ARTICLE V.—AFFILIATION.

Any State, District, Territory or Province in North America may become affiliated to the "Inter-National American Bee Association" upon the annual payment of five dollars, which shall be due on the first day of January in each year.

ARTICLE VI.—MEETINGS.

The regular meetings of this Association shall be held at such time and place as shall be agreed upon at the previous annual meeting. Ten members shall constitute a quorum for the transaction of business, but a less number may engage in discussion, and adjourn until some future day.

ARTICLE VII.—SPECIAL MEETINGS.

Special meetings may be called by the President and Secretary, who shall constitute an executive committee.

ARTICLE VIII.—VACANCIES IN OFFICE.

Vacancies in office by death, resignation, or otherwise, shall be filled by the President until the next annual meeting.

ARTICLE IX.—AMENDMENTS.

This Constitution may be amended at any annual meeting, by a two-thirds vote of all the members in attendance.

BY-LAWS.

ARTICLE I.—The officers of this Association shall be elected by a majority ballot; or, if so decided, by a vote of two-thirds of those present, the officers may be elected by a show of hands.

ART. 2.—It shall be the duty of the President to call and preserve order in all meetings of the Association; to call for all reports of officers and standing committees; to put to vote all motions regularly seconded; to decide upon all questions of order, according to the Constitutions and By-Laws of the Association, and in accordance with parliamentary usage; to provide for counting the votes at all elections; and at the expiration of his term of office, to deliver an address before the Association.

ART. 3.—It shall be the duty of the 1st Vice-President (or in his absence one of the other

Vice-Presidents), in the absence of the President, to perform the duties of that office.

ART. 4.—It shall be the duty of the Secretary to call the names of the members of the Association at the opening of each annual meeting, and to receive the annual dues; to report all proceedings of the Association, and record the same, when approved, in the Secretary's book; to conduct all correspondence of the Association, and to file and preserve all papers belonging to the same; to take and record the name and address of every person who becomes a member of the Association, and transfer the moneys received for dues to the Treasurer, after taking a receipt for the same; to make out and publish annually, as far as practicable, a statistical table showing the number of colonies owned in the spring and fall, the amount of honey and wax produced (together with such other information as may be deemed beneficial) by each member of the Association; and to give notice of all regular meetings of the Association in the bee-papers, at least four weeks before the time of such meeting.

ART. 5.—It shall be the duty of the Treasurer to receive from the Secretary the funds of the Association, and give a receipt for the same; to pay them out upon the order of the executive committee, and to render a written report of all receipts and expenditures of the Association at each annual meeting.

ART. 6.—The Secretary shall have power to choose an Assistant-Secretary, if deemed necessary.

ART. 7.—The Association shall be mainly governed by the following order of business:

- Call to Order.
- Reading the minutes of the last annual meeting.
- Calling the roll of officers and members.
- Reception of new members.
- Collection of annual dues.
- Secretary's report.
- Treasurer's report.
- Report of standing committees.
- Reports from affiliated local associations.
- President's address.
- Election of officers.
- Selection of place and time of next meeting.
- Miscellaneous business.
- Discussion of topics.
- Installation of officers.
- Adjournment.

ART. 8.—A committee of five shall be elected, who shall have power to organise itself into a "Honey Company," and its duties shall be to inaugurate plans for the marketing and sale of the products of the apiary. Every member of the Inter-National American Bee Association;

and its affiliated branches, shall be entitled to the benefits of the Honey Company, subject to the terms of its by-laws.

2. This Honey Company shall make annual reports of the state of the market, amount of business done, and of its financial condition to the annual convention of the Inter-National American Bee-Association.

ART. 9.—1. The Secretary of each local affiliated society shall, through its Secretary or President, on the first day of August in each year, report to the Secretary of the Inter-National American Bee-Association, the number of its members, stating the aggregate number of colonies of bees in their apiaries in the previous fall, the number in the spring, the increase since, and the approximate number of pounds of honey produced (stating comb and extracted separately), and any other desirable information concerning the probable honey production of those not members of the Society, but within the territory of the affiliated local association.

2. If the annual affiliation fee be not promptly paid, and the local report withheld, the "Inter-National American Bee-Association" may at any time within one month of the dates mentioned withdraw the privileges of affiliation which comprise the following :

(1.) The President of each affiliated society is "ex-officio" a Vice-President of the Inter-National American Bee-Association.

(2) It shall be entitled to receive from the Inter-National Society, two silver medals to be offered as prizes for honey, open for competition all its members, one for the best in the comb, and the other for the best out of the comb.

(3) The members of all the affiliated societies shall be entitled to the facilities which may be provided from time to time by the Honey Company, for the sale of honey and beeswax, upon the terms stated in the By-Laws of the Company.

(4) Each affiliated society shall be entitled to the services of a Judge to award premiums at its Bee and Honey Show, upon the payment of his actual railroad and hotel expenses.

(5) Each affiliated society shall be entitled to elect one delegate to each 25 of its members, or fraction thereof, who may represent it at the annual meeting of the Inter-National American Bee-Association. All expenses of such delegates to be borne by themselves or the local society, or both conjointly, as they may provide. Such delegates shall be entitled to vote, hold office, and take part in all the deliberations of the Inter-National Association.

ART. 10.—A Defense Committee of seven shall be appointed for the purpose of considering the

application of members for Defense from unjust lawsuits by those who are prejudiced against the pursuit. This committee shall be the officers annually elected by the National Bee-Keepers' Union, which is hereby declared to be affiliated to the Inter-National American Bee-Association. Its President is hereby made a Vice-President of this Association, and its Manager also a delegate to the Inter-National Convention.

ART. 11.—An Expert Committee of three shall be annually elected and fully empowered to prepare examination blanks, and make all necessary arrangements for the examination of candidates for Diplomas as Experts in the art of bee-keeping. This committee shall be empowered in the name of this Association, to award diplomas of three grades upon candidates, according to their proficiency in the art of bee-keeping and the management of an apiary.

ART. 12.—The Executive Committee of this Association shall cause the Constitution and By-Laws to be printed in appropriate form, and every person joining the Association shall be entitled to a copy of the same.

2. It shall also select subjects for discussion, and appoint members to deliver addresses or read essays, and the same shall be published with the call for the next annual meeting.

3. It shall also provide free badges for all members, and procure medals for the honey shows of affiliated associations, and diplomas for experts.

4. The Executive Committee shall also provide a place of meeting for the annual convention, and see that all necessary arrangements are made to carry out the demands of the Constitution and By-Laws.

ART. 3.—No member shall be entitled to the floor more than five minutes in the discussion of any motion, resolution or petition, without obtaining the consent of the Association, nor a second time, unless by the consent of the President, or a majority of the members present.

ART. 14.—All committees shall be elected by ballot, by a plurality vote, except by special resolution.

ART. 15.—These By-Laws may be amended by a two-thirds vote of all the members present at any regular meeting of the Association.

Let us all remember that in the strength of its deposits "the Bank of Human Friendship" is invincible! and the assets are greatly augmented when "good men and true" invest largely in its capital stock! Were mankind to cease to aid each other, the race would soon perish. From the moment of our advent into this world until some kind hand wipes the death-damp from our brow, we need assistance and friendly help—and none can be guiltless who refuse it.

"Do you ask for the name
Of this Genius whose fame
Through the civilised world doth abound?
It is Friendship pure,
Whose works will endure
Until the last trumpet shall sound."

I trust that I have made plain the *outline* of the organisation suggested—the *advantages* offered—the *duties* devolving upon its members, and the *responsibilities* resting on its executive officers; and now, in conclusion, let me ask, may we not hopefully look to the future, expecting to see Apiculture prosper, and its votaries intelligent, successful and happy, enjoying the full fruition of the grand organisation which may result—from the labors of this day? In the language of Webster, when laying the corner stone of the Bunker Hill Monument. I will say of this proposed organisation: "Let it rise! Let it rise, till it meet the Sun in its coming; Let the earliest light of Morning gild it, and the parting day linger and play on its summit!"

But little discussion followed the reading of Mr. Newman's paper, and on motion of Dr. Mason a committee consisting Prof. A. J. Cook, W. Z. Hutchinson and A. I. Root was appointed by the President, to take into consideration the proposed amendments to the constitution and report upon the advisability of its adoption.

Later on the committee reported as follows: "We recognize, with no light gratitude, the great labor and thought bestowed by Mr. Newman upon this scheme. We have given it all the thought and consideration that our limited time would permit, and in view of the sweeping changes suggested, and the somewhat intricate and involved plan proposed, we recommend that the matter be postponed for one year, and that Mr. Newman be requested to print the scheme, and that after a year's thought and study we then consider the matter again, when we can do the important subject the justice which it demands."

Next came a paper from C. P. Dadant, Hamilton, Ill., entitled:

COMB FOUNDATION, ITS MANUFACTURE AND USE.

The first requisite for a good article of comb foundation is, to get a pure article of beeswax. The making of foundation of wax mixed with paraffine, or with ceresine, has been tried several times, and has resulted in a loss to the manufacturer, as the bees detect the imposition more readily than men can. Besides, these artificial compounds melt at a lower degree than pure beeswax, and endanger the safety of the colony, when put in use. In this country, where the extremes of heat and cold are so marked, even pure beeswax, in naturally built combs, sometimes gives way under the heat and weight combined. It is by their lighter specific gravity that paraffine and ceresine are most readily detected. Happily, however, these adulterations are very scarce. The most frequent adulteration of beeswax, that with tallow, is easily noticed by the dull and greasy appearance of the cakes. This wax should be carefully rejected.

After selecting the beeswax, we melt it in a large boiler, and keep it liquid for 24 hours or more, to give all the impurities time to settle to the bottom. These are afterwards melted over, to separate what may remain in them.

The wax is then dipped into sheets, by the use of thin pine boards, which have been kept dampened in water, to prevent sticking. We formerly used glass, and finally rejected it as too expensive. The sheets are made thick enough to stretch in the rolls when moulded. In this way all the inequalities of their surface

are laminated out, and the foundation turned out of the rolls is dry, or nearly so, all the moisture being forced out with the pressure. It is in this particular that resides one of the many advantages of the roller mill over the press. In the press, the lubricating material, whatever it is, is left on the sheets, and is very objectionable to the bees.

There are many points in the manufacture of comb foundation that are worthy of attention, but it is impossible to notice them all in this short essay. In this branch of industry, as in all others, practice is required to acquire skill, and speed in manipulations.

Of the use of comb foundation, it is not necessary to speak, for there is certainly not a bee-keeper at this meeting who does not know of its advantages.

Two of our bee-papers have lately published an article from my pen, which first appeared in the *Western Agriculturist*, several years ago, when comb foundation machines were yet in their infancy. In this article I advised the use of narrow strips in the brood frames, for we did not then know how to make foundation that would hold, in full sheets in the hive, when used for natural swarms. But everybody now uses comb foundation in full sheets in living swarms, and we have done so ourselves for years with entire success.

Let me close with the remark, that of all nations, the American is the most progressive, as far as practical or material advancement is concerned. America leads the world in practical bee-culture, and though many are the scientific discoveries that we owe to our brothers across the Atlantic, they readily acknowledge that in the practical production of honey, they only follow in the footsteps of the apiarists of the New World.

C. P. DADANT.

Mr. H. R. Boardman took issue with the essayist upon the point of "everybody" using full sheets of foundation in hiving swarms. Mr. Boardman said many bee-keepers did not use them.

The President and Secretary expressed doubts as to Mr. Dadant's having stated the matter exactly as he intended.

James Heddon gave the results of experiments showing that the lye used for lubricating when using the Given press was in no way objectionable. He admitted that Mr. Dadant made as fine foundation as is made, more even, than is usually, upon the Given press, but with the press the excess of wax is forced into the side walls, the base of the cells being even throughout the sheet. He failed to see anything objectionable in this inequality in the height of side wall of foundation made on the press.

Dr. Miller used the press and liked it.

Here the discussion branched off into a consideration of the use of drawn combs versus foundations in the supers.

J. A. Green had used both old and new foundation as well as drawn combs. The new foundation was drawn out and filled first, then came the drone comb, and last of all the old foundation.

F. Wilcox used foundation in sections and could not understand how Mr. Doolittle and others could make the claims they did for starters of comb, much less sustain them.

Mr. Boardman asked the gentlemen who experienced trouble in using old combs to explain how they secured these combs.

Mr. Green used white new combs, such as the fine white built by the bees.

R. R. Murphy put in an upper story in the fall, and allowed the bees to fill the frames with comb, then extracted the honey, and cut the combs, fit them into the sections and use them the next spring.

Mr. J. Bull favored sections filled with comb, the bees commenced work in them sooner, and the honey was of fine appearance when finished.

James Heddon, years ago, used sections of figured spruce. When he began using white poplar he had on hand 300 or 400 sections of figured spruce filled with comb; each year they were placed upon the hive, but sections of foundation were finished first; some of the old sections were left over each year, and it was three or four years before they were finally finished up.

President Miller had had the bees fill and finish sections of comb before they began work in sections filled with foundation, in fact, the bees did not commence on the foundation at all, as the honey season came to a close.

H. R. Boardman thought much of this confliction came about as the result of different management. He said that Mr. S. F. Newman of Ohio, had informed him that had it not been for his stock of sections filled with comb he would have secured no honey the past season, as it was, he had 2,000 or 3,000 lbs. Mr. Boardman did not favor the use of old discolored combs or soiled sections. In hiving swarms on empty frames, if no combs are placed in the supers there will be a loss at first from lack of storage.

W. Z. Hutchinson preferred to use the empty combs at the opening of the season. He would use a whole case of combs. The bees start in them sooner; the first honey gathered is placed in the sections; the brood nest is thus relieved of all "pressure" and more brood is the result, while the honey is just as fine. He could not understand why Mr. Heddon had the trouble he did.

W. Z. HUTCHINSON, Sec.

For the Canadian Bee Journal.

Setting Bees In and Other Matters.

AM in favor of putting bees into winter quarters early for several reasons. Especially it is necessary to do so after a honey season like the past one. When the honey fails early in the season from drought or any other cause the brooding ceases correspondingly early, and hence the bees to be wintered are correspondingly old. This being the case, the vitality of those bees to be wintered must be conserved in every proper way, and their "days lengthened out" as far as may be. Now, to conserve the vitality of the bee and lengthen its life we must reduce its activity to a minimum. We all know, or ought to know, how to do this. In the first place nothing contributes more to serene content, tranquility of mind, and quiet quiescence

in a well-bred honey bee than a full pantry, *i. e.*, 25 to 30 lbs. of good capped honey in the hive. In the second place the bee must have a warm, dry and comfortable house to live in. In a word it must be so well "fixed" in its domicile that it need not worry about "grub" for the future, need not have the bother of "drying off" from the leakage through the hive of every rain, and need not gormandize in order to keep warm. Right here let me remark that bee-culture in this climate needs two things in this connection pretty badly—a hive that will keep out the rain and a hive that will keep in the heat. I have yet to see a hive of this description come from any factory, any supply-man, or any workshop except in a very few cases the bee-keepers' own workshop. Hives there are—double-walled—that will retain the heat very well, but even they in many cases will let in the rain. They will all do it, of every style and make, from every factory. And this is a more serious evil than we might imagine, and ought to be remedied. I venture to say from what I have seen that fully three-fourths of the hives in use in any part of the province, taking them all as you come to them, will leak or admit the rain more or less. It is hardly necessary to stop here to recount the bad effects upon the colony of a leaking hive during a wet season, and in the spring and fall of any kind of season. Suffice it to say that the home of a colony of bees—to be worthy of the name of a home—ought to be rain proof, and ought to be warm, so constructed that it will retain the heat and at the same time admit of free ventilation in hot weather. It seems to me that hitherto too little of the mechanical ingenuity displayed in bee-hive construction has been expended in this direction. Let the apiarian inventors and hive-makers take the hint and turn the swelling stream of their ingenuity slightly into another channel and this *desideratum* will doubtless soon be achieved.

Well, then, to prolong the life of winter bees they must be kept dry, cosy and comfortable in the fall and must have plenty of stores. And especially should they be dry when put away in the cellar. I must differ from the JOURNAL on a point in this connection. In last issue it is recommended that the propolis or summer quilt be removed *after* the bees are placed in the cellar and one substituted that will allow the moisture to escape. At any rate the JOURNAL states that is the way they themselves do it. Now, I submit, the propolis quilt ought to be removed *some* days *before* the bees are put away, and this for two important reasons, *viz.*: to secure dry combs and stores when put away, and to avoid agitating the bees. We have all noticed that

upon removing the propolis quilt in the fall we often find drops of water collected on its under side and also on the tops of the frames and combs—the evaporation from the bees not having been able to escape through the propolized quilt. Such a colony is not in fit condition for winter quarters till it gets thoroughly dry. Most of you have also doubtless noticed that removing the summer quilt and substituting an entirely different one to the cause of considerable excitement and agitation amongst the bees, and this is certainly a bad condition to arouse in putting them into winter quarters.

My own habit is to remove the propolis quilt some time before setting in so that they can have time to settle down and reconcile themselves to their new condition and have a flight before they go in. When I remove the propolis quilt and substitute a cotton one after laying two or three short sticks, say an inch square, across the frames to give the bees a winter passage, I put on the warm woollen winter quilts to retain the heat. They will then get nice and dry before they are put in. By having them in this shape I can gently carry them in and deposit them without agitating them at all as they are all prepared for the cellar.

At this date (Nov. 18) my bees are mostly all in winter quarters. I commenced setting in the 8th of the month, continued the 9th and then again the 15th, all being in nice dry condition. Those out are to be removed by purchasers; otherwise they too would be in. The thermometer stands about 50° and "order reigns in Warsaw."

ALLEN PRINGLE.

Selby, Ont.

FREIGHT RATES ON HONEY.

THE DISPOSAL OF THE GOVERNMENT GRANT AND OTHER MATTERS.

AT the approaching annual meeting of the Association there are several matters that ought to be taken up and dealt with. One of these is decided action with a view to secure reduced freight rates on honey. The schedule rates of the various carrying companies are now out of all proportion to the risk, stowage and trouble incurred, and out of all proportion to that of many other classes of goods quite as risky and bulky. First class freight rates are now charged for extracted honey no matter in what form it is shipped, unless it is put up in kegs or barrels—a form in which very little honey is transported by us. Why we should have to pay the same amount per hundred for honey shipped in tins either wholly or partially encased in wood, that is

charged for dry goods which is much more valuable and bulky is something that is hard to be explained. As a matter of justice, honey so done up, should be rated down as low as syrups and all such goods. I believe if proper representations were made to the railway authorities, a marked reduction in freights would be secured. This is a matter that interests every bee-keeper in the Province.

Another matter that ought to be settled is the appropriation of the Government grant. Without going into details it would be well, I think, for the Association to supplement the exhibition prize list by a liberal prize for the *most attractive display of honey*. Something certainly ought to be done to increase the attraction of the honey show. Hitherto its magnitude has been its redeeming feature. It is time more taste was displayed in its get-up. Perhaps no other department of the Toronto Exhibition has been thrown together so promiscuously and with less apparent taste in its arrangements than have the goods in the honey department. This is not as it ought to be. Surely bee-keepers should guard against impressing the public with the belief that as a class we are devoid of the artistic taste necessary to show off our goods to advantage.

Again more perfect machinery should be created for the better organisation of districts and their affiliation with the parent society. A suitable code of laws should be enacted for calling districts into organised life. Some pecuniary assistance should be given them in maintaining their organisations when affiliated. I think it will be found that some such change is necessary under the act of incorporation. My object in throwing out these hints is for the purpose of eliciting the opinions (on these and kindred matters) of those interested in seeing that the Bee-keepers' Association now recognised and assisted by the country is worthy the confidence and support bestowed upon it by the public.

R. MCKNIGHT.

Owen Sound, Ont., Nov. 22, '87.

We thank Mr. McKnight for having thus brought before readers of the CANADIAN BEE JOURNAL, in such a clear light, these objects for discussion. It is quite true that honey is being charged at a much too exorbitant rate, and sales at a long distance are very hard to make, as the freight must always be a consideration. Only the other day we received a consignment of 1200 lbs. of honey, coming a distance of 100 miles, the freight on which amounted to \$6.00 or 50c. per hundred. This is the one great impediment in buying up the

honey of customers. By the time that the freight is paid, and the trouble and cost of handling is taken into consideration, the cost of the honey is so advanced that there is little or no margin in the transaction. Some four years since, and single handed, we attended a meeting of the General Freight Agents of the different Canadian lines, with a view of having the rates reduced on bees, beehives, "nailed," "in the flat," or "knocked down" as the railway companies express it. We were so successful in that effort that to-day, instead of our customers having to pay four times first class rates on bees, it is reduced to "double first class." Instead of "double first class" rates on hives, "made up," the rate is now "first class," and on hives, "knocked down," the freight rate now, instead of "first class," is "third class." The rates throughout were reduced one-half. There is no doubt in our minds, but that, if properly approached, the desired end can be attained. The other points raised by Mr. McKnight are also subjects of which we have very much need to dispose. We will speak of them another time. The columns of the C.B.J. are open to all who desire to discuss these matters, and we hope to have full views expressed on the different subjects.

From our English Correspondent.

"Standard" Frames, Distance Pins, and Metal Ends.

OUR hives, however much they may differ in external appearances, have one thing in common. It is this:—The frames are all hung in them by the end lugs of the top bar. None of the frames stand on the bottom boards as those used by Mr. Corniel for example.

You must not expect me to defend the 'standard' frame in these columns. I am only writing a description, not a defense, of our hives and appliances. This 'standard' was fixed by the B.B.K. after much thought and discussion. Every conceivable size and shape has been tried Italian, German, Swiss and American. Shallow frames are old with us, as old as the Stewarton system but this Standard size has been selected as the happy medium and is I believe the best size for our climate.

Being decided on we soon settled down to adapt ourselves to it, and now we have all our hives, extractors, and bee-gear, generally, suited to it, we find it has simplified matters so much

that it would cause a strong commotion if it was seriously proposed to alter it. But I do not think it is likely we shall find the man sufficiently bold just yet.

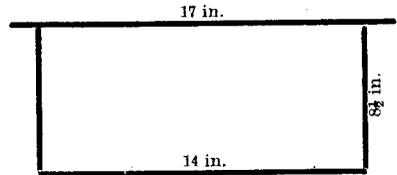


FIG. 1.

I have inserted the size again at Fig. 1 to save you the trouble of referring back to page 534 of C. B. J. It is very nearly the size used by Mr. Woodbury, the 'Langstroth' of British bee-keepers. Pine planks come to us chiefly 9 ins. and 11 ins. deep, consequently hives to take the standard frame can be made from boards 9 ins. deep and plenty room is allowed for bee-space under the bottom bar after the board is placed smooth on each edge. The top bar and two sides of the frame is finished $\frac{3}{4}$ in. x $\frac{3}{8}$ in. The bottom bar is $\frac{5}{8}$ in. x $\frac{1}{2}$ in. and is used simply to keep the sides steady. The top bar being 17 ins. long gives good finger room for the operator to hold it by during manipulation. The outer walls of the hive are made exactly 17 ins. apart (within) thus allowing the top bar to drop down between them and at the same time preventing lateral movement; and also preventing too large a bee-space one end of the frame, and too small or none, the other. The ends of the frames being only $\frac{3}{4}$ in. wide allows the bees free access around them. Close ended frames on what is known as the 'Giotto' system are in great disrepute in England.

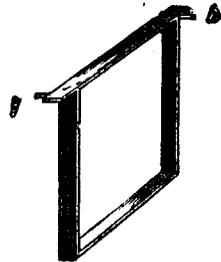


FIG. 2.

Our committee when deciding on this frame left the question of 'distance pins' out of the question, they are no part of the standard frame; but distance guides of some kind are very largely used, in fact almost universally so. Their objection is, I need scarce point out, to keep the centre of the frames nineteen-twentieths of an

inch apart. Some simply use distance pins as seen at Fig. 2 others use wire staples instead of pins, others again tack on small blocks of wood on each side of the top bar just where the pins are in the cut. Mr. Abbott makes a frame with a top bar shown at Fig. 3.



FIG. 3.

It is known as Abbott's 'broad shoulder' top bar. There are thousands of these in use, but the most popular of all distance guides are what is known as 'metal ends.' All my own hives are fitted with them. They are made of type metal and cast in a mould. Lead is too soft and zinc is too hard, they must be tough so a mixture of lead and antimony are used for it. They are sold for 4s. 6d. (\$1.00) a gross and are made very rapidly; the labor price being about 2s. 2d. per gross.

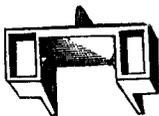


FIG. 4.

These metal ends (Fig. 4) are forced on the top bar tight. When you wish to extract they are drawn off and replaced before you return the frame to the bees. These various devices make the distance very arbitrary, but by drawing off every other one you can reduce the distance to $1\frac{1}{2}$ in. but it leaves the tops of your bar unlevel. It is more simple to expand them for winter, but that is seldom done with us.

In manipulating you can push your whole set of frames from one side of the hive to the other without fear of injury to the bees. The distance pins or metal ends prevents a 'jam,' and the side walls of the hives prevent lateral movement to the frames; the metal ends especially prevent propolizing and form very easy runners for the frames. We get our combs built in the frames as true and level as boards consequently they are interchangeable, are easy to uncap for extracting and when fitted with distance pins of some kind can be pressed together with the confidence that you have not given the bees a night's work at cutting fresh 'bee ways' between some of the combs. I believe metal ends are unknown with you, we have used them seven or eight years, and they are yearly getting more popular. A standard frame is too stereotyped an idea for you to adopt I suppose, but after all

a bee hive is like a plow; much of the success or failure lays 'behind the handles.'

My next must be a few samples of British hives but they all take the standard frame.

AMATEUR EXPERT.

England, Oct. 26th, 1887.

SUNDRY SELECTIONS.

GEO. H. HALL.—I put 16 swarms into winter quarters the 12th for the purpose of experimenting. Part are very weak and part are very strong. I will post you from time to time in regard as to how they are wintering. It has been the poorest honey season I have known during my eleven year's experience.

Rumney, N.H., Nov. 23, '87.

A GOOD WORD FOR FORCE PUMPS.

J. K. DARLING. The pumps came to hand in good order but literally "one day after the fair" as I was just getting my stuff home again. I am well pleased with them but have not been put to the necessity of using them as the danger had passed by the time they arrived. I do not think, however, that I will ever be without them around the place again. It is surprising to see with what force they throw a steady stream.

Almonte, Nov. 18th, 1887.

THE EXTENT OF VENTILATION REQUIRED IN REPOSITORIES.

ADOLPHE BLAIS.—Will you be good enough to favor me with your opinion on the following point? I have a small cellar, 16 ft. square, and 3 ft. deep, and in it I have 50 colonies of bees, placed there the last day of October. The only ventilator in the cellar is one three inches square that runs up through the loft, but not through the roof. Some of my friends advise me to put in another ventilator, connected with the stovepipe. I have no other way of giving them ventilation than through the roof, or up the chimney by way of the stovepipe. The cellar is a very dry one. I wintered in it, last winter, 25 colonies, and all came out in good condition and strong. It may be that I have put my bees into winter quarters a little early, but it is a sort of experiment.

Glen Sandfield, Nov. 6, 1887.

If they will keep cool enough (say from 45 to 47°), we think the one ventilation pipe is sufficient, but if you find the temperature running up to 50° or more, you might put in the other ventilator. Putting double as many colonies in the same repository will change the temperature considerably, making it much warmer. If you find them getting too warm during this fine weather, you might open the windows at night and allow the cellar to cool off, closing them again in the morning before daylight.

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 **specially** intended for those who have bees or other goods for exchange for something else, and for the purpose of advertising bees, honey, etc. for sale. Cash must accompany advt.

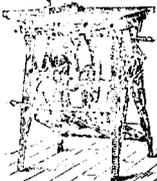
\$1 00 Will secure you by mail, post paid, 250 Noteheads and 250 Envelopes with your name, business and address printed on the corner of each. Send in your order now. **THE D. A. JONES CO.,** Beeton, Ont.

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

ADVERTISEMENTS.

BARNES' FOOT-POWER MACHINERY



Read what J. J. PARENT, of Charlott, 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 bee-hives, 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. & JOHN BARNES, 574 Ruby St., Rockford, Ill. 21

JOHN BARNES, 574 Ruby St., Rockford, Ill. 21

BEE-KEEPERS ADVANCE

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

J. B. MASON & SONS,
t.f. Mechanics' Falls, Me.

W. Z. HUTCHINSON,

ROGERSVILLE, GENESEE, CO., MICH.

HAS published a neat little book of 45 pages, entitled

"THE PRODUCTION OF COMB HONEY."

Its distinctive feature is the thorough manner in which it treats of the use and non-use of Foundation. Many other points are, however, touched upon. For instance it tells how to make the most out of unfinished sections, and how to winter bees with the least expense, and bring them through to the honey harvest in the best possible shape.

Price 25 cts. Stamps taken; either U.S. or Canadian

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 :

BEES BY THE POUND.

	May	June	July	Aug st	Sept.
Bees, per $\frac{1}{2}$ 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 $\frac{1}{2}$ 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" hives.. You may have whichever style you desire. Be sure to specify when ordering.

The above must go by express.

QUEENS.

	Komebred	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	Carniolan Crosses	Hybrids
May	\$9.00	\$10.00	\$11.00	\$8.50
June	8.00	9.00	10.00	7.50
July	7.50	8.00	9.00	7.00
August	6.50	8.00	9.00	6 50
September	6.50	7.00	8.00	6 00
October	7.00	8.00	9.00	6 50
November	8.00	8.00	9.00	8 00

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

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

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PRINTING

Supply Men, Foundation Dealers,
and Bee-Keepers,

SEND FOR ESTIMATES FOR WHATEVER
YOU REQUIRE IN THE WAY OF

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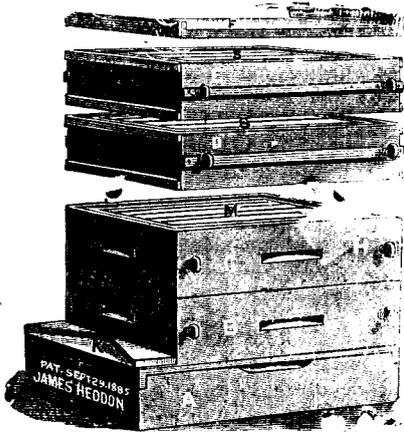
LABELS,

OR GENERAL PRINTING.

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

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

HEDDON HIVES!



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

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

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

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

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

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

PRICES OF PARTS.

	made up flat.
Bottom stand.....	12 09
Bottom-boards.....	15 11
Entrance blocks (two).....	03 03
Brood case, invertible, including set screws and frames wired when made up or punched for wiring in flat.....	60 45
Honey Board (wooden) slotted, invertible.....	10 07
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's 1887 Circular.

NOW READY.

ALL ABOUT THE NEW HIVE.

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

Address,

JAMES HEDDON,
DOWAGIAC, MICH

TOOLS For BEE-KEEPERS

HAMMERS.

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

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

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

SCREW DRIVERS.

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

TWO-FOOT SQUARES.

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

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

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

TWO FOOT RULES.

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

HAND SAWS

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

PANEL SAWS.

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

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

PLANES.

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

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

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

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

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PUBLISHERS

THE CANADIAN BEE JOURNAL

FINE BOOK & JOB PRINTERS.

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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.

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J. B. MASON & SONS, Mechanic Falls, Me.
M. J. DICKSON, Hiawatha, Kans.
ED. R. NEWCOMB, Pleasant Valley, N.Y.
J. W. PORTER, Charlottesville, Va.
ASPINWALL & TREADWELL, Barrytown, N.Y.
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and numbers of other dealers. Write for SAMPLES FREE and Price List of Supplies, with 150 COMPLIMENTARY and UNSOLICITED TESTIMONIALS from as many bee-keepers in 1885. **We guarantee every inch of our Foundation equal to sample in every respect.**

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HAMILTON, Hancock Co., ILL.

Promote a Home Market!

By judicious distribution of the Leaflet,

"HONEY: Some Reasons why it Should be Eaten."

It never fails to bring results. Samples sent on application. Prices printed with your name and address: 100, 80c.; 250, 2; 500, \$2.00; 1,000, \$3.25.

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

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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 1887. Free.

W. T. FALCONER.

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—OR—

MANUAL OF THE APIARY

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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

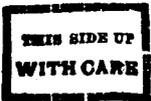
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BEETON ONT.

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These are for pasting on the tops of cases.

Price, per 10, 5c. by mail, 6c.

" 100, 25, by mail, 27

" 1000, 1.50 by mail, 1.60

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

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

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

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Our **Cartons** for enclosing Section Honey are the best and lowest priced in the market. Made in one piece. With or without tape handles, with Mica fronts or without. In the flat or set up. Printed or not, any way to suit. We are bound to satisfy you. We have just put in special machinery for their manufacture and are prepared to fill orders promptly. Price list **Free**. Samples 5c.

PRICE LIST OF 4 1/2 x 4 1/2 x 2 OR THINNER.

	500	1000	5000
Advance Printed.....	\$4 50	\$ 7 75	\$32 50
Same with Mica Front.....	5 50	9 25	40 00
Same with Tape Handle.....	5 25	9 00	38 75
Same with M F and T H.....	6 50	10 50	46 25

14 oz **Glass Jars** \$5.25 per gross, including corks and labels. 1 1/2 and 2 gross in a case. Catalogue of Honey labels free.

A. O. CRAWFORD, S. Weymouth, Mass.

OUR 60 LB. TINS.

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

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

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

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