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VOL. IV, NO. 17

1888

JULY 18

PUBLISHED EXCLUSIVELY IN THE INTERESTS OF THE HONEY PRODUCER

THE CANADIAN



JOURNAL

THE FIRST \$ WEEKLY IN THE WORLD

ONE DOLLAR PER YEAR

THE GREATEST POSSIBLE GOOD TO THE GREATEST POSSIBLE NUMBER

PUBLISHED BY
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BEETON ONT.

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- THE HIVE AND HONEY BEE, by Rev. L. L. Langstroth. Price, in cloth, \$2.00.
- A BIRD'S-EYE VIEW OF BEE-KEEPING, by Rev. W.F. Clarke. Price 25c
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- FOUL BROOD, ITS MANAGEMENT AND CURE by D. A. Jones. Price, 11c. by mail; 10c. otherwise.
- A. B. C. IN CARP CULTURE, by A. I. Root, in paper 30c.
- 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.

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See advertisement on another page. We have just arranged for the sale of these machines, and we can quote a price F.O.B. cars at Toronto (duty and freight paid thereto). On application we will forward catalogue and pricelist free.

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

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

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

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

Subscriptions are always acknowledged on the wrapper label as soon as possible after receipt.

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

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

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

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

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All advertisements will be inserted at the following rates

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"American Apiculturist," monthly.....	1.40
"Bee-Keepers' Magazine," monthly.....	1.40
"Bee-Keeper's Guide," monthly.....	1.50
"Rays of Light".....	1.25
"The Bee-tive".....	1.40
"Beekeepers' Review".....	1.40
"Beekeepers' Advance".....	1.50

TO CONTRIBUTORS

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

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

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

Reports from subscribers are always welcome. If any 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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Headquarters in the West for Pure Italian

BEES & QUEENS.

Two-frame nucleus, untested queen, in May, \$2.50; June, \$2.25; after, \$2.00; 3-frame, in May, \$3.50; June \$3.00; after, \$2.50. With TESTED queen, add 50c. more. Bees, per lb., in May, 90c.; June, 75c.; after, 60 cts. Untested queens, in May, \$1.00; after, 75c.; six, \$4.00. Tested, in May, \$1.50; after, \$1.25. Write for circular of Bees, Queens, Sections, Foundation, etc. 6-8 mos. Address JNO. NEBEL & Son, High Hill, Mo.

FRUIT PRESERVED WITHOUT HEAT I

TIME, LABOR AND MONEY

SAVED BY USING THE

Perfect Fruit Preservative.

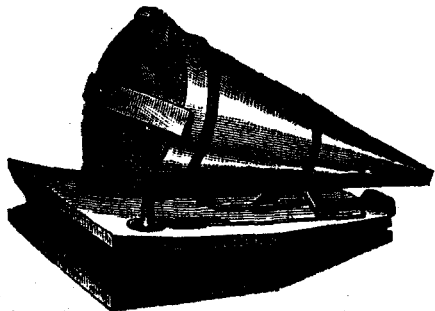
Fermentation absolutely prevented. Simple, Reliable, Harmless. PRICE 25 CENTS per box. Sold by Grocers, or supplied by

BOOTHE BROS.,

Props., TORONTO.

Or
The D. A. JONES CO. Ld.,
BOSTON.

CLARK'S COLD BLAST SMOKERS.



We are making these, with late improvements, and can forward them by mail or with other goods by return post. The prices are as follows:

Each	With goods. By mail.
6 at one time, each	50c. 70c.
	45c.

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

COMB * FOUNDATION I

At hard pan prices.

WILL. ELLIS,
ST. DAVIDS, ONT.

My 20th Annual Price List of Italian, Cyprian and Holy Land Bees. Queens and Nuclei Colonies (a specialty); also Supplies—will be sent to all who send their names and addresses.

H. H. BROWN,
LIGHT STREET, Columbia Co., Pa.



ITALIAN BEES AND QUEENS. Two or three Frame Nuclei or Full Colonies at lowest price. Every Queen bred from Imported stock and guaranteed second to none. Address

E. HEAL,
LINDEN APIARY,
ST. THOMAS, ONT.

SEND US \$2.50

And we will send you a good serviceable man or boy

Nickle Keyless Watch,

And FOREST AND FARM for one year.

The liveliest and Best Weekly Paper published in the Dominion. Send your address for sample copy and full particulars. Special terms to bona fide canvassers.

FOREST AND FARM,
CHAS. STARK, Publisher, 50 Church St., Toronto.

-Comb Foundation-

Having purchased one of the best machines I am ready to receive wax to manufacture or buy. Pure Italian bees, queens and comb foundation for sale. Agent for the D. A. Jones Co. supplies. Can ship by C.P. Ry or H. & N.W.R., (now G.T.) and by Dominion or American Express.

H. COUSE.

Cheltenham, Ont., April 5th, 1888.

THE BEE-KEEPERS'

REVIEW.

For June is now out. The special topic is that of "Removing Queen near the Close of the Harvest." It is contributed to by such men as E. France, G. M^t Doolittle, Prof. Cook, F. Boomhower, James Nip and Dr. Miller.

It also contains a long editorial in which the editor gives in detail, his experience in "feeding back" 13,000 lbs. of honey to secure the completion of unfinished sections. "Feeding Back" is to be the special topic of the July number, and contributions upon this subject will be gladly received. All such as are used will be paid for.

Price of the REVIEW is 50 cents a year. Sample free. Back numbers can be furnished.

THE PRODUCTION OF COMB HONEY.

A neat little book of 45 pages, price 25 cents. The REVIEW and this book for 60 cents. Stamps taken either U.S. or Canadian. Address

W. Z. HUTCHINSON,
613 Wood Street, Flint, Mich.

BEE-KEEPERS'

PRINTING.

We make a speciality of Apiarian Printing, and have unequalled facilities for Illustrated

Catalogue and Label Work.

Note these figures, which include printing.

	500	1000
Note Heads, good quality.....	\$1 15	\$1 90
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Letter Heads, Superfine.....	1 75	2 50
“ Linen.....	2 00	3 25
Envelopes, business size, No. 7,		
white.....	1 15	2 00
Extra quality.....	1 35	2 25
Business Cards.....	1 50	2 50
Shipping Tags, 40c., 45c. and 50c. per 100.		

Our new book of labels contains nearly 100 specimens of elegant honey labels. Write for prices for any printing required.

THE CANADIAN BEE JOURNAL,
BEETON.

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 *peculiarly* 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.

Will exchange one new Stanley Reversible Honey Extractor, with four frames, suited for L. or Simplicity frames, for comb or extracted honey or wax.—R. E. SMITH, Box 72, Tilbury Centre, 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.

\$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.

UNTESTED Italian Queens, daughters or granddaughters of that choice queen purchased from G. M. Doolittle, which was selected out of 600. The above will be reared chiefly from natural swarming cells. Price \$1 each. G. A. DEADMAN, Druggist and Apiarist, Brussels, Ont.

SECTIONS! SECTIONS!

At low prices, and sample free. Send card for sample. Received first prize for

COMB FOUNDATION!

Toronto Exhibition, 1887. Brood and Section Foundation by return express. All kinds of Bee-keepers' supplies,

S. P. HODGSON & CO.,
Shelburne, P.O., Ont.



Italian Queens!

Untested, May, \$1.25; June \$1.00; July, 90 cts. Send for page ILLUSTRATED PRICE LIST of Bees, Queens, Chaff Hives, Barnes Foot-power Saws, Langdon Miter-Boxes, and Apiarian Supplies. Address

WILLIAM E. GOULD,
Fremont, Newwaygo Co.,
Michigan.
5-3 mos

E. L. GOULD & CO.,
BRANTFORD, ONT.

All kinds of Bee-keepers' Supplies. Sole dealers in Canada of Dadant's Comb Foundation.

CANADIAN HONEY PRODUCER!

Monthly: June, July and August (3 months) for 100 Send for Price List, free. Queens for Sale.

NEARLY 30 TONS OF
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SOLD IN 1887.

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 - CHAS. HERTEL, Jr., Freeburg, Ill.
 - E. L. ARMSTRONG, Jerseyville, Ill.
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 - Dr. G. L. TINKER, New Philadelphia, O.
 - D. A. FULLER, Cherry Valley, Ills.
 - JOS. NYSEWANDEK, Des Moines, Iowa.
 - G. B. LEWIS & CO., Watertown, Wis.
 - PAUL L. VIALON, Bayou Goula, La.
 - B. J. MILLER & CO., Nappanee, Ind.
 - J. MATTON and W. J. STRATTON, Atwater, Goodell and Woodworth Mfg. Co., Rock Falls, Ills.
 - J. A. ROBERTS, Edgar, Neb.
 - OLIVER FORSTER, Mt. Vernon, Iowa.
 - GEORGE E. HILTON, Fremont, Mich.
 - J. M. CLARK & CO., 1409 15th St., Denver, Col.
 - E. L. GOULD & Co., Brantford, Ont.
- and numbers of other dealers. Write for SAMPLES FREE and Price List of Bee Supplies. We guarantee every inch of our Foundation equal to samples in every respect. Everyone who buys it is pleased with it.

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

BEE-KEEPERS!

SAVE money by printing your name and address on your labels, cards, etc., yourself. Your name on Rubber Stamp, 25c. Name and address, 35c. Any number of lines at 25c for first, and 10c for each extra line. If ink and pads are wanted with stamp, add 15c to these prices. Club amounting to \$1.25 sent for \$1. If you send sample of any name printed, to give us an idea of the size and shape you want we can suit you.

Gem Rubber Stamp Co.,
MALAKOFF, ONT.



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

VOL. IV. No. 17

BEETON, ONT., JULY 18, 1888.

WHOLE No. 173

EDITORIAL.

OUR OWN APIARY.

THE SEASON IN ONTARIO.

AT this date we have nothing encouraging to say as to the prospect of the entire season's crop.

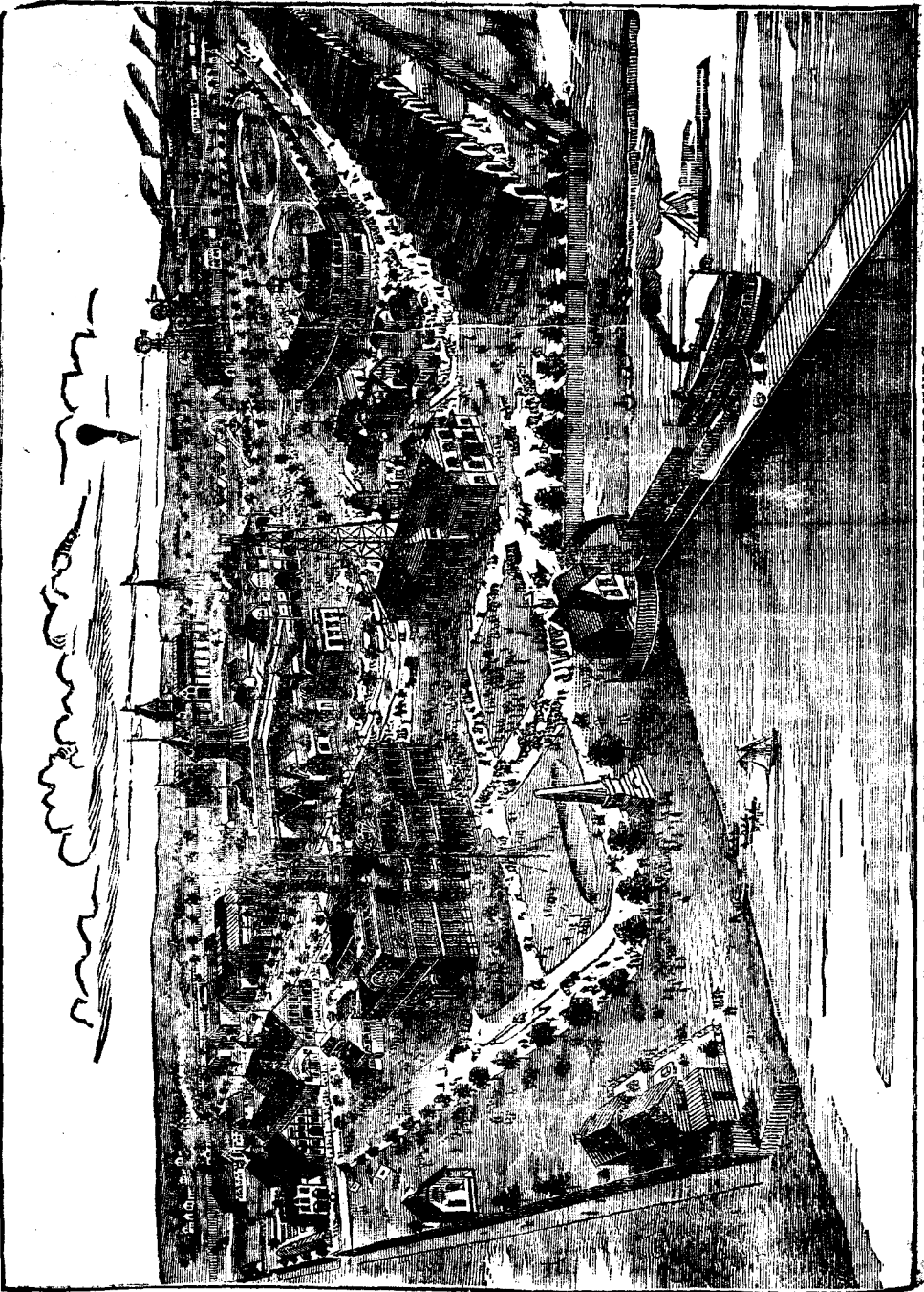
Up to this time the take has not been large, and as the dry weather continues basswood will not likely amount to much. In some localities there has been a fair amount of yield from clover—Muskoka has not done badly, Waterloo has come out with a medium crop, as have also the Southern counties. Simcoe has nothing to boast of, as far as we can learn. On the whole there will not be over one-quarter crop.

The price, will, however, be in proportion, and we strongly advise all who have honey to sell, and who can do so conveniently, to hold it until the fruit season be over, and then to ask a reasonable price for it, commensurate with the supply.

THE INDUSTRIAL EXHIBITION.

WE have pleasure in presenting to the readers of the CANADIAN BEE JOURNAL an engraving showing the grounds and buildings of the great Industrial Fair and Agricultural Exposition to be held at Toronto. We think of all the expositions and fairs that are held on this great American

continent that none have attained a greater success or have been better managed than that which is annually held in Toronto under the auspices of the Industrial Exposition Association. While it is a credit to the city of Toronto it is still more a credit to the Dominion at large, as the latter has much to do in making a success of it, and it justly deserves the liberal support of the Canadian public. People look to the time of the holding of this Exposition as a public holiday, and excursions from every Canadian and many points in the United States run to it almost every day during its entire term, which dates this year from the 10th to the 22nd September. Bee-keepers of Canada have reason to feel proud of the exhibits they have made year after year at this Exposition, and we are given credit by our American brethren for getting up the best display in the world. Every year brings something new, and bee-keepers who visit the fair one year must not think that they have seen all that is to be seen and that it will not be necessary for them to repeat their visit. Not only in this department, which specially relates to our readers, will they find many interesting things, but in every other part of the Exhibition grounds will be found matters of special benefit. We hope, therefore, to see the present year's Exposition the largest and best ever held in Toronto. It is now positively announced that the new Governor-General of Canada, Lord-



VIEW OF THE TORONTO INDUSTRIAL EXPOSITION GROUNDS.

Stanley, will be present and will open the Exposition in person, and special rates have been secured on all the railways for that and following days. Any reader of the BEE JOURNAL may obtain from Mr. H. J. Hill, the Manager and Secretary, a copy of the prize list, by addressing him at Toronto.

For the CANADIAN BEE JOURNAL.

Foul Brood—Does Dead Brood Require Any Attention.

TRUST you will excuse me troubling you again, but as the interests of the bee-keeping community are your own, and as the matter I write about is of vital importance to me, I take the liberty of again addressing you as your experience will probably enable me to arrive at a definite conclusion much sooner than the natural course of events will.

Referring to the brood disease regarding which you kindly published my impressions under the *nom de plume* of "Ena," on pages 267-8 of June 27, C. B. J. Though one or two hives have shown the brown, ropy matter in one or two cells indicating the malignant foul brood, and have been dealt with accordingly. I cannot but think that the disease in the remaining hives affected, about half of the yard or 26 colonies, is that described in the D. A. Jones pamphlet, page 16, as Dead Brood, as there is no brown ropy matter in them. The larvæ, though dark colored and shrivelled somewhat, retains its shape and some odd dead pupæ are to be found, and as there is no indication in the pamphlet as to whether treatment is necessary or whether nature may be left to work its own cure, or whether if left alone it will develop into the form of foul brood I would feel very much obliged if you would give me some idea regarding it.

I have used the utmost precaution and feel pretty sure that this has some other source than that of contagion. In fact I feel that it is surely the result of the bad wintering, or of the poor honey season, and if this latter it must prevail in other yards besides mine and you will probably have reports of it. However, if it should be the fore-runner of the malignant form of foul brood giving me the proof that in spite of my best efforts it can take a hop, step and a jump over my yard like this, it seems to me that the chances of keeping clear of it year after year are altogether exceedingly few, and the prospect is very discouraging at present, when there is no honey to sell and no bees or queens that one could conscientiously dispose of.

ENA,

From what you say we are led to the conclusion that pages 16, 17 and 18 of our pamphlet on foul brood is the true description of your diseased larvæ. We have sometimes had it appear in one or two colonies at a time, and after a while they appeared to get better of their own accord except in some instances where the same queen was left in the hive for two or three years and the hive became very much worse the second or third year. We treated them the same as we would for foul brood which completely wiped out the disease. We have not found it to be contagious and think it only spreads by exchanging combs from one hive to another. We have known hives to be diseased for several years and have the cells showing each season and never appearing after; at other times we have known them to be very bad the first season and gradually get better until the disease did not show. About three years ago a bee-keeper, having an apiary within eight or ten miles of us, stated that he had one or two hives which showed dead brood. He described it as perfectly as he could and asked us what we thought of it. We said from his description it was evidently not foul brood, but was what we termed dead brood. The next year it appeared in his hives again, only showing in some two or three. One of his worst combs was brought to us for examination. This comb contained a large number of cells, both sides were carefully examined, and although some of the brood had been dead so long that it was dried up in the bottom of the cells into a small, dark, hard substance, not unlike dried pollen, only much harder to break. This comb also showed it in all stages down to the larvæ just dead, and in no instance was there a particle of the brown ropy matter. It lacked the elasticity as well as the color of the pure foul brood. When pricked a watery substance would ooze out of some of the larvæ just dead, quite light in color, and smelling like slightly sour water. After a while this watery substance would turn dark and finally before it dried up would become like an inky, watery substance. Last year this same bee-keeper said it was spreading in his apiary; that by exchanging the combs when extracting, equalising stores, and making nuclei he had spread

it throughout his entire yard. This spring again he said that it had appeared in many of his colonies and on going to examine it we found it in almost every colony, some affected much worse than others. Some combs would show from one to two hundred dead cells. We have spent much time in examining it and even subjected some of it to the microscope, but are unable thus far to detect anything like the pure foul brood. After giving the matter due consideration we came to the conclusion that in the interests of bee-keepers it ought to be experimented with, to ascertain, if possible, the most speedy and simple cure. This apiary contains nearly one hundred colonies, and we think we are within bounds when we say that the loss in brood from this disease is equal to at least five colonies in the season. This is quite an item to a bee-keeper. The bee-keeper in question seems very anxious to rid his apiary of the disease, so we bought six colonies off him in order to test the matter, and he gave us six more of the worst in the yard, to cure if possible, and return him what share we choose after they were cured, and if they could not be cured he did not want any of them, not even the colonies returned. We have got these twelve colonies set down by themselves and are experimenting with them in order to ascertain just how to deal with such cases in future. In most cases where a few cells appeared in years gone by, if it was the same disease as this, we used to sometimes remove the queen and introduce another or exchange queens with other hives and that seemed to cure the disease, but we are trying various plans with these twelve, which we shall describe hereafter when we have something more definite to report. In the meantime we would advise any one who has the disease in their apiary to spray the combs once a day with carbolic acid, using one to 500 pure rain water. This will have a tendency of preventing the disease spreading, and we think will cause the bees to clear out the dead brood more rapidly. Care should be taken not to spread the combs throughout the apiary, and to allow no robbing; and if any honey is extracted from such colonies, it should not be given to other colonies, until after it was heated, in other words, that the disease

should be guarded against as carefully as foul brood until we are enabled to deal with it successfully. Will some of our friends who have had some experience with this or similar diseases tell us something more about it. Perhaps Prof. Cook or Prof. McLain could give us something in regard to the matter.

For the Canadian Bee Journal.

Artificial Comb—A Question of Privilege.

WO American Bee-Keepers.—Some years ago in an article in the *Popular Science Monthly* June, 1881, p. 254, in speaking of the uses of glucose I employed the following sentence:

"In commercial honey, which is entirely free from bee mediation, the comb is made of paraffine, and filled with pure glucose by appropriate machinery."

In the article in question I do not give my authority for the above and since that time this statement has been declared false, and I have been published in at least one journal, ostensibly devoted to the interests of honey producers as a "wilful and malicious liar."

Usually I take no notice of attacks made upon me in language which excludes the possibility of its author being a gentleman, but in this case I depart from my usual custom at the request of a friend who has been for more than thirty years editorially connected with the agricultural press of this country.

The statement in question was made on the authority of Dr. E. J. Hallock, an eminent chemist, whom, unfortunately, science lost by death several years ago. Dr. Hallock was at that time a resident of Boston and editor of the *Boston Journal of Chemistry*. Neither Dr. Hallock nor myself believed at that time that such artificial comb could be made commercially successful, although honey made in that way could be sold at an enormous profit, if the comb could be made to sufficiently counterfeit the genuine article. It is possible that Dr. Hallock may have been misinformed in respect of this matter; but I cannot say that he was. Moreover, the statement is of such a nature that I did not anticipate that anyone would seriously suppose that comb honey is in danger of being replaced by the spurious article. I make this statement for the benefit of those who may have been deceived by the malicious slanders which have been circulated concerning me.

The adulteration of honey is practiced to a most alarming extent in this country, and every

bee-keeper will join me in my labors to detect and remove this fraud.

To my personal and scientific friends I have no need to speak. I address this note to those who may have been lead, without a knowledge of the facts, to believe that I purposely sought to pervert the truth.

Respectfully,

H. W. WILEY.

We have never said very much through the columns of THE CANADIAN BEE JOURNAL either for or against the statement so commonly known on the American side of the line as "the Wiley lie," leaving it for the papers published over there to do, especially so, as there is but very little adulteration practised in Canada. To make the statement which Prof. Wiley did without sufficient foundation, even though it did emanate from the authority which he says in his letter above, was very wrong and very much harm has been wrought by it to our common industry. The least that the author of the statement could have done would have been to have corrected the erroneous statement as soon as it was brought to his notice, instead of which, this is the first intimation that we have seen wherein he gives his authority for what he wrote as far back as 1881. Would it not have been much better had he given the name of the author of such a statement when he believed at the time that the article was written that it was impossible to "sufficiently counterfeit" the pure article as to make it a "commercial" success. Prof. Wiley is much to blame in the whole matter, and while he may have been attacked intemperately, yet we think there was considerable cause. His delay in not before setting the matter before the people in its right light is sufficient cause for violent attack. He should have taken pains to have first ascertained the effect such a statement as the one he purposed making would have on the bee-keeping industry at large. While we give the above communication space, yet we incline to the opinion that bee-keepers will put just about as much faith in this letter as they did in his former one—which wasn't much.

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For the Canadian Bee Journal.

THE CAUSE OF FOUL BROOD.

On page 267 of the C. B. J. of June 27th, 1888, we have the best letter ever written on the cause of foul brood. Every bee journal should publish it, and every bee-keeper should read it. The writer says that his first case of foul brood arose in a damp raw spring from spring dwindling. Yes, and so have hundreds of other cases besides his started just the very same way. He also says in another part of his letter that he doesn't think that foul brood was imported, and that we can have a genuine case manufactured on the spot anywhere we like. I know from experience that he is right; we can have it manufactured anywhere we like. In seven cases out of ten it originates in the bee-keeper's own yard, the other three cases of it being caused by the bees robbing from hives affected with it, and the bees carry the disease just in proportion to the amount of the diseased honey they convey to their own hives. I lost over fifty colonies with foul brood in the summer of 1885. It originated in my own bee-yard and was caused by the rotting of uncared-for brood in a hive which had lost most of its bees by mixing in with another in spring. The rotting of uncared-for brood is the real and only cause of foul brood. There never was any other cause, no, nor there never will be any other cause. Mr. Jones says that he once took a number of combs of sealed brood, and also brood in all stages, and placed it in a hive and then put a clean colony of bees over it and kept it there for weeks, and that it did not produce foul brood. Mr. Jones is right. The reasons why it failed to start it are as follows:—1st, The colony of bees had no decaying brood in it. 2nd, The weather was warm and the brood in the colony was well cared for. 3rd, The brood in the colony of bees was fed plenty of new honey fresh from the fields; so that if the honey in the bottom hive did get tainted, the bees did not need to use any of it. Foul brood will almost be a thing of the past when every bee-keeper knows the real cause of it, looks well after his bees in spring, and sees that the brood is well cared for in every hive, and those that are not real strong to crowd well on few combs by using division boards. We have many bee-keepers that don't take a bee journal of any kind and have never seen foul brood and don't know anything about it; and some have never heard of it. Such are hard to do much with, and their neglect sometimes causes much trouble and heavy losses to other bee-keepers. Every bee-keeper that has got any bees should take one or more

of the bee journals. I have often found letters in the bee journals that were worth far more to me than the year's subscription. Our CANADIAN BEE JOURNAL should be taken by all. Will the writer who signed his letter "Ena" be kind enough to answer the following questions through the CANADIAN BEE JOURNAL:—1st, In what condition were the colonies when placed in the cellar? 2nd, When were the bees put in the cellar and what was the temperature of the cellar for the first four weeks after they were put in, and what was the temperature in February? 3rd, Did they breed much in the fore part of the winter, and how many combs had each colony to winter on?

WM. McEVoy.

Woodburn, July 4th, 1888.

You will see something further from our correspondent signing himself "Ena" in this present issue of the JOURNAL. We have no doubt that he will be pleased to answer the questions you have asked to the best of his ability. With reference to our transgressing the rule which we made requiring writers to sign their names to all communications for the BEE JOURNAL, we may say that under the present circumstances we have allowed the use of a *nom de plume* because it is an unpleasant thing to have foul brood, and where a person is making every effort to get rid of the disease and refuses to sell colonies, bees and queens, until the disease is thoroughly eradicated, it seems to us only a matter of respect that the affair should not be hawked around the country so that every one should be at liberty to say: "Mr. So-and-So has foul brood"; while it is but right that bee-keepers who are careless and have foul brood, doing nothing to eradicate it, should be advertised.

For the Canadian Bee Journal

The Season in Vermont.

THE honey crop with us is a failure. All along the spring has been late and clover was two weeks behind hand. The first week the hives were filled and work began in the sections when the weather became cloudy and cold with a north wind and for about ten days during the heart of the clover season bees did nothing. They tore down queen cells and sealed over partly filled sections. Since July 4th, however, the wind has changed and a jog in the cappings of sections shows where they began again to get honey.

I have 98 colonies in good shape with, I think, honey enough in their hives to last till next year's clover bloom. I like nothing better than plenty of honey in the brood chamber (except plenty of brood in May). Even though a solid frame of honey be called a dollar division board yet I don't object to having a little money invested in that way. I don't believe they use any less honey by having only enough for a week ahead.

I have been much interested in common with many others, in the talks of Amateur Expert. What has become of him?

J. H. LARRABEE.

Larrabee's Pt., Vermont, July 9, 1888.

For the Canadian Bee Journal.

THAT NEW PEST.

THE "bird" you sent me is the female of *Diplax Berenice*, a species common over the southern portions of Ontario. This insect—as all members of related genera—feed on small insects, which they capture and devour on the wing.

We have species of the genera *Anax* and *Aeshna* much larger and more rapacious than any species of *Diplax*. But although fairly well acquainted with these insects and their habits, I never knew them to capture any of our larger *Hymenoptera*, and I am inclined to think the jaws of *D. Berenice* are much too weak to crack the exoskeleton of *A. Mellifica*.

But as it is of great importance to bee-keepers I would suggest that the correspondent who sent you the *Diplax*, and other bee men, again observe, record and publish, and then "remedies" can be discussed. Yours truly,

W. BRODIE.

Toronto, July 10, 1888.

It would appear from the above that Mr. Brodie is not of the opinion that the insect which Mr. A. W. Brown, of Port Rowan, sent, would devour the bees, and, as will be seen by his letter, he suggests that all bee-keepers who see any of these insects about their premises should report the results of their observations. This will refer more particularly to bee-keepers along the shores of Lakes Erie and Ontario. We do not seem to be bothered to any extent with the insects here.

MICHAEL BROWN:—I put thirty-four colonies in the cellar last fall and lost nine, and five died since, no honey being made. I have to feed bees now. I have had no young swarms this season. Woodbridge, July 7, 1888.

From the Canadian Live Stock Journal.

July in the Apiary and Other Matters.

JULY is the most profitable month in the year for the Canadian apiarist. It is the month for swarming, for extracting, and especially for comb honey. In eastern Ontario the clover bloom usually commences sometime between the 10th and 20th of June, and lasts three weeks or more. The sweet clover comes into bloom later, yields abundantly, and lasts till fall. But of all the clovers for honey production, the alsike is far ahead, and stands in the very front rank amongst all the honey producing plants. The alsike is also a profitable farm product apart altogether from the apiary. It makes better hay for the stock than the red, and gives a better yield of seed, which always commands a higher price. It ought, however, to be mixed with timothy or red clover in seeding, unless the land is in first-class condition, or but one crop is desired. The agricultural apiarist is therefore doubly rewarded in the alsike, and by pasturing a portion of it off till, say the first week in June, thus causing it to bloom late, he can thereby secure a continuous bloom for weeks, filling in the gap following the ordinary bloom.

BUCKWHEAT.

July is the month for sowing the last two lots of buckwheat for late fall honey. It pays to sow at least four lots of buckwheat during the season for honey alone, and the probability is that two or three of the sowings will yield a crop of seed. The first lot should be sown about the 1st of June, the second the 15th, the third the 1st of July and the fourth the 15th. During a favorable season I have had a crop of grain from all four sowings. While the buckwheat honey is not quite so marketable as the lighter grades, I never have any trouble of disposing of it at a moderate price, and from long experience I am satisfied it is all right for winter stores for the bees when properly cured and capped. That which remains in the frames uncapped after the season is over can be extracted.

COMB HONEY.

July (with probably the last ten days in June), is the month for comb honey. The tendency now amongst bee-keepers is to the increased production of comb honey, especially in section boxes, as these are undoubtedly the most popular and saleable of any form of the product of the apiary. Not that the comb honey is any more wholesome than extracted. Indeed, as an article of diet, it is much less wholesome, for the obvious reason that the comb is merely wax, and wax is not exactly in its place in the human stomach. However, physiology and the popular

tastes do not always run in the same lines, and we must continue to produce the comb honey to meet the demand, while at the same time reminding the consumer that the extracted honey is the more wholesome of the two, and is the very best and purest food in the line of sweets.

How, then, shall we produce comb honey? A few fundamental conditions are necessary: First, we want the working force of bees—a strong colony; secondly, we want a liberal flow of nectar; and thirdly, we want the indispensable manipulation; that is to say, proper management on the part of the apiarist. Although it is in order to put on the section cases as soon as or before the honey flow begins, usually there will not be much done in them till after the first swarm comes off, which is not long delayed after the clover bloom opens out.

HOW TO DO IT.

When the swarm comes off put it in a hive with brood chamber of diminished size, confining the queen thereto by means of a perforated zinc honey-board. The size of the brood-chamber for the successful taking of section honey, should not be more than six Langstroth frames. The balance of space can be filled up with "dummies," or division-boards. No matter what style of hive you use, contract the brood-chamber to that capacity, with zinc over it, and then put on your section cases from the old hive whence the swarm came. Put full sheets of foundation in your brood-chamber for the new swarm, or empty comb may be given, provided the sections are well under way. If the sections are well drawn out or you have empty comb in sections saved from the previous year, and your queen is young and prolific, starters will do in the brood-chamber—that is, foundation, say an inch or so deep, fastened at the top of each frame. With these conditions you will probably get what you want, viz.: all worker comb constructed below in the brood-nest, and an abundance of honey stored above in the sections. At any rate, if you fail to get comb honey after following the above suggestions, the fault will not be yours.

HOW NOT TO DO IT.

When your swarm comes off put it in a big box hive, and in about three weeks time put a "cap" on top, or hive them on ten or twelve empty frames of a movable comb hive, and put on section cases at your leisure, and you will find yourself wondering in both cases why you have not got comb honey.

INCREASE.

As a rule, one swarm from a colony is enough. After swarms are unprofitable. Of course, if increase of colonies is a leading object, and the

season favorable, two swarms per colony may be taken, and sometimes one from the first swarm. To replenish the losses of the past spring and winter many bee-keepers will, no doubt, be anxious for increase at this time, and but few will be studying how to prevent it. Different plans for the prevention of increase are practised and recommended, all of them more or less successful. But when the "swarming fever" once takes hold of a colony the best laid plans "gang aglee", and when they are actually stopped by some drastic process they usually go off into the salks in idleness and will not work. The best way, if you do not want the increase, is to keep the "fever" back. This can usually be done by giving them abundance of room and ventilation, always in advance of their requirements, and using the extractor freely upon them.

To prevent after swarms, I usually lift the frames from the hive just swarmed, before carrying it to a new stand, and shake all or nearly all the bees from them in front of the new swarm, where they will enter, at the same time cutting out all the queen cells but the best one. I sometimes practice the Heddon method, which, however, is not always successful. The plan is as follows: When the swarm is out and hived, place it on the old stand, and place the old hive close beside it, but falling away from it at about right angles to the old entrance. In a couple of days turn it around half way toward the old entrance, and in a couple more turn it completely round so that it will be exactly alongside the new swarm, close to it and facing in the same direction. In three or four days more carry it away to a new stand during the day, when the largest number of workers are out foraging. Of course, nearly all the outside workers it contains will return to the new swarm on the old stand, and the object is to so weaken them that they cannot swarm. But while this plan works very well in perhaps the majority of cases, it is uncertain and not to be depended upon. It not unfrequently happens that there is a young queen all ready to go out with the second swarm in three or four days after the first, and sometimes sooner.

DRONES.

This is the month for drones, their heyday and their harvest, when they appear to enjoy life to the fullest, with plenty to eat, excellent digestion and absolutely no care—nothing to do. They eat and excurt and excurt and eat, for to-morrow (next month) they may die or be killed.

But the drones are rather unprofitable to the bee-keeper. They get away with much of his surplus when they are numerous. Of course, they have one important function to perform,

namely the fertilization of the young queens, but the workers, in a state of nature, are greatly inclined to "over production" of these gentry for that purpose; and we must bring in some Malthusian or Besant "checks" to over production. A common practice is to behead the drones in the cells before they hatch, and let the workers lug the defunct carcasses out. But this is attended by a great loss of work by the bees in rearing them and then ejecting them. The proper way is to get rid of the drone comb, by cutting it out of the frames wherever it is present, and replacing it with worker comb or foundation. Of course, a few frames or partial frames of drone comb are requisite for the rearing of necessary drones, and these may be placed in the choice colonies from which we desire to breed. Sometimes when the brood-chambers contain much drone comb, the drones steal a march upon the apiarist and hatch in large numbers, when a drone trap will come in play, or they may be shaken from the frames along with the workers in front of the hive, and a Jones "bee guard" placed at the entrance, when the workers will re-enter but the drones will be excluded, when they can be destroyed. The "bee-guard" may also be used to great advantage in keeping inferior drones in the hive when young queens are being mated.

ALLEN PRINGLE.

Selby, Ont.

Read by Mrs. Harrison before Illinois Farmers' Institute.

Bees, and Their Relation to Agriculture and Horticulture.

BEFORE approaching the subject proper of this paper, it may be well to preface it with a few remarks upon the natural history of the honey bee. Honey bees can only flourish when associated in large numbers, as in a colony. In a solitary state a single bee is almost as helpless as a new born child, being paralyzed by the chill of a cool summer night. On examining a strong colony in the height of the honey season you will find

THREE KINDS OF BEES.

1st, one of a peculiar shape, having a longer abdomen than the rest; this is the queen or mother bee, she being the mother of the whole colony. 2nd, several hundreds of large bees, called drones; these are the males. 3rd, many thousands of a smaller kind, called workers, or the common bees, such as they are seen on the flowers. Many of the cells will be found to contain honey and bee-bread or pollen, and vast numbers of eggs, and immature workers.

and drones; and if near the swarming point, a few cells of unusual size, devoted to the rearing of young queens. Of the substances found in a hive, there is wax, a fatty secretion of bees, of which the combs are built; bee-bread or the pollen of flowers; honey, and propolis or bee glue, which the bees gather from the resinous plants and flowers. The queen bee is the only perfect female in the hive, and all the eggs are laid by her, which is the only duty she is expected to perform. The drones are the males; their office is to impregnate the queen. Over the young brood and assist in the capping of the honey cells. The last point has been disputed, but careful observation has satisfied me of its correctness. *The workers are females*, whose ovaries are not sufficiently developed to enable them to lay eggs, but who retain the female instinct to care for the young brood. The time required for the reproduction of bees from the eggs is twenty-one days for the worker, twenty-four for the drone, and sixteen for the queen. A low temperature in the hive retards the development of the brood, and a high one facilitates it. A good strong colony of bees in the working season will number about twenty thousand. The natural instinct of the bee is to gather liquid sweets; and this instinct is so strong that it cannot resist the temptation under any circumstances when an opportunity presents itself. And in carrying out this instinct of nature given to it for a wise and beneficent purpose, there comes incidentally the fertilization of fruits and flowers.

FERTILIZATION BY BEES.

For the value of the United States hay and grass crop, \$1,200,000,000 is probably not a large estimate. When we consider that the clover, of which there are forty native species in this country—the common red clover, so valuable and nutritious for hay and pasturage; the White or Dutch, frequently a considerable addition to the hay crop, and very valuable for pasturage in conjunction with blue grass, thriving well in the shade; the Alsike or Swedish clover (*Trifolium hybrida*), so valuable for both hay and pasture; the Southern clover (*Trifolium Carolinianum*) valuable for pasture; the *Trifolium Involucratum*, an annual; the Japan clover (*Lespedeza Aspiata*), which has been tried with gratifying results in the South—when we consider that these furnish at least one-fourth (perhaps one-third) of our hay crop and pasture grass, and that they are all, except the red clover (and that in conjunction with the bumble bee), dependent on the honey bee for the fertilization of their flowers and consequent production of seed, we see something of the value of this won-

derful little insect, in the economy of nature. There are upwards of 5,000,000 farms in this country which, with an average of six colonies of bee per farm, and an average yield of forty pounds per colony, would give 1,200,000,000 pounds of the purest honey and most healthful sweet known to man. By this we see something of the possibilities of apiculture in connection with agriculture. Every horticulturist, every orchardist, nearly every fruit grower, knows that among the blossoms on our fruit trees and vines are many imperfect flowers, and particularly among strawberries, many having only pistillate bloom. Also that for fertilization insects are required; as the stigmas are ripe before the pollen is produced, bees walking over the bloom, seeking honey, carry pollen to the stigmas. In the apple bloom the stigma comes to maturity before the anthers, and bees passing from bloom to bloom carry pollen from the older to the younger, and secure fertilization, without which no apple could be produced.

It is not my intention (it would not be possible in this brief paper) to enumerate the many beneficent works of this most useful insect, "who acts as marriage priest to a thousand flowers," but to only touch upon a few prominent points. Those who have never given time or thought to this subject are referred to those classics, Langstroth on the "Hive and Honey Bee," and Darwin's "Forms of Flowers." Observant horticulturists have estimated that our fruit crop is increased one-third by the cross fertilization of flowers by the honey bees. Bees never injure sound fruit. In the vineyard, where grapes are pecked by birds, stung by wasps, or chilled by rains, the bee comes in as a scavenger, to gather up and utilize what would otherwise be lost. If the bee could puncture sound fruit, and its instincts led it to do it once, it would do it continuously.

And now in conclusion, my agricultural and horticultural friends, remember that the busy little bee is your friend and co-worker. She is trebly a benefactor, she causeth many blades of grass (I use the term in its broadest sense) to grow where none grew before, she multiplieth your fruits, she gathereth the richest of nectar to tickle our palates and soothe our lungs; she toileth early and late, and at the close of her brief but useful life she asketh neither grave nor monument. Let a grateful people write her obituary.

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SUNDRY SELECTIONS.

LYDIA SWANSON.—I put three colonies into winter quarters. On the 3rd of April all three hives had capped brood, then one became queenless and swarmed on 19th of May and they (the young swarm) worked very hard until about the 1st of June, and have done very little since. I think they must have swarmed again; if they did I lost the swarm.

Rockwood, July 5, 1888.

TRANSFERRING—INTRODUCING.

J. H. PARSONS.—I have two old colonies queenless: I think they must have been queenless all spring. They are in Richardson hives; hived without foundation. Combs are built cross-ways. I can't get them out. I have never introduced queens. Please tell me in my case how to introduce. Apparently every cell in the hives is filled with honey. Can a queen work in such a hive?

Osaca, July 6, 1888.

We would advise you to drum your bees out of the hive, turn it upside down on two sticks and let the frames with the combs slip out. Then when the combs are turned bottom up in the frames, you can cut round them and get the combs out quite nicely on boards. Then transfer them in the frame as they should be. The queen may be introduced at the same time. If you find all the cells filled with honey you had better extract the honey from combs before transferring them.

HOW TO INTRODUCE QUEENS.

W. TOWNSEND—Your of 21st of June was duly received, as also the queens all right. You say the Carniolan was worth as much as the other two put together, and that next month you would not sell her for less than \$2. Well, sir, she was certainly a fine queen when she came, but was worthless next day, for I found her dead. The other two were received kindly, but neither have yet commenced to lay. How is it? Do you think they are fertilized? One the Italian, looks this morning as if she were going to start. She is looking into the cells but does not enter, and there are no eggs. The hybrid is still very small and does not look like an impregnated queen.

Toronto, July 2nd, 1888.

We think the weather had to do with your bees destroying the Carniolan queen, and the others not commencing to lay. Yesterday we were handling one of our colonies which had raised a queen that had been in the hive for two years and the unfavorable weather caused the bees to kill the queen right in our presence. They did not even wait to

"ball" her, but simply pounced on her stinging her to death in less than a half minute. We have almost had to give up handling our bees the last few days, the weather has been so very unfavorable. No honey coming in has made them very cross to handle and also very cross toward their queens.

BEEES BY THE POUND TO BRITISH COLUMBIA.

C. A. CARNCROSS.—I received the bees eight days after shipment. The bottom cage was in good condition, there being but few dead bees, and the rest seemed active and strong. In the top cage nearly or quite two-thirds of the bees were dead, or so near it that there was no help for them, and the reason was that you did not put up sufficient food for so long a trip, and they used a portion of what was put up in building a piece of comb in the cage.

The queens were bright and lively, however, and, taken all in all, I think we can call the experiment a success.

I gave each lot of bees a frame of brood and removed one of my old stocks and set the weak one in its place last evening, so that it might pick up in numbers somewhat.

Your shipping cages are perfect, but when sending any more on such a long trip give them a little more food.

Elgin, British Columbia, July 6, 1888.

We are glad to hear of the safe arrival of the bees which we forwarded to you, though sorry that some were lost for want of stores. We put in an extra supply, such as we thought would be required for the extra long journey, but still it seems not enough. The building of the comb in the top of the cage, would of course consume considerable. However, we will be careful another time to see that there is sufficient stores.

From the Canadian Live-Stock and Farm Journal.

BURYING BEES—CLIPPING QUEENS.

In the columns of the *Journal* last fall was published an account of burying bees, copied from the practice in Sweden, and we were promised through the same medium, the results of the experiment as to how the bees came out this spring, and what it took to keep them throughout the winter. It was a somewhat important experiment, and if successful, might bring about a revolution in wintering bees. Please make the result public if possible. Mr. Pringle, in your last issue, gave his method of hiving swarms but I did not understand the method of clipping queens, didn't so much as know that it was practised. There may be quite a number who, like myself, keep a few colonies for their own use, and to whom such knowledge might be use-

BEES BY THE POUND!

We have quite a large lot of Bees which we will dispose of by the pound, at very low rates, as follows:

6 lb Bees and 6 good mated Queens, \$10.00
10 " " 10 " " " " " 15.00

This forms a good opportunity to build up weak colonies or to repopulate spare combs. Orders booked and filled in rotation.

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No. of Barrels.	No. of Doz.	Prices.
1	8½	\$ 6 25
1	8½	6 45
4	9½	6 75
5	9½	6 95
4	9½	7 15
3	10	7 35
3	10½	7 55
2	10½	7 75
1	11½	8 45

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ADVANCE IN NAILS.

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Length of Nails.	No. in Pound	Size Wire	Price of 1 Pound	Price of 10 lbs.
¾ & ½ inch	7200	21	22	2 00
¾ inch....	5000	20	17	1 60
¾ inch ...	3880	10	17	1 60
1 inch....	2069	18	12	1 05
1¼ inch...	1247	17	11	1 00
1½ inch...	761	16	10	90
2 inch....	350	14	9	80
2½ inch...	214	13	9	75
3 inch....	137	12	8	70

PRICES OF BOX OR HIVE NAILS.

	Per lb.	Per 10 lbs.	Per 100 lbs.
1½ inch.....	7	65	6 00
2 inch.....	6½	60	5 50
2½ inch.....	6	55	5 25
3 inch.....	6	55	5 25

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I. R. GOOD.

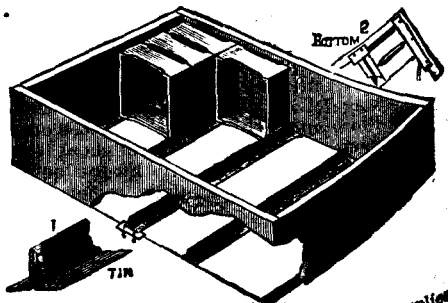
NAPPANEE IND.

ELLISON'S EARLY ITALIAN QUEENS!

	April.	May.
1 Untested Queen.....	\$ 1 15	\$1 00
3 " Queens.....	3 00	2 50
1 Tested Queen.....	2 50	2 00
3 " Queens.....	6 00	4 50

Many of the above will be reared in the height of the swarming season and all will be nearly, if not quite as good as the best swarming queens. In every case safe arrival and satisfaction guaranteed.

W. J. ELLISON.
Stateburg, Sumter Co., Sth. Carolina.

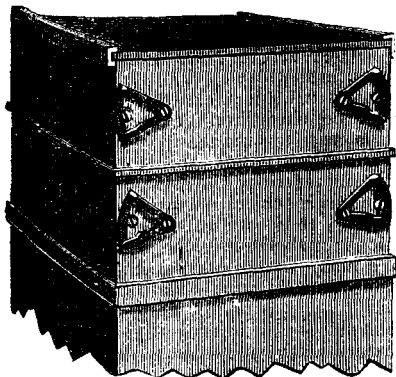


For this 1 super or any other bee-keepers' supplies send to
J. & R. H. MYERS,
Illustrated catalogue free. Box 94, STRATFORD.

OUR NEW Reversible Honey - Board

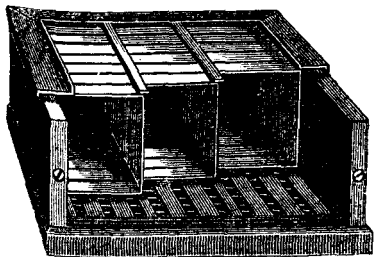
—AND— SUPER REVERSER.

This is the invention about which so much has been said in the bee journals during the past winter, and we are satisfied it will meet



THIS CUT SHOWS THE GENERAL APPEARANCE OF THE SUPERS.

with the approbation it merits. We have tested it thoroughly in our own apiaries, and have had it in operations in the apiaries of three other able, practical and successful bee-keepers.



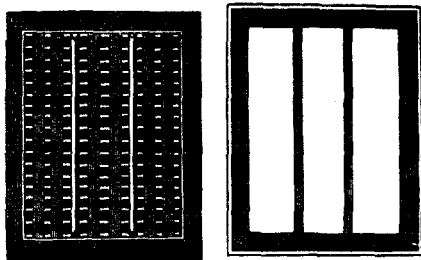
IN THIS ENGRAVING THE SECTIONS ARE SHOWN AS RESTING ON THE HONEY-BOARD WITH THE REVERSER COVERING THE JOINTS OF THE SECTIONS.

We claim for it:

1. That section honey can be produced with less expense and with less handling than with other hives.
2. The great simplicity of the whole arrangement which adapts itself to the requirements of the merest novice as well as to the skilled apiarist.
3. It can be adapted to any hive in present use at very small cost.
4. The cost of wide frames, section cases, skeleton crates, \perp rests, etc., is done away with.

5. The hive and supers are rain proof and wind proof.

6. The trouble of having the sections proposed together is done away with entirely.



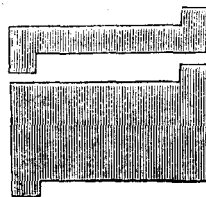
SHOWING REVERSIBLE HONEY-BOARD AND REVERSER.

7. A most perfect and exactly correct bee-space is maintained at all times.

8. There is no shrinking and swelling of wide frames or section arrangements, there being none.

9. The sections may be reversed or interchanged, either by the whole crate or individually, with the utmost simplicity.

10. Separators can be used with this style of super just as readily as with any other.



CROSS SECTIONS OF SIDES OF REVERSIBLE HONEY-BOARD AND REVERSER.

11. The sections are brought just as close to the brood chamber as it is possible to get them in the tiering up system, and a quarter more sections can be put in every super.

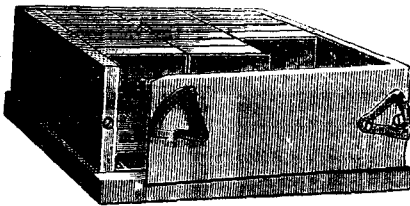
12. There being less weight and bulk the shipping charges will be much less than ordinary.

The prices of these honey-boards and reversers, for the different styles of hives, are given under their proper headings. We keep on hand a stock suitable for the "Jones," "Combination" and "Langstroth" hives. In ordering for any other style of hive, be particular to give the exact inside and outside measurement of the hive, so the honey-boards may be made to fit properly.

SPECIAL PORTABLE SUPERS.

Almost any super will suit this new arrangement, and we give in the price list the prices of the honey boards and reversers separately. We make a special "portable" super which is put together with a very light hive clamp, which answers its purpose capably. When the sections are ready to take off, all that you need to do is to unfasten one corner (see cut following), and lift off the whole super. We make

them for the Combination Hive only, except to order.



SHOWING PORTABLE SUPER WITH SIDE THROWN OPEN SO SECTIONS MAY BE REMOVED.

The price in flat includes the clamps and screws necessary to put them together.

Portable Supers each.....	made up in flat		
" " 10 and under, each	\$ 25	\$ 22	
" " over 10 and up to 25	22	20	
" " 25.....	19	17	

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

THE COMBINATION HIVE

We believe that for all general purposes this hive is the best and cheapest in the market today. It combines all the good qualities of the most expensive hives offered, and the simplicity wanted by the novice or beginner in bee-keeping; its cheapness alone being one great characteristic.

The inside dimensions of the hive are: Length, 10 $\frac{1}{8}$ in.; width, 13 $\frac{1}{2}$ in.; depth, 12 $\frac{1}{2}$ in. The frames are 10 $\frac{1}{2}$ x12 $\frac{1}{2}$ in. In other words, the frames are of the same dimensions as in the "Jones single walled hive" but are turned over on the side. There are those who object to using a hive with so deep a frame as the ordinary Jones hive for comb honey, while the frame turned on its side meets their views; the supers are worked by the use of skeleton crates or \perp rests, and either 3 $\frac{1}{2}$ x4 $\frac{1}{2}$ or 4 $\frac{1}{2}$ x4 $\frac{1}{2}$ sections may be used, unless, of course, you desire the new reversible honey-board and reverser, prices of which are given farther on, when neither skeleton crates or \perp rests are needed.

COMPLETE HIVE FOR EXTRACTED HONEY

Will consist as follows: 1 Brood Chamber, (including cover, bottom and frames) 75c.; 1 Second Story, (including frames) 65c. Total (ready for use) say.....\$1 35
3 and up to 5..... 1 20
Over 5 and up to 10..... 1 10
Over 10 and up to 25..... 1 00
Add 15 per cent. to these prices for one coat paint; and 25 per cent. for two coats.

The prices of the above complete hives in the flat, will be:—

Over 3 and up to 5.....	\$1 00
" 5 " " 10.....	90
" 10 " " 25.....	85
" 25 " " 50.....	82
" 50 " " 100.....	78
" 100.....	75
Brood chambers alone, in flat, each...	55
Second stories, alcne, in flat.....	45

COMPLETE HIVE FOR COMB HONEY

Consists as follows: Brood chamber (including cover, bottom-board and frames) 70c. two supers made up, each 15c. (30c) say..\$1 00
Over 3 and up to 5 each..... 95
" 5 " 10 each..... 90
" 10 " 25 each..... 87
" 25 " 50 each..... 85

Add for one coat paint 15 per cent; two coats 25 per cent.

Prices in the flat—include brood chamber, as above, and two supers—and are as follows:

Over 3 and up to 5 each.....	\$ 75
" 5 " 10 each.....	70
" 10 " 25 each.....	65
" 25 " 50 each.....	63
" 50 " 100 each.....	58
" 100.....	58

Supers, in flat, each..... 15
" " per 10, each..... 10

Strips of sheet iron for bottoms of supers or section cases are included.

We do not include the \perp rests or skeleton crates, in prices of the comb honey hives. We prefer leaving the choice with the customer. If you use \perp rests you will require to buy 3 $\frac{1}{2}$ x4 $\frac{1}{2}$ sections; if skeleton crates, 4 $\frac{1}{2}$ x4 $\frac{1}{2}$.

We make up sample surplus cases complete with sections in any of the above ways at 45c. each.

The prices of ordinary queen-excluding honey-boards of metal and wood to fit this hive are as follows:—

	MADE UP.	IN FLAT.
Price, each.....	\$ 25	
" per 10.....	2 35	\$ 2 10
" 25.....	5 50	4 75
" 100.....	20 00	17 00

Prices for New Reversible Honey-board to suit the Combination Hive

WITHOUT PERFORATED METAL.			
	Made up.	In flat.	
Honey-boards, each.....	25	22	
" 10 and under.....	22	20	
" over 10 and up to 25.....	20	18	
" over 25.....	19	17	

QUEEN-EXCLUDING BOARD WITH METAL.			
	Made up.	In flat.	
Honey-boards, each.....	30	25	
" 10 and under.....	28	23	
" over 10 and up to 25.....	27	22	
" over 25.....	25	20	

REVERSERS.			
	Made up.	In flat.	
Reversers, each.....	15	13	
" 10 and under.....	14	11	
" over 10 and up to 25.....	13	10	
" over 25.....	12	10	

The super arranged as above holds 24 sections 3 $\frac{1}{2}$ x4 $\frac{1}{2}$ x1 $\frac{1}{2}$.

Where separators are wanted add 10 cents to the price per super.

PORTABLE SUPERS.

For the prices of these see page 5. We only stock these to fit the Combination Hive.

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

D. A. JONES, Pres.

F. H. MACPHERSON, Sec.-Treas.

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

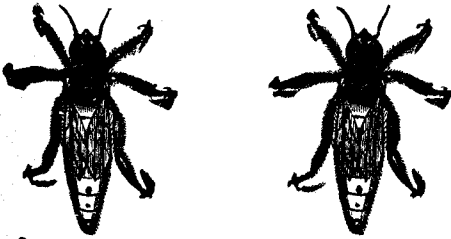
Manufacturers of and Dealers in Apiarian Supplies

OUR CIRCULAR SENT FREE ON APPLICATION.

Publishers Canadian Bee Journal.

Figures and Job Printers.

QUEENS.



Our trade in queens grows greater each succeeding year, and we seem to be giving better satisfaction as well. We endeavor to raise queens which will produce good honey-gatherers irrespective of breed or race. We pay much attention to the class of drones with which our queens come in contact. The annexed table shows the prices at different seasons, of different varieties. These are, of course, subject to change depending upon the supply and demand. All changes will be noted in the CANADIAN BEE JOURNAL:

MONTH.	Untested	Tested	Selected	Virgin
May	1 50	2 50	3 00	
June	1 00	2 00	3 00	0 60
July	1 00	2 00	2 50	50
August	1 00	2 00	2 50	50
September	1 50	2 00	2 75	
October		2 50	3 00	

Three at one time, deduct 10 per cent; six at one time, deduct 20 per cent.

EXPLANATIONS.

We are not, owing to our high latitude, able to sell queens before May, nor later than October.

Untested queens will be ready for sale as soon as mated, and before they have had a chance to prove themselves.

Tested queens are those which have been proven as to race and honey-gathering qualities.

Selected queens are chosen because of color, size and honey-gathering qualities.

Queens cannot be shipped unless the weather is warm enough, except at risk of purchaser otherwise safe delivery is guaranteed.

We replace all queens lost in transit, but not those lost in introducing.

BEEES.

Bees should always go by express, unless they are personally cared for *en route*.

We do not hold ourselves responsible for breakage or delay in transit of colonies of bees they always leave our hands in good shape. We will send out only such colonies as we are sure will give satisfaction. Our bees will be such as the queens we offer will produce.

MONTH.	Italian	Italian Crosses	Carniolan Crosses
May	\$8.00	\$ 8.00	\$ 9.00
June	7.00	7.00	8.00
July	7.00	7.00	8.00
August	6.50	6.50	7.00
September	6.00	6.00	6.50
October	6.50	6.50	7.00

The above prices are for up to four colonies; five colonies up to nine, take off 3 per cent.; ten colonies up to twenty-four, 5 per cent.; twenty-five colonies and over, 10 per cent—*always cash*. Bees at these prices will always be sent out in the Combination Hive, and each colony will contain a good queen, some honey, and brood according to the season.

BEEES BY THE POUND.

Just as soon as we can raise them in the spring, we will have for sale, bees by the pound at the following prices:—Up to July 1st, \$1.25 per pound; after that date, 90c. per pound. Orders must be accompanied by the cash, and they will be entered and filled in rotation as received. We are booking orders now. Do not delay in ordering if you want prompt shipment.

NUCLEI.

A two-frame nucleus will consist of one-pound of bees, two frames partly filled with brood and honey, and an extra good queen, price \$4. Two at one time, \$3.75 each—up to July 1st.

After that date the prices will be \$3 singly; two at one time, \$2.75 each.

We can send frames that will suit either the Jones or Combination hive. Please specify which you wish. Should you prefer the nucleus in either Jones or Combination hive, add price of the hive, made up, to the cost of nucleus.

Bees by the pound and nuclei must always be sent by express. Orders for nuclei filled in rotation the same as bees by the pound.

APIARIAN SUPPLIES

MANUFACTURED BY

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

Are unsurpassed for **Quality** and fine **Workmanship**. A specialty made of all sizes of the **Simplicity Hive**. The **Falcon Chaff Hive**, with movable upper story continues to receive the highest recommendations as regards its superior advantages for **wintering** and **handling** bees at all seasons. Also **manufacturer of FALCON BRAND FOUNDATION**. Dealer in a full line of **Bee-Keepers' Supplies**.

Send for Illustrated Catalogue for 1888. Free.

W. T. FALCONER.

Bee-Keepers Guide

—OR—

MANUAL OF THE APIARY.

The fourteenth thousand just out. 10th thousand sold in just four months. More than 50 pages and more than 40 costly illustrations were added to the 8th edition. It has been thoroughly revised and contains the very latest in respect to **Bee Keeping**.

Price by mail, \$1.25. Liberal discount made to dealers and to Clubs.

A. COOK, Author & Publisher,
STATE AGRICULTURAL COLLEGE,
LANSING, MICH.

BEE-KEEPERS !

I will send to any address a good substantial **Bee Veil** for 15c., post paid. I carry a good line of **Apiarian Supplies** and solicit your patronage. Send for catalogue.

A. D. ELLINGWOOD,
MILAN, COOB Co., N.H.

250 ENVELOPES

—AND—

250 NOTE HEADS

FOR \$1.

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

CANADIAN BEE JOURNAL OFFICE,

BEEETON ONT.

Muth's Honey Extractor.

Perfection Cold Blast Smokers, Square Glass Honey Bars, etc. Send ten cents for Practical Hints to Bee-Keepers. For circulars apply

CHAS. F. MUTH & SON.

Cor. Freeman & Central Avenues, Cincinnati

COMB FOUNDATION.

I manufacture the best, or as good as the best foundation in Canada. Comb foundation for sale to suit almost any sized frame or section. Pure bees wax worked on shares or for cash. Samples with prices on application. No circulars. All freight to Ridgeway station, if by mail to **Henry B. Parker, MORPETH, ONT.**

BEEES FOR SALE CHEAP.

30 COLONIES OF ITALIAN BEES FOR SALE. In lots of 3 or more \$6.00 each. Now is the time to send in orders for spring delivery. Bees second to none.

Address

LEWIS JONES,

DEXTER P.O. ONT.

THE CANADIAN

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

Poultry, Pigeon and Pet Stock Fraternity.

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

H. B. DONOVAN,

22 Front St. East, Toronto.

FRIENDS. IF YOU ARE IN ANY WAY INTERESTED IN

BEEES AND HONEY

We will with pleasure send you a sample copy of our **SEMI-MONTHLY GLEANINGS IN BEE-CULTURE**, with a descriptive Price-list of the latest improvements in Hives, Honey Extractors, Comb Foundations, Section Honey Boxes, all books and journals, and every thing pertaining to bee-culture. Nothing patented. Simply send your address on a postal card, written plainly.

A. I. ROOT, Medina, Ohio.

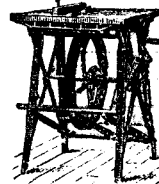
BEEES AND HONEY.

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

M. RICHARDSON & SON,

Port Colborne, Ont

BARNES' FOOT-POWER MACHINERY



Read what J. J. PARENT, of Charlton, N. Y., says—"We cut with one of your Combined Machines last winter 50 chaff hives with 7 inch cap, 100 honey racks, 500 good frames, 2,000 honey boxes and a great deal of other work. This winter we have double the number of beehives, etc. to make, and we expect to do it all with this saw. It will do all you say it will." Catalogue and Price List free. Address W. F. & JOHN BARNES 544 Ruby St., Rockford, Ill.

SECTIONS FOR THE MILLION.

We are turning out sections at the rate of 10,000 per day right along, in addition to our regular hive and supply trade, and we are prepared to furnish them in any regular size and style in large quantities at very low rates.

Our prices are as follows :—

1000	\$ 4 50
3000	13 00
5000	20 00
10,000	37 50

All orders entered as received, and shipped with promptness. Order early to avoid the rush. These prices are spot cash.

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