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VOL II, NO. 10,

1886

JUNE 2.

PUBLISHED EXCLUSIVELY IN THE INTERESTS OF THE HONEY PRODUCER



JOURNAL

APR 27 1886

THE FIRST \$

WEEKLY

IN THE WORLD

ONE DOLLAR PER YEAR

THE GREATEST POSSIBLE GOOD TO THE GREATEST POSSIBLE NUMBER

PUBLISHED BY

JONES, MACPHERSON & CO

BEETON ONT.

GRANT LITHO CO

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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.

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

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ERROES. — 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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TO CONTRIBUTORS

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

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

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

Reports from subscribers are always welcome. They assist greatly in making the JOURNAL interesting. If any particular system of management has contributed to your success, and you are willing that your neighbors should know it, tell them through the medium of the JOURNAL.

ADVERTISEMENTS.

WE CLUB

	Price Both.	Club
THE CANADIAN BEE JOURNAL and.....		
Cook's Manual (cloth).....	\$1.25	\$2.00
A B C in Bee Culture (cloth).....	2.25	2.00
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"Foul Brood"

Its Management and Cure.

BY D. A. JONES. NOW READY.

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

Price, 10 Cents. By Mail, 11 cents.

JONES, MACPHERSON & CO., Publishers Beeton, Ont.

MUTH'S HONEY EXTRACTOR.

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

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

CHAS. F. MUTH & SON.

976 and 978 Central Avenue, Cincinnati, O.

ITALIAN QUEENS.

REARED IN FULL COLONIES.

Untested, \$1.25 to June 1st, after that \$1.00. Tested, double above prices. A few black and hybrid at twenty to fifty cents each. Also bees by the lb., nuclei and full colonies. Will guarantee safe delivery and satisfaction in every case.

I. L. PARKER.

Tracy City, Tenn.

THE BEEKEEPER'S LIBRARY.

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

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

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

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

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

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

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

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

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

SUCCESS IN BEE CULTURE as practised and advised by James Heddon—price in paper cover, 50 cents.

ODD SIZED SECTIONS.

We have a lot of about 5,000 one-piece sections which were cut slightly too large for the cases for which they were intended, and as they are an odd size (43/64 or nine-sixteenth) we will sell them at five dollars per thousand, to any one who can use them, and will take the lot. Perhaps some of you use that size, if so, let us hear from you, and we will send a sample. They are nicely made, and are cheap at that money.

THE D. A. JONES CO. (LD.) Beeton, Ont.

TABLE OF CONTENTS

	PAGE
Advertisements.....	196
Apiary, Our own.....	186
Bees dying with plenty of stores.....	193
Bees seemingly stupid.....	194
Bee-Keeping, Pertinent questions on.....	194
Bird's Eye View of Bee-Keeping.....	185
Clamp Wintering.....	194
Can a queen be too prolific.....	191
Clay or grass for bee-yards.....	193
Drones in April.....	193
Damaging Statements.....	194
Dr. Thom's Attack.....	186
Foul brood—How to tell.....	193
Honey Extracted.....	187
Hive, The Heddon.....	190
Perforated Metal.....	190
Queen's Fertility.....	192
Queries and Replies.....	191
Reversible Frames.....	189
Robbing.....	185
Side and top storing.....	190
Swarm, Another early.....	193
Sundry Selections.....	193
Sufficient stores and right temperature.....	193
Transferring.....	194
Waterloo Bee-keepers.....	191
Winter feeders, How to fill.....	192

W. Z. HUTCHINSON,

In order to more fully supply the wants of his customers, has entered into partnership with his neighbor, R. L. Taylor, and will offer for sale bees (full colonies, or by the pound), queens, Given foundation, white poplar sections, hives, cases, feeders, empty combs, etc., etc. Also hens' eggs, for hatching, of three varieties. For circular and price list, address

W. Z. HUTCHINSON,
Rogersville, Genesee Co., Mich.

HEAD * QUARTERS

IN THE SOUTH FOR EARLY NUCLEI & QUEENS.

Four frame nucleus, with pure Italian Queen, in April 4
Three frame nucleus, with pure Italian Queen, in April
\$3.50 Two-frame nucleus, with pure Italian Queen in
April, \$3.00. After 15th May, 25c. less. I would advise the
four-frame nucleus as giving the best result.

Italian Queens—untested in April, each, \$1.25, per doz.,
\$13. From 5th May to 1st June, each \$1.10, per doz., \$12.
After 1st June, each \$1.00, per doz., \$10. Tested, \$2.50 ea.
Selected Tested, \$3.00 each. 50 cents less after June 1st.
Bees by the pound, in lots of five pounds and over, \$1.00 per
pound, no queens; if queens are wanted add price of queens.
Safe arrival and satisfaction guaranteed. Discounts, 3 per
cent on orders of \$50 or over; 5 per cent on orders of over
\$100. Illustrated catalogue now ready. Address

F. L. VIALLOU,
BAYOU GOULA, Louisiana

Queen City Oil Works!

The Highest Honors and Gold Medal For Our

— PEERLESS OIL, —
Manufactured only by

SAMUEL ROGERS & CO.

Toronto, Ont

BARNES' FOOT-POWER MACHINERY.



Read what J. I. PARENT, of CHARLTON, N. Y., says—We cut with one of our Combined Machines, last winter, 50 chaff hives with 7-inch cap, 100 honey-racks, 500 broad frames, 2000 honey boxes, and a great deal of other work. This winter we have double the amount of bee-hives etc., to make and we expect to do all with this Saw. It will do all you say it will." Catalogue and Price-list Free. Address, W. F. & JOHN

BARNES, No 472 Ruby St., Rockford, Ill.

SMALL FRUITS PLANTS.

Raspberries, Blackberries, Strawberries, Currants, Gooseberries, Grape Vines, Russian Mulberries. First-Class Plants at Low Prices.

Send for price list.

JAMES R. HOWELL,
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BEESWAX WANTED.

Will pay the highest market price for any quantity of pure wax. Comb foundation for sale to suit any frame or section. 35 cts, for wax. Wax worked on shares or for cash. All freight to Campleville station, C. P. R. If by mail to

ABNER PICKET,
Nassagaweya P. O., Ont.

Also agent for D. A. Jones' supplies.

ITALIAN BEES IN IOWA.

60 cents to \$1 per lb. Queens 30 cents to \$2.50. Nuclei and full colonies. Order from my new circular.

OLIVER FOSTER,
Mt. Vernon, Linn Co., Iowa.

Bee-Hives, Honey-Boxes, Sections.

Largest Bee-Hive Factory in the World.

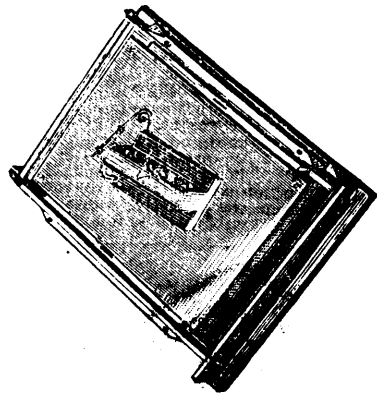
Write for our prices for one price sections, delivered freight and duty prepaid.

G. B. LEWIS & CO.

WATERTOWN WIS.

THE MITCHELL FRAME NAILER.

Saves the cost of the machine in nailing 500 frames, to say nothing of the extra quality of the work obtained by its use.



PRICES.

For Jones' Frame.....\$1.25

For Langstroth Frame.....\$1.50

Ready to go by express or freight.

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

BEES 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

TO BEE-KEEPERS.

You will be interested in perusing a beautiful catalogue which explains fully about the best hives, and also gives almost as much information about the best methods of getting honey, as the regular works upon that subject. This is no catch penny scheme, but every statement made may be verified, because the implements used are of the simplest kind and at the same time the most practical. Send your name, plainly written, with your post-office address also plainly written upon a postal card, and the names and addresses of any bee-keepers you may know and get this pamphlet free. Address,

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

QUEENS BY MAIL.

EARLY

ITALIAN

In May, \$1.15 each; \$12.00 per dozen. In June, \$1.00 each; \$10.00 per dozen. Tested in May \$2.50; in June and after \$2.00 each.

Safe arrival and satisfaction guaranteed. Special rates to dealers. W. J. ELLISON, STAMBURG, SUMTER CO., S. C.

EGGS FOR HATCHING.

From two grand yards of W. F. Black Spanish and One yard of Light Bramahs. Eggs, \$1.25 for 13, or \$2.00 for 26. A few Fowl for sale. Send for circular.

G. H. SHEERES, Clarksburg, Ont.

PRICES CURRENT.

BEE SWAX

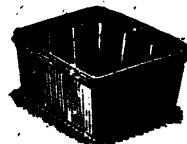
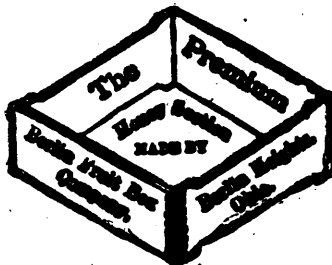
Beeton, June 2nd, 1886.

We pay 31c. in cash (30 days) or 34c in trade for good pure Beeswax, delivered at Beeton, at this date, sediment, (if any), deducted. American customers must remember that there is a duty of 25 per cent. on Wax coming into Canada.

FOUNDATION

Table with 2 columns: Description and Price. Rows include Brood Foundation, Section, and Brood Foundation starters.

If you want to use the best one-piece sections made, try ours. They have taken 1st premium wherever exhibited, and all who use them once want no other. H. R. Boardman, of



East Townsend, O., who use 10,000 of them last season, says: "In trying them I folded 1000 without breaking a piece. Send for our price list of Apiarian Supplies and

Berry Packages. Address as above.

HONEY JARS.

Buckets and Tumblers of Crystal Glass, Corks, Tin Foil Caps, etc.

Best Quality With Lowest Prices.

Address for prices, etc.

TYGARD SONS.

2119 S. JANE ST., PITTSBURG, PA. Mention C. B. J.

20 Colonies of Italian Bees

For sale at \$8 per colony.

Italian Queens, 4 frame nuclei. Bees by the pound. Foundation and Bee-keepers' Supplies. Send for illustrated price list to

J. & R. H. MYERS, P. O. Box 94, Stratford, Ont.

BEE CITY SUPPLY ESTABLISHMENT

NEW REVERSIBLE CRATE HIVE.

Taking the standard Langstroth frame arranged for section or extracted honey at the will of the apiarist. A perfect saving-of-work-hive. Honey can be marketed as raised in the hive without re-handling. Given foundation, all-in-one-piece sections, smokers, honey crates, honey knives, frames, extractors, &c., &c. For circulars and samples address

WM. MCKENZIE, Drawer E., Port Burwell, Ont

Bees For Sale!

We will sell a limited number of colonies of bees—bred for business—being special strains which have been proven for their prolificness and honey-gathering qualities. Each colony will have seven to eight frames, and good laying queen.

Table with 2 columns: Price per colony and Price per 5 or 10 colonies.

Bees should always go by express unless they are personally cured for en route. Terms—are cash with order.

THE D. A. JONES CO., L'T'D. Beeton, Ont.

IMPORTED QUEENS.

Table with 2 columns: Month and Price in francs.

No order received for less than 8 queens. Queens which die in transit will be replaced only if sent back in a letter.

C. BIANCONCINI & Co., Bologna, Italy.



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

VOL. II. No. 10. BEETON, ONTARIO, JUNE 2, 1886. WHOLE No. 62

OUR OWN APIARY.

ROBBING.

We have been in the habit of telling you that we did not have any robbing in our apiary. We will have to admit that we have had some robbing this spring. One of our apiaries has been injured considerably by robbing, caused by the man in charge leaving the door of the bee-house open. He was in the house working among the combs, and being called away suddenly, forgot to close the door. We happened to be passing through and saw a large number of bees flying in front of the bee-house. Feeling satisfied that the bees could not be swarming, we hurried on only to find them flying through the doorway in thousands. They became so excited when the door was closed that they tried to get into almost every hive in the apiary.

We have had so much cold weather lately, that it is impossible to work with the bees for fear of killing queens. Of the bees that ventured out in this chilly weather, many never returned. We have orders for a number of shipments of bees, which we are holding until the weather gets more summer-like. To ship now, when there are large numbers of young bees hatching, would be sure to cause loss in transit. We shipped some, and the weather turning cold before they reached their destination, many became chilled and fell down upon the bottom board, the brood nest was contracted, and many of the larvæ in the combs chilled, with all the eggs outside the circle of brood. The loss from cold was increased by the jarring of the cars, so that several colonies were almost worthless. We have now decided to ship only in fine weather, unless we have the best of reasons for doing otherwise.

This back-set seemed to discourage the

bees, and it will take them some time to recover. We can ship bees more safely in a temperature of 90° or 100° than in a temperature of 40° or 50°, especially if the bees are very young. Old bees may be shipped and will stand more rough usage. We once made a very strong nucleus of young bees, which weighed 3 or 4 lbs. It was conveyed on a waggon about 10 miles on a cool day. At every jolt or jar the young bees would drop from the combs, and after they had been on their stands for several days, an examination showed them to have dwindled down more than half.

We almost forgot to mention that we are putting a wind-break around one of our apiaries, in the shape of a double spruce hedge, enclosing about half an acre. Where double spruce can be got cheap, it would be advisable for those having apiaries permanently located, to put hedges around them, and in a few years, if properly cared for, they will afford a better wind-break than a board fence.

A BIRD'S-EYE OF BEE-KEEPING.

WE are now publishing a work on bees which will be ready about July 1st, entitled, "A Bird's-Eye View of Bee-Keeping," by the well-known veteran apicultural writer and practical bee-keeper, Rev. Wm. F. Clarke, whose name is as familiar as a household word among the thousands of apiarists throughout North America. The object of this little work is to supply a brief, cheap, and comprehensive treatise, which, within the compass of a few pages, that can be read out at a sitting, will give the outlines of bee-keeping so far as general readers may be curious to know them, and at the same time furnish beginners

with directions for doing the practical work of the apiary during the first season at least. Among other live questions this little book discusses how to begin bee-keeping; who should keep bees; is it a good calling for ladies; should amateurs or only specialists embark in the business; the best hive to use; what race of bees to adopt; swarming and non-swarming; reversible frames; what height from the ground to set hives; various methods of wintering, especially out-door wintering; hibernation; sugar feeding; stimulating; over-stocking; getting up a *furor* about bee-keeping, &c.

Bee-keepers who do not need the practical instruction given in this book, will read it with interest because of the lively and spicy hits it contains, and will get entertainment out of it to the full amount of its cost. But it will be especially useful to such, because it will save a large amount of valuable time during the working season. When visitors come who know nothing about bees, and would otherwise ply you with a thousand and one questions, you can hand them the "birds' eye view," saying, "this will tell you all about it," and let them read it on the spot.

This book does not appear as a rival to any other, but occupies a field all its own. As a true A. B. C. book, it is introductory to larger works, and will awaken a desire to read more fully on the fascinating subject concerning which it treats. Moreover, being in POETRY, it will not compete with any of the other works on bee-keeping, they being all in prose. This feature will be found to be one of peculiar interest, and beginners will be astonished how clearly practical directions can be given in the poetic form.

We will spare no pains or expense in illustrating the work with engravings both serious and comic, and will issue it in a style of typography, and on a quality of paper that cannot fail to make it attractive.

PRICE :

25 cents per single copy; five for \$1.00, and the usual wholesale discount to the trade. Orders enclosing the cash may be sent forthwith.

For the Canadian Bee Journal.

DR. THOM'S ATTACK.

WHAT I have good reason to be annoyed as well as astonished at Dr. Thom's letter in the last JOURNAL every intelligent and fair-minded reader will have seen for himself before bearing a word from me. He has done me an injustice altogether unprovoked, and hence nothing short of an unqualified retraction and apology will make amends. The JOURNAL could scarcely have fully realized the position

when it allowed Dr. Thom through its columns to make such charges against a contributor without the slightest reason. He might as well have charged me with theft or murder as "nihilism" in the popular and opprobrious sense in which he obviously uses the term. Even in its literary and legitimate sense I utterly repudiate it, and there is not one word in my article to give a shadow of justification to the charge of "nihilism."

Barring ulterior motive or malice, it is, to say the least, strange that Dr. T. should be so sorely exercised over my friendly criticism of positions taken by Messrs. A. I. Root and W. F. Clarke. Nothing could have been further from my mind in writing that article than any desire to wound anyone's feelings, and I very much question whether anybody was hurt by my remarks except Dr. Thom himself. Still further from my mind if possible was any desire to "hold up to ridicule the religious belief" of any one. The portion of my article that so "deeply pained" and sorely vexed the Dr. was simply a good-natured reply to Messrs. Root and Clarke, especially the latter, and if there was really cause given by me for anybody's religious feelings being hurt Mr. Clarke is the man to complain as he is, I believe, a christian minister; and so clear do I feel in the case that I am perfectly willing to leave the verdict with him. There has been some pretty sharp criticism between Mr. Clarke and myself, but even that will not cause me to hesitate to refer the matter to him, for I am satisfied he is above such narrow-minded captiousness and will do me justice in the premises. I therefore call upon Mr. Clarke to say in these columns whether in his judgment my article will fairly bear the construction Dr. Thom has put upon it and whether he felt his religious susceptibilities "deeply pained" upon reading it. If Mr. Clarke says yes, I shall forthwith apologize to the publishers and readers of the CANADIAN BEE JOURNAL. If Mr. Clarke says the article will not fairly bear the obnoxious construction forced upon it by Dr. Thom and that he did not experience the "deep pain," then I shall expect (and the publishers and readers of the JOURNAL have also the right to expect) that Dr. Thom will make ample apology.

This attack is so unreasonable as well as unjust that there must be ulterior *animus* in the case; and after cogitating the matter I think I have hit upon the explanation. Recently, in dealing with "Science and Apiculture" in response to the call of a correspondent of this JOURNAL, I expressed an opinion adverse to the system of medicine in which Dr. Thom is I believe a graduate and practitioner. I had occa-

sion to do the same thing a year or two ago in an article on diphtheria, etc., in the *A. B. J.* It is, in fine, plain enough that I hold opinions on more than one subject that do not at all suit Dr. Thom. Now, conversely so it happens that Dr. Thom holds opinions on more than one subject that I am very far from agreeing with—that I even consider erroneous and very absurd—but I should scarcely on that account feel called upon to make an outrageous attack upon him. He has a perfect right to hold any opinions he likes, and I suppose most people would concede that I have the same right. Those that know me best know that I am a peaceable citizen until I am attacked, and then I develop considerable fight. And just at present I feel like talking business (or friendly fight if you please) to Dr. Thom after the following fashion: My dip into medical science *not* having been confined to Allopathy, nor my survey of theological questions circumscribed by Presbyterianism, I shall make Dr. Thom the following proposition: Any and every position I have taken on medical or physiological subjects; and any and every position I have taken on theological questions, that happen to be distasteful to Dr. Thom and to vex him, I am ready on the shortest notice to defend and maintain against the Dr. or any substitute he may put forward. But I do not propose to do this in the *C. B. J.* The *JOURNAL* is not the place for either medical or theological controversy, but there are other suitable mediums. There are medical journals and the religious journals, and into these we will go with our differences if Dr. T. is at all anxious for the fray. I am very, very, busy, but when my "dander" is up I would cheerfully work all day and write all night in order to properly dispose of such gentlemen as these. And this, I submit would be more to the point than taking advantage of a side wind to give a malarious blast. The *C. B. J.* is not concerned with Dr. Thom's religious opinions. It is only concerned with our views and experiences in apiculture and cognate subjects. And when in discussing these subjects foreign topics are incidentally brought in—as they are naturally brought in occasionally by the whole of us—it ill becomes any reader to begin to grumble when he sees something that doesn't just suit him, and open an attack which is as unjustifiable as it is unjust. I have noticed matter from Dr. Thom's pen in the *C. B. J.* more than once that did not please me, and with which I totally disagreed, but I did not feel called upon to even fairly criticise it much less attack Dr. Thom or his motives. I do not expect every reader to agree with all I write, but I do expect the fair and

honorable treatment which I strive to accord to every man.

ALLEN PRINGLE.

Selby, May 22, 1886.

Friend Pringle's offer is a fair one. As he calls upon the Rev. W. F. Clarke, we shall hear from that gentleman, and the matter will then be dropped so far as the *CANADIAN BEE JOURNAL* is concerned. We are sure that neither of our correspondents are desirous of continuing the controversy in the columns of a journal not having for its object such discussions. Candidly we have been unable to see that the article which has called forth these communications, could be construed into the meaning Dr. Thom has placed upon it.

FOR THE CANADIAN BEE JOURNAL.

EXTRACTED HONEY.

A BRIGHTER season prospectively has perhaps never dawned upon the Canadian bee-keeper than the present. Although the cold and changeable season of winter has not left us entirely free from loss, we can say that bees in Canada have been wintered successfully. Spring again has smiled upon us, colonies that would otherwise have succumbed to the sunshine and cloud, warmth and cold, wind and calm, have been nurtured into vitality and the early blossoms yielding bountifully, all have placed our colonies fully two weeks ahead of our average Canadian season. The season in Canada will not alone be remembered for many a year as so far a favorable one, but as we all know there is a matter before us of vast and grave importance to the future honey producing industry of our country, viz: the intended exhibition at Kensington. It is not only a matter wherein we can act as individuals, by sending our little portion in the very nicest shape and most saleable form, but it is a matter wherein it is of the utmost importance and wherein the only method of meeting with success ourselves is to have, if not *every one* else, at least the great majority, send an article which cannot be surpassed by combining all the light we have and arrive at a correct conclusion as how to produce and place before our prospective customers the nicest article.

Upon this the opinions of our most enlightened bee-keepers vary, and in this discussion let every one seek to do the most good, and if that be his aim, speculation and theory will never be understood to have been practical experience, and doubts will never be represented as certainties. All are of value, correctly given, but each have their respective values. The comb honey question and how to secure the best I am unable

to take up; I have no experience and the information I possess is gleaned entirely from others. I pass on to extracted. Although I have some knowledge of agricultural and animal chemistry I am somewhat "rusty" and should I stumble in minor points I hope I shall not have thrust upon me in a variety of ways, and from as many sources, the oft-used phrase: "a little learning is a dangerous thing." How then shall we secure the best extracted honey for market?

We have to take into consideration color, exture and flavor. Three points of varied importance, but none of which can be overlooked.

Out of 100 I should give flavor 65, color 20, texture 15. Why? Because flavor is what will draw your customer, and after he is once drawn, *hold him*. Color I place next because it will draw your customer, especially if your package is glass, and if you have flavor and color texture cannot be so far behind.

Now, then, how is honey affected as to color, that is so far as it lies in our power to affect it. The care we take of it after leaving the combs, perhaps, and probably, if not certainly, its condition as to fitness for extracting. I mean what is generally known as its degree of ripeness, but there is another and one which I have known for some years, but never saw an occasion sufficiently weighty to lay before the public. That is the hive and combs wherein the bees store their honey.

To secure the best colored (and probably the flavor is affected) honey we must have perfectly clean hives, wood white and fresh and the combs light and bright. Cells which have had repeated generations of baby bees swaddled in them will change the color of honey in proportion to the number of generations which have inhabited them. This item is of *practical value* only in a measure; the conditions may be aimed at but cannot always be secured. We next pass on to texture and flavor. In passing, I would say in my estimation, in Europe our Linden honey will meet with a more favorable reception than our clovers, and of the latter, Alsike will have the preference. Why! because all the preparations of their food show that a decided flavor is desired. How can we then improve the flavor of our extracted honey? This is a question which has perhaps not been fully answered by any, and thought of by few.

I again assert that honey extracted before ripening before being capped, or before being ready for capping, never will have the richness of flavor which honey so ready has. Why? I think honey exposed to the atmosphere after leaving the hive loses a part of its essential oil which is volatile, this oil is distilled by the flow-

ers and gathered by the bee in connection with the honey, of this latter fact there is no shadow of doubt. Again we know that the honey bee spreads honey all over the surface of the combs and as it is prepared by evaporation, etc., the bees again take it up in their honey sack and carry it upwards, so that it is self evident that several times, at least, honey enters the honey sack of the bee and is again placed in the cells. In my paper read at the Brantford convention in January and published in the *British Bee Journal*, I refer to the value of honey as a food, being perhaps owing to its easy assimilation, the bee having effected part of the process of digestion. If this be correct, and there is every probability it is, honey cannot have that richness of flavor nor can it be of the same value as a food until the bee is ready to place the cap upon it. We have many examples of food being partially digested and then fed to young; if I mistake not, many of our birds do so, of course the case is not analagous, but is it not extremely probable that honey undergoes the first process of digestion, and the most difficult, in the bee? Would this not account in a measure for the extremely short life of the worker at this season, for the opinion many have that it is injurious to feed bees late in the season? And above all if such be the case, and I have for some time thought so, are we not losing sight of a fact which we should place before the consumer, that honey is a food in its most concentrated form and not only so but that it is in a condition that it can be readily assimilated by the system?

To show its great value let me briefly, and to the best of my ability, show the process of digestion. Food is taken into the mouth, then the salivary glands during the process of mastication secrete a fluid which acts upon the starch in the food and converts it into sugar. The food then swallowed has certain parts of it acted upon by the gastric juice, from there it is acted on by the pancreatic juices and the juices from the liver. This being done in perfect digestion the nutritive has been so separated from the non nutritive, or that incapable of nourishing animal life, that the small vessels upon the small intestines can assimilate and take up what is nutritious and from there it passes on as a milky fluid until colored and taken up to nourish the system. In many cases of disease the system does not perform properly the process of digestion either nitrogenous or carbonaceous food or both, that is the nutritious is not separated from the non-nutritious and the system is unable to take up nourishment and replace waste. If honey then is a food already digested and ready to be assimilated we have a class of foods which

the system cannot do without and we need not marvel that it is of such value, especially to those in feeble health. This is a question worth studying from many standpoints and it is to be hoped we will send to Europe especially only honey about which there loiters no shadow of doubt as to the high standard of its merits.

R. F. HOLTERMANN.

Brantford, Ont.

FOR THE CANADIAN BEE JOURNAL.

REVERSIBLE FRAMES, ETC.

SEE that the reversible hives and frames are going ahead lively in the States, but I hope there is not one bee-keeper in Canada that will accept the reversible frames or hives. I have read all the articles written in favor of the reversible frames and hives that I can get, and as yet I have failed to see where a man can gain anything by them. Now for protection, both to the bees and the honey market, I can see at a glance that as soon as a comb is inverted, if there is honey in it and a super on top, the honey will be all carried up into the super. Now this is what some men know about the honey harvest. I sold a queen to a man in this place last summer, and about the first of October, I called on him to see how his bees were for winter. I told him that they were too light. O but, says he, they will get lots of honey yet. So you see some men do not know when the honey flow begins or when it stops, and wonder from spring till fall why their bees do not fill up the super, even in a poor season, and if they had a reversible hive, they would be turning it heels over head, and get the bees to put the last pound of honey that was in the hive up into the super, and then they would snatch it off and think they had done wonders—the very honey the bees should have had for their winter use. There are other men that know when the honey flow begins and when it stops, who would take all the honey their bees could gather, if they could get them to put it into the super by the reversible system, and would feed sugar syrup instead, whereas if they had an unreversible hive, the honey that is in the brood apartment will go into winter quarters with the bees. For almost every bee-keeper knows how unpleasant it is to go into the brood nest to extract the honey that is there after the honey season is over; there is sure to be plenty of brood in the combs, and what honey is there has been capped so long that it is hard to get out, and, as a rule, it is not of a very good quality. Besides, you will have thousands of robber bees after you; if you use a tent, the robbers will hang around till you leave the hive, when they will try to see what they

can get. After a man extracts a few hives, he will come to the conclusion to let the rest have for winter use what is in the hive. So you see that by one system, the honey that is in the hives will go into winter quarters with the bees, and that by the other—the reversible—system, it will probably go on the market, and sugar will go into the hives instead. I have never used a reversible frame, but we have testimonials from those who have used them, saying that the bees will store nearly all the honey in the super. Now, if this be the case, I will start at home and see what it will amount to. In the fall of 1884, I moved to this place, and into the cellar of the house I was living in, I put 57 colonies of bees. It was cold and damp, and there was no way of warming it, so that my bees came out rather weak; although I did not lose one colony in winter quarters. I lost some by spring dwindling. I started the season of 1885 with 50 colonies, increased to 119; and I got about 2000 lbs. of extracted honey, some of which I fed back to hives that were rather light. My 119 colonies went into winter quarters last fall with 25 lbs. of honey each on an average. Now, if I had used a reversible hive and had got all of that, I would have had about 3,000 lbs. more to have done something with; if I fed it back, it would not hold out; if I sold it, the money would scarcely replace it with sugar, by the time you deduct what will be used up in storing it into the hive. So you see that by one system I put about 1,800 lbs. in the market, and that by the other system, I could have put about 5,000 lbs. on the market. So that if the bee-keepers of Canada adopt the reversible system and sell all the honey they can get, you see what amount of honey will be thrown on the market every fall that should have gone into winter quarters with the bees, thousands and tens of thousands of lbs. If they keep it off the market and feed it back, they will lose by the transaction; then where does the benefit come in? If there is a man than can not get his frames full of brood without reversing them, let him adopt Mr. J. E. Pond's method, on page 56 of the present volume of the *American Bee Journal*, and not be turning the dirty black edge of the comb up next the supers for the bees to travel on from one to the other, thus spoiling the appearance of your nice white sections. If there is a man that can not get enough honey to supply his market, without getting a reversible hive and turning it heels over head and robbing the bees of the stores they had capped over so nicely for winter use, then let him get it from some man that has it, and sell it on commission. If there is a man that can not get his bees to fill his frames full of

comb from end to end, and from top to bottom and to attach it just as securely to the bottom bar as to the top bar, without reversing his frame, then let him come to St. Thomas, and I will show him in two minutes how he can.

I would like to say something about sugar feeding, and where a man stands in his own light by so doing, but as my article is long enough, I will postpone it at present.

Of the horses that Mr. Pringle speaks about on page 708 and 709 of the CANADIAN BEE JOURNAL, I will take "Brother Barber's high temperature horse prancing off at 90," but as I am not a very good rider, I will prance off at 55. So good-bye.

J. ALPAUGH.

St. Thomas, Ont., Feb. 10th, '86.

You will see by the reversible and invertible hive that is likely to become the favorite that we can always let the bees fill one story or case which is sufficient for wintering, setting that away for a rainy day, as it were, and having it in readiness to give the bees when they require it. By this means no sugar syrup need be fed, and the honey that would have a place in the brood chamber—forcing you to have a larger one, or have it entirely filled with honey—is obviated. The same system of saving a case of honey can be applied when extracting is practised. If this system will save the handling of the frames, and enable us to take care of double the number of colonies with the same amount of labor, will it not also permit of the production of honey at a lower rate, so that we can sell it at the present prices, and make a much larger profit? Should we not endeavor to devise means of producing honey so cheap that we can sell it at a price that will pay us well for our labor, and yet be able to give the public our production at so low a rate that it will entirely crush out other things that are now used instead?

FOR THE CANADIAN BEE JOURNAL.

PERFORATED METAL.

IN your issue of May 19th, I find quite an item about the above article. The day has past when perforated metal is an experimental appliance in the apiary. I learn from extensive apiarists that if the metal is used between upper and lower story and eggs are placed in the compartment in which the queen is not, queen cells will be raised and brought to maturity. Furthermore that drone comb should be avoided as much in such compartment for store combs as in the compartment with the queen, the bees having the desire to raise drones, even if unable to raise brood in them, they will not use them for storing honey but as it were leave them empty in hope of having eggs deposited in them.

When we have such men as J. B. Hall and S. T. Pettit and others with no axe to grind and with very large and extensive experience with perforated metal use and advocate it so strongly we may rest assured that it has passed the experimental stage and its utility is established.

R. F. HOLTERMAN.

Brantford, May 22, 1886.

FOR THE CANADIAN BEE JOURNAL.

SIDE STORING AND TOP STORING.

I HAVE only time now to say to Joshua Bull (page 146) that I only use side storing in connection with top storing, and never recommend exclusive side storing for some of the reasons he gives. Bees prefer to build comb at the sides of the hive, and store honey at top, hence I get the sections filled with comb at the sides when they are raised to the top and at once filled with honey. I use wide frames which are interchangeable, so the process causes but little labor, and after years of trial of all kinds of systems I am free to say that I know of no other system which will give as good results.

G. M. DOOLITTLE.

Borodino, N. Y., May 24, 1886.

FOR THE CANADIAN BEE JOURNAL.

THE HEDDON HIVE.

PLEASE find one dollar for my renewal of your JOURNAL for the coming year. I like it well, especially "Our Own Apiary," as the contents are not theories (of which our bee-papers have too many) but actual experience and knowledge, by which many of the readers receive actual value and profit. There is only one thing to which I wish to call your attention, to save the fraternity time and lots of money,—I mean the "Heddon Hive." There has already been so much time and paper wasted on it, in fact a good deal more than all the Heddon hives together will be worth in five years. This is a strong sentence, but the hive itself will fulfill my prophecy, and wise bee-keepers will let it alone; for Mr. Heddon will be as much mistaken about his hive as he was about the pollen theory. I will only refer the reader to an article in *Gleanings*, by A. J. Cook, and to the remarks that the editor makes on it; he surely expresses the opinion of the majority of the bee-keepers who do not belong to the clique and have no axe to grind.

I would only ask Mr. Heddon two questions of which he does not tell us anything in his book or elsewhere, to my knowledge: Is reversing natural? If the pupæ in the queen cells are killed by reversing, will not also the pupæ of the

workers be destroyed when they are forced to lie on their backs instead of on their underside as nature has provided?

What is Mr. Heddon doing with the part of the brood chamber, which is supposed to be full of brood at the time when contraction is at hand?

To prove to Prof. Cook that it makes no difference whether we have pollen or not to keep bees from breeding in winter, and at the same time have them warm enough not to get diseased, I will write another article if so desired.

I will only mention that my 160 colonies have all come out in splendid condition.

C. THIELMANN.

Thielmanton, Minn.

P. S.—I do not wish to be understood to have any envy whatsoever against Mr. Heddon and his friends, but we want to know the value of it before we lose our money.

We intend to use a large number this year, and we may say that Prof. Cook, of whom you speak, told us after a year's trial that he believed they were the coming hive. We have talked with many of our most prominent bee-keepers, and they tell us they are well pleased with it. Mr. J. B. Hall, of Woodstock, one of our largest and most successful comb-honey producers, has so much faith in the hive that he got 50 from us and 150 supers. We have practised reversing combs for many years in transferring, and latterly by the reversible frame, and have hitherto known of no bad effects from reversing, not even the loss of a single larva. You will recollect that the queen-cells project downwards, and while it probably will not kill the queen to reverse, yet the bees dislike building queen-cells upside down, and when they are started in the usual way, reversing causes the bees to tear them down, to build them in their accustomed way. On the other hand, the ordinary worker cell remains horizontal when reversed, and the larvæ, if lying on their backs, could roll over much more easily than they could turn round and spin the cocoon in the cell. We would have no hesitation in placing the surplus on top of a case of sections in order to have the bees work in them sooner. The brood could then hatch out, while the queen could not get up to lay, and even if it were lifted up and allowed to be sealed up full of honey, there could be no objection to having a case of sealed stores. If you have had any experience with bees' breeding without pollen, we would like you to give it through the C. B. J., as we have never known bees to carry on brood-rearing without pollen. The hive is now before the public, and hundreds of our best bee-keepers are trying it. Those who have any doubts about its value had better not invest until they hear further from those who are about to give it a thorough test.

WATERLOO BEE-KEEPERS.

WHE Waterloo Co. Bee-Keepers' Association met in the Council Chambers, Waterloo, on 22nd May.

At 10.30 the meeting was opened with Pres. Devitt in the chair. The minutes of the last meeting were read and adopted; some business matters were discussed. Statistic sheets were prepared and issued, to be filled out with the number of colonies put into winter quarters last fall, the number alive this spring, and where wintered; they were also invited to write out any question they wished discussed, on the back of the slip. The meeting then adjourned to meet at 2 p.m.

AFTERNOON SESSION.

2 p.m. The President being detained at home on account of swarming bees, Mr. S. Sanderson was elected to the chair pro tem. The reception of new members and collecting of statistics occupied a little time; though members were still arriving, the secretary closed the tables, and reported that the meeting represented 286 colonies last fall and 223 this spring, a little over 22 per cent. loss. The reports were not definite enough to show which wintered best, those packed out doors or those put inside.

The question drawer was then opened and discussions on the various questions were heartily entered into by Messrs Sanderson, Snyder, Kinzie, Devitt, Groh, Shantz, Stanfer and others. There were however more questions than time would admit of discussing. Upon motion the meeting adjourned to meet in Elmira on Sept. 18th, at 12 o'clock.

ANSON GROH.

QUERIES AND REPLIES.

UNDER THIS HEAD will appear Questions which have been asked of, and replied to, by prominent and practical bee-keepers—also by the Editor. Only questions of importance should be asked in this Department, and such questions are requested from everyone. As these questions have to be put into type, sent out for answers, and the replies all awaited for, it will take some time in each case to have the answers appear.

CAN A QUEEN BE TOO PROLIFIC?

QUERY No. 77.—Can a queen be too prolific for profitable honey gathering?
—G. W.

PROF. A. J. COOK, LANSING, MICH.—I think not. Surely not in this locality.

M. EMIGH, HOLBROOK, ONT.—I have seen colonies that would breed out of season. They were not profitable.

H. D. CUTTING, CLINTON, MICH.—Theoretically, with a certain line of manipulation, yes. But I never had one of those queens.

R. MCKNIGHT, OWEN SOUND, ONT.—A queen

cannot be too prolific if her progeny are kept at home. If they are allowed to swarm at their own sweet will the profit may be secured in bees instead of honey.

ALLEN PRINGLE, SELBY, ONT.—I have never had any too prolific to suit me. Very prolific queens, however, require proper manipulation and management at certain seasons when you do not desire much brood rearing.

S. CORNEIL, LINDSAY, ONT.—I have sometimes thought that such might be the case. Two years ago one of our stocks, having a strain of Cyprian blood, produced a very large quantity of brood but gave no very little surplus honey. Of course there might be another explanation. The bees might be poor honey gatherers.

O. O. POPPLETON, WILLIAMSTOWN, IOWA.—Yes, if she, or the bees, for her, doesn't know when the proper time comes for her to cease excessive egg laying. In localities like my own, where the surplus honey season is of very short duration, those colonies give the most honey whose queens are very prolific during medium or very light flows of honey, but almost cease breeding during very heavy flows.

G. M. DOOLITTLE, BORODINO, N.Y.—No, not if that prolificness comes before the honey harvest. If not prolific at the right time then, yes. The Syrian race with me allow their queens to lay only sparingly except when the honey harvest arrives, so that much of the honey gathered by the bees raised before is consumed by the brood, thus giving little for the apiarist. Such prolificness I consider a damage so have discarded them in their purity.

BY THE EDITOR.—Not with proper management. We have had queens which, if given plenty of room, would lay an immense number of eggs, and in a small hive, would occupy every comb; but by the use of perforated metal, we can get grander results from prolific queens than from unprolific ones.

QUEEN'S FERTILITY.

QUERY No. 78.—Would like to ask whether a queen that has proved a partial failure the first season, is always such, or does she sometimes become a good layer the second season, or perhaps longer?—I. O.

S. CORNEIL, LINDSAY, ONT.—I have never made any observations on this matter.

M. EMIGH, HOLBROOK, ONT.—I never give such a queen a trial the second season.

PROF. A. J. COOK, LANSING, MICH.—I should

not expect much of her if she failed on the first test.

O. O. POPPLETON, WILLIAMSTOWN, IOWA.—Such a queen sometimes does well the second and third seasons.

ALLEN PRINGLE, SELBY, ONT.—I have had such variable queens and that before the age was such as to naturally impair fertility.

G. M. DOOLITTLE, BORODINO, N.Y.—With me such queens never gain any ground, and the sooner suspended the better.

R. MCKNIGHT, OWEN SOUND, ONT.—Not always so; her after history may be more creditable to her than was her work in the days of her youth.

H. COUSE, THE GRANGE, ONT.—I would not keep such a queen over till second season unless she was otherwise valuable or unless she could not be replaced.

H. D. CUTTING, CLINTON, MICH.—Only for experimental purpose can you afford to carry over such a queen. It would be best to replace with a good layer.

H. COUSE, THE GRANGE, ONT.—The prolificness of the queen does not go beyond the capacity of the bees to rear brood. Is the trouble not caused by the over desire of certain races of bees, such as Cyprians, to rear brood and having a lesser desire for gathering honey? Cyprians generally seem to be satisfied if they can get enough honey to keep up brood rearing.

BY THE EDITOR.—We have frequently known queens to lay sparingly the first season, but the second season, by changing them into another hive, they would become very prolific. We attribute this to the fact that some colonies feed their queens better, and give them more attention than others. For instance, a black queen, introduced to a strong Cyprian or Syrian colony, would lay a third more than she would in her own hive, while a Cyprian or Syrian, introduced to a colony of black bees, would not lay nearly as many as with her own colony.

HOW TO RE-FILL THE WINTER FEEDERS.

THOS. COLLINS.—A thought strikes me concerning the winter feeder. When it is empty how are we to know the fact, and how are we to re-fill without taking to pieces?

The feeder will hold enough to do a colony all winter, and if well filled we do not think they could eat more than two-thirds of it; however, there might be a little hole in the top, corked up, so you could peep in occasionally to see what was going on.

SUNDRY SELECTIONS.

ANOTHER EARLY SWARM.

A. ROWAND.—Bees in this section of the country have wintered very successfully. I commenced winter with seven colonies and brought them all through in good condition with the exception of one hive's losing their queen. Had mine packed in dry saw-dust. They commenced raising brood in February. Had one swarm come off on the 22nd of May, and all the others are full. How is that for this northern climate?

Walkerton, Ont.

Here's another swarm just three days behind *Brother Clarke*.

BEEES DYING WITH PLENTY OF STORES.

A. S. CROSBY.—I send you my report, although it is not very good. I put fifteen colonies in clamp last fall, had six this spring. Three of the colonies died in cluster with plenty of stores. There was not any honey on the side of the frames in which they died. Another colony died scattered through the hive, but with plenty of stores. All were free from mould and were good strong colonies. Would like to know the cause of death, and how to prevent. Three-fourths of the bees have died in this part of the county.

Cold and dampness, we think, were the causes.

CLAY OR GRASS FOR BEE-YARDS.

Which is best? a bee-yard of grass, or plowed, and kept from weeds.

We prefer grass when it is kept mown, at least once a week with the lawn-mower.

DRONES IN APRIL.

SUBSCRIBER.—Say through the C. B. J., what is the cause of drones being in a hive when set out (April 7, 1886)?

In all probability the queen died during the fall or winter, or was superseded by a young one which either failed to become fertile in the fall, or if hatched after drones were destroyed, could not be, and of course laid drone eggs in worker cells which were smaller than ordinary drones. If you lift the combs out of the hives, doubtless you will find a number of conical shaped cells lengthened out more in the capping than worker cells, and looking like little ant hills. Your colony should be doubled up with the next weakest colony. If there are only worker bees left the queen may be destroyed.

Do you think it a good sign?

We do not consider it a good sign, but rather the reverse.

If not, what is the remedy?

The remedy is either to double up or give them a fertile queen.

FOUL BROOD—HOW TO TELL IT.

R. W. McD.—Have read your pamphlet on Foul Brood, but am yet in quest of further information. Would you kindly answer the following:

What are the earliest possible indications of foul brood, which would warrant application of remedial measures. It is of course an object, especially at this season, to be able to know it as early as possible in a yard where it has already been in the past season, and to grapple with it on first sure signs of its presence.

The first sign of foul brood that a novice is likely to detect is the dead brood turned to brown, ropy matter, which is always to be found where there is pure foul brood.

What means do you use to disinfect the hands, knife, smoker, etc., after handling infected colonies?

A knife may be washed in hot water; ordinary washing of the hands is sufficient. The smoker need not be disinfected.

Where impossible to boil hive (for instance chaff hive) how would you disinfect?

It is claimed by some that is not necessary to disinfect the *hive*. Will the winter cushion sacking and sawdust used for packing and covering, carry the disease?

Build a fire and invert the hive over it until it is scorched inside.

SUFFICIENT STORES AND RIGHT TEMPERATURE.

W. H. KIRBY.—The last has been my first winter with bees. Packed four on their summer stands on the "clamp and spout" principle, the hives all being in different shapes; one old one on eight long frames, 11½ in. deep; another on six frames, 10½ in. deep, with a triangle in the lower back corners empty; another on eight, 10½ in. deep, with the combs about an inch up from the bottom. Honey harvest gave out here with the raspberry last year, the weather being so cold the bees would not build down, although fed. Another, a third swarm in a little box hive, eight by ten, and fourteen deep, combs down to within four inches of bottom. All have come through in grand shape. I have to thank the *JOURNAL* for the many valuable suggestions contained therein by its many contributors and

able editors, for my success in wintering. I believe, as you say, Mr. Editor, it is sufficient stores and the right temperature that will bring bees through all right.

Oshawa, Ont., May 17, 1886.

We assure you we appreciate the good words you speak for the CANADIAN BEE JOURNAL, and we are glad to know of your success.

TRANSFERRING.

When is the best time for transferring bees? Compton, Que.

At the beginning of white clover bloom, or about 21 days after they swarm.

CLAMP WINTERING.

E. DECEW.—Thanks for the missing number of C. B. J. I have now the whole set which I have bound, and I find myself in possession of the best book on apiculture that I know of. In the spring of '85, I had two swarms of bees,—one good and strong,—the other, feeble. The former increased to four; the latter became strong. Extracted 140 lbs., 80 of which I took July 29th, but I found it was too much as the honey flow stopped short, and I commenced feeding, *a la C. B. J.*, in the latter part of August, giving about 15 pounds of syrup to each colony as fast as they would store it, and I continued to give a pound or less to each from time to time, until November, when I packed them up for winter, on their summer stands in a cheap clamp of my own contriving; March 10th I found them all right, and gave each a portion of honey and sugar, as per *C. B. J.*; April 10th I removed the clamps, which was but a few minutes' work, and to-day find my colonies all fine, apparently as strong as in the fall. The clamp, as I said, is cheap; it is composed of four separate pieces, made partly of lath and partly of half-inch boards with strips of inch for corners, costing about 25 cents apiece for the material. The clamps are now deposited in a pile in my bee-house, occupying about three square feet, each numbered ready for fall.

DeCewsville, 17th April, 1886.

BEEs SEEMINGLY STUPID.

CHAS. RIDOUT.—We were surprised on going into our bee-yard about a week ago, to find a number a bees dead on the alighting board, and 40 or 50 in front of each of the strong hives crawling about as if going away to die. The weather had been fine and the bees had been working hard, and the previous night was cold. Was it the result of their over work, or had they been eating poisonous honey or flowers? Please

answer in your next issue of C. B. J. Our bees came out in pretty good condition this spring and are doing well now.

Often moth webs in the hive cause the bees to gnaw out many of the young before they hatch. Young bees often get chilled and drop down on the bottom board, and yet after being taken out, show signs of life. We think it is caused by most of the old bees being dead and the young ones chilled. Entrances ought to be kept closed on cool nights, which would in all probability prevent such a thing occurring again.

USING THE QUEEN NURSERY.

ADOLPHE BEAUSOLEIL.—The foundation and queen-cages received in good order; thanks for the same. Will you give directions in your JOURNAL how to use the cages properly, and oblige. Yours, etc.

Tecumseth, May 15th, 1886.

In using the queen nursery, we fill the tin pocket with queen food, (such as is used for shipping queens) just before the queen cells hatch. As soon as the queens hatch, we place them in the cages, but if we place the cells in, we support them in their position by slipping them under a little rubber band; it is also advisable to put in three or four young bees, so that when the queen hatches the bees may feed her. Queens may be kept in the cage until required, but we do not advise keeping them longer than five or six days before becoming fertilized; then they may be kept for weeks if necessary and re-caged. We sometimes have twenty or thirty of these cages in use.

PERTINENT QUESTIONS IN BEE-KEEPING.

Who is "Bob Ingersoll?" Where does he reside when at home? Does he raise extracted or comb honey? How many colonies of bees does he keep? What race or strain? Does he use the Heddon hive? If not why not? What is "Nihilism" anyhow. Is it a new way of rearing queens or perhaps fertilizing them in confinement? Apistically yours.

APIS CANADENSIS.

Kingston, Ont., May 22nd, 1886.

DAMAGING STATEMENTS

Concerning all producers of Honey, and which all are called on to exert every means in their power to set right.

We clip from the *Monetary Times*, Toronto, the following item which will be interesting to honey producers generally:

Vermont has passed a law making the adulteration of maple sugar or honey with any substance whatever punishable by a fine of from \$25 to \$50.

THE CANADIAN BEE JOURNAL.

JONES, MACPHERSON, & Co.,

EDITORS AND PUBLISHERS,
BEETON, ONTARIO.

WEEKLY, \$1.00 per Year, Postpaid.

BEETON, ONTARIO, JUNE 2ND, 1886.

We are a trifle behind with foundation orders but hope to catch up in a few days. Note the slight advance in prices.

We can do with the services of another assistant in our apiaries—one who wishes to gain a still further knowledge of the business and wants to work under instructions. Any one who wishes a place will please apply as soon as possible.

CONVENTION NOTICES.

MICHIGAN STATE BEE-KEEPERS' ASSOCIATION.—The next annual convention of this association will be held in Ypsilanti, Mich., Dec. 1st and 2nd, 1886. H. D. CUTTING, Sec., Clinton Mich.

HALDIMAND BEE-KEEPERS' ASSOCIATION.—The next meeting of the Haldimand Bee-Keepers' Association will be held in the village of Hagersville, on Saturday the 5th of June, 1886, at 10 o'clock a.m., when the following programme will be presented: 1. Artificial or natural swarming—which is best? and how to proceed. 2. Transferring—how to do it practically illustrated by Mr. James Armstrong, Cheapside, ex-President of the Association. 3. How to raise good queens. 4. Report of winter and spring losses. 5. Question drawer.—E. C. CAMPBELL, Secretary.

HONEY MARKET.

DETROIT HONEY MARKET.

No comb honey in the market. Beeswax scarce at 25 cents.

Bell Branch.

M. H. HUNT.

BOSTON.

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

BLAKE & RIPLEY.

CINCINNATI.

No new feature whatever on the market of honey. Trade perhaps duller than usual. Manufacturers are seeming to take a rest. Prices are nominal and no changes to note from last quotations. There is a fair demand for beeswax which we quote at 20c. to 25c. on arrival.

CHAS. F. MUTH & SON.

CHICAGO.

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

Chicago,

R. A. BURNETT.

NEW YORK.

We quote quite an improvement in sales of comb honey the past two weeks, and owing to the lateness of the season prices rule low. In consequence of the low freight rates from San Francisco to New York, many dealers in honey are availing themselves of the rates and shipping extracted honey to this market at prices ranging from 4½ to 5½ cts. per lb. This has already had its effect on stale goods. We quote prices as follows: Fancy white comb honey, 1 lb. sections, 12 and 13 cts. per lb.; fancy white comb honey, 2 lb. sections, 9 and 10 cts. per lb.; fancy buckwheat comb honey, 1 lb. sections, 9 cts. per lb.; fancy buckwheat comb honey, 2 lb. sections, 7 and 8 cts. per lb.; off grades, 1 and 2 cts. per lb. less; extracted white clover honey, 6 and 7 cts. per lb.; extracted buckwheat honey, 5 and 5½ cts. per lb.; extracted California honey, 5 and cents per lb.; extracted Southern, as to color and flavor, 5 and 6 cts.

McCAUL & HILDRETH BROS.

EXCHANGE AND MART.

Advertisements for this Department will be inserted at the uniform rate of 25 cents each insertion—not to exceed 5 lines—and 5 cents each additional line each insertion. If you desire your advertisement in this column, be particular to mention the fact, else they will be inserted at regular rates. Cash must accompany the advt.

NOW ready to ship.—Untested Italian Queens at one dollar each.—Send for catalogue MARTIN & MACY, N. Manchester, Ind.

WARRANTED.—Italian queens, from selected mothers only \$1. It will be to your interest to send for my circular and price list. S. F. REED, N. DORCHESTER, N. H.

BEES FOR SALE.—Will sell a number. good strong colonies, fine Italians, bred for business in Jones hive, nine frames, \$9 each. \$8.50 for five. Can ship on H. & N. W. or C. V. Ry., at Inglewood. H. COUSE, The Grange Ont.

BEES FOR SALE.—Between 40 and 50 colonies of Hybrids and pure Italians. Prices all according to strength and quality. Write me. MRS. R. McKECHNIE, Angus, Ont.

50 COLONIES Bees, principally Italians, delivered at Beeton, Tottenham or Bradford railway station at \$8 each; with upper story to hold same size frame, or sections \$9. WM. BRUCE, Penville P. O., Ont.

WANTED—Bees in exchange for the following chattles:—One young mare and foal, one harness, buggy, cutter, sleigh and robes or any of these articles separately. F. C. MUNSON, Collingwood.

BEES, good, strong swarms of Italians, Syrio-Italians, and Syrians, in eight frame hives, made light for shipping, or in other hives if preferred. Safe arrival guaranteed by express for \$8 per colony; Hybrids for \$7. ILA MICHENER, Low Banks, Ont.

BEEES! BEEES! For sale—Thirty or forty colonies in fine condition, cheap. Address, W. H. SANFORD, Tottenham.

ADVERTISEMENTS.

A YEAR AMONG THE BEES.

A new bee-book of 114 pages, cloth bound. Price 75 cents. Sent postpaid by the aut. or.

DR. C. C. MILLER, Marengo, Ill.

HOW TO RAISE COMB HONEY.

An illustrated pamphlet, *just out*, by Oliver Foster, describing improvements in methods resulting from 10 year's practical work and extensive experiment. Price 5 cents. Send also for *free* circular of Italian bees and queens, bred for honey and for sale. The "Adjustable" Honey Case, and other standard supplies for the apiary. Address

OLIVER FOSTER,
MT. VERNON, LINA Co., Iowa.

Italian Bees and Queens.

Full Colonies, Nuclei and Queens, sent on short notice.

A. NEEDHAM
Sarrento, Orange Co., Fla

TELEGRAM FROM

NORTHSHADE APIARY

Good Healthy pure Italian bees at following reduced prices:—1 lb. \$1.25; 5 lbs. \$6.00. Safe delivery guaranteed. Untested queens \$1 \$10 per dozen. Tested queens \$2.00; 5 for \$9.00. Select tested \$3.00. All ready for orders. 140 colonies to draw from.

Address

O. H. TOWNSEND.
Alamo, Mich., Kal. Co.



RAY'S 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.

J. J. MARTIN & CO.,
North Manchester, Indiana.

THE INVERTIBLE HIVE

INVERTIBLE FRAMES,

Invertible Surplus Honey Cases,

Entrance Feeders, Top & Bottom Feeders,

Five-Lifting Device, Honey Extractors,
Wax Extractors, Comb Foundation, etc

My new Illustrated Catalogue is now ready, and will be mailed to all who apply for it. Address

J. M. SHUCK
DES MOINES IOWA

ITALIAN QUEENS 1886.

For Italian Bees and Queens in their purity for beauty and working qualities they are equal to any in the U. S. or Canada. Comb foundation 40c. per lb. Untested queens \$1 each, \$11 per dozen; tested \$3.50 each. Queens reared in full colonies from egg; safe arrival and satisfaction guaranteed. Send for circular

T. S. HALL,
Kirby's Creek, Jackson Co., Ala.

50 COLONIES OF BEES FOR SALE.

ITALIANS, \$9. HYBRIDS \$8.

Also bee-smokers, honey knives, comb foundation, perforated metal and apiary supplies. No circular. Write for wants.
D. P. CAMPBELL,
Park Hill, Ont.

J. W. GREEN, ALDERSHOT, P. O.

Manufacturer of Roots', Chaff and Simplicity Hives and Apiarian Supplies, Catalogue free, by sending your name or P. O.

ESTABLISHED MAY 1ST, 1883.

The * American * Apiculturist,

A JOURNAL OF 32 PAGES DEVOTED TO

PRACTICAL BEE CULTURE

SEND FOR SAMPLE COPY.

We also deal in first-class supplies, and under the direction of Mr. Henry Alley, we run the largest queen rearing apiaries in the world. Circular and price list free. Address

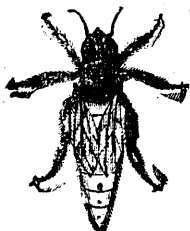
AMERICAN APICULTURIST
Wenham, Essex Co. Mass

20 COLONIES

Of Italian Bees for sale. Originated from D. A. Jones' and S. Corneil's apiaries. Complete Jones' hive; 10 frames with each hive; good queens. Price \$9 to \$10. Apply to
ERNEST SCHULZ, Lethbridge, Muskoka.

Foundation Wholesale and Retail.

I make a specialty of manufacturing foundation of all kinds and sizes and in any quantity. Correspondence with dealers solicited. All of my foundation is made from pure yellow wax, and cleansed and purified by steam, and I guarantee every lb. equal to samples. HEAVY, 5 to 7 sq. feet, cut to fit any frame, in 25 lb. lots, 49c.; 50 lbs., 48c.; 100 lbs., 47½c. BEAUTIFUL THIN foundation, 10 to 12 sq. ft., 25 lbs., 58c.; 50 lbs., 75c. FOUNDATION MADE UP, HEAVY, 50 lbs., 12c.; 100 lbs., 11c. THIN, 25 lbs., 20c.; 50 lbs., 18c. Papered and packed in light boxes free. Customers have choice of mills on which foundation is made. A few fine stocks of ITALIAN BEES in May or June on 7 L. frames in light shipping box, \$8. A good 2½ inch SMOKER by mail, \$1. SECTIONS, CRATES, &c. FREIGHT to Montreal per 100 lbs., 28c.; EXPRESS per 100 lbs., 35c. No CIRCULARS. Prospective customers furnished with SAMPLES of foundation upon application. Remember I continue to act as agent for all makes of FOUNDATION MILLS, and write me before purchasing. See former ad. REFERENCES: Exp. Agent, P.M., or Manager E. T. Bank, all of Bedford.
FRANK W. JONES,
Bedford, Que.



THE ITALIAN APIARY.

M. B. HOLMES, Delta, Ont.



IMPORTER OF AND DEALER IN

ITALIAN :: BEES :: AND :: QUEENS.

The best of Italy's choicest queens their mothers. Not one dissatisfied customer in 1883, 1884, and 1885. Price, untested, \$1.50. Tested, \$2.00; Selected tested, \$3.00. Colony in Jones' Hive, \$8.00.

gent for all kinds of Apiarian Supplies.

BEE-KEEPERS' SUPPLIES.

Having just completed our Large Factory we are prepared to offer all kinds of Bee-Keepers' Supplies at

RED ROCK PRICES.

WE MANUFACTURE

5 Styles of Hives 6 Styles of Honey Extractors,
7 Styles, Foundation Etc., 2 styles of Smokers
2 Styles Wax Extractors, "V" Goove, Section, Etc.

WE GUARANTEE OUR WORK FIRST-CLASS.

Liberal Discount on Large Orders.

Send a Postal Card for our Illustrated Catalogue

ASPINWALL & TREADWELL, BARRYTOWN, N.Y.

Pure Italians.

	May	June 1st to 18	June 22 to Oct. 1
Tested queens.....	\$2.50	\$2.25	\$1.75
Untested queens.....		1.25	1.00
Bees per pound.....	2.00	1.00	90
Nuclei per comb.....	90	65	50

Communications promptly responded to and all questions cheerfully answered.

S. C. PERRY,
Portland, Ionia Co., Mich.

ESTABLISHED 1855.

BEEWAX HEADQUARTERS.

We have constantly on hand a large stock of Domestic and Imported Bees-wax in original shape, which we offer to manufacturers of Comb Foundation at lowest prices. We guarantee all our beeswax absolutely pure. Write to us for prices. Address,

R. ECKERMANN & WILL,

Beeswax Bleachers and Refiners. Syracuse, N.Y.

Queen Bees and Nuclei.

Italian and Albino Queens bred from Northern mothers, equal to any in the United States, being hardy and superior honey gatherers, as my surplus is stored largely from red clover. Three frame Nuclei a specialty. Vandusen and Given Foundation. Extra nice dovetailed white popular sections. Also one Apiary of 75 colonies of bees. Prices reasonable. Satisfaction and safe arrival guaranteed. Cash with order. Reference, Schenectady Bank.

A. E. WOODWARD,

GROOMS CORNERS, SARATOGA Co., NEW YORK

FOR SALE CHEAP.

100 Colonies of Bees, 2000 lbs. of Extracted Honey. Will exchange Bees for an Engine and Boiler, 6 or 8 horse power. Send \$1.00 for one of my frame nailers for Jones' frames, and be happy putting frames together. All kinds of hives made to order. Write for prices.

JAS. ARMSTRONG, Cheapside, Ont.

QUEENS. 1886. QUEENS.

Reared from Imported Mothers. Two, three, and four frame nuclei. Safe arrival and satisfaction guaranteed. Send for price list. Address

FRANK A. EATON, Bluffton, Ohio.

—BOOK FREE.—

Great Reduction

Good as the best! Our one-piece

V-GROOVE SECTIONS,

Smooth on both sides, at \$3.50 per 1,000. For larger lots, write for prices.

A. M. MURRAY & CO.,

Goshen, Elkhart Co., Ind.

COMB FOUNDATION.

Headquarters in Canada. Four first premiums in two years. We are now entering our fourth year without one complaint. A. I. Root's Simplicity Hives & Supplies. Circulars free. WILL. ELLIS, St. David's, Ont.

FOR SALE

A number of colonies Italian bees bred from A. I. Root's queens, \$8 to \$01. Hatching eggs from pure bred W. F. B. Spanish, \$1.50 setting of 13, or \$2.50 for 2.

JAS. STEWART, Meaford, Ont.

Send for one of my Price Lists, and see

HOW CHEAP I OFFER BEES,

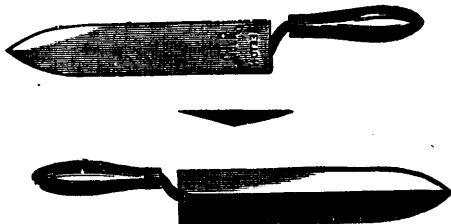
Apiarian Supplies, Bee Hives, etc., very cheap. S. P. HODGSON, Horning's Mills, Ont.

BUCKEYE SECTIONS, V. GROOVE

White as snow, any size, very cheap. We manufacture the Scientific Bee Hive, shipped in the flat (body and frames) can be set up in five minutes without hammer or nails. This hive beats them all for honey. Send for circular to J. B. MURRAY, Ada, Ohio.

HONEY KNIVES.

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



These Knives are made of the Finest Razor Steel

Ebony Polished Handle, mirror polish.....\$1 50
Ebony Polished Handle, glazed polish..... 1 25
Wood Polished Handle, glazed polish..... 1 00
If by mail, add 15c extra for each knife.
THE D. A. JONES CO., LD., Beeton

WHAT EVERYBODY WANTS.

—THE—

CHAMPION EGG TESTER.

PRICE, 50 CENTS.



Use it at home, everywhere. Take it with you in your pocket when buying eggs. Save money and trade. Bad ones are seen at a glance. For incubating purposes they are far superior to anything out—durable, nice form, and will last a long time.

THE CHICK'S HEART can be seen beating through the shell in three days, and dead ones are plainly noticeable. After eggs have been under a hen or incubator for five days, the unfertile ones should be removed. This can be done by using an Egg Tester

We will send one of these Egg Testers free to every person sending us \$1.25, the price of one year's subscription to the "POULTRY MONTHLY," the best magazine of its kind. If you have already paid your subscription, induce one of your neighbors to subscribe, mail us the amount (\$1.25) and we will send you the Egg Tester free of charge for your trouble. Send for Price List of Poultry Supplies. Address

THE POULTRY MONTHLY.
P. O. Box 215, Toronto, Canada.

4881 TARBEE TAR HEEL APIARIES. 1880
71-66.
ABBOTT L. SWINSON,

PROPRIETOR

Goldsboro. Wayne Co. N.C., U.S.A.

Price list of warranted American Albino Italian, (the best Bees in America) Syrian and Carniolan Queens

For the Year 1886	April	May	June	July & on
Untested laying, each...	\$1 50	1 00	1 00	1 00
Untested laying, 1/2 doz...	8 00	6 00	5 25	5 00
Fine Tested Q's each...	3 00	2 50	2 25	2 00
Fine Tested Q's 1/2 doz...	15 00	1	12 50	11 00

My AMERICAN ALBINO ITALIANS, all show 3 yellow bands and many the 4th and 5th, with an equal No. of white silvery bands of fine fuzzi, these are my specialty for 1886. Syrians and Carniolans are bred from Imported mothers of Mr. F. Benton. The Syrian was SPECIALLY selected to order, for producing the gentlest and whitest banded bees to be found in Syria. Nuclei—Add 75 cents for each L. frame of Bees and brood to price of queen. Bees by pound, same price each month as untested queens. Pelham foundation 45c. and 55c a pound. Untested queens by April 15th. Circular free.

NOW THEN ORDER.

Having determined to devote my time exclusively to the production of

PURE ITALIAN BEES & QUEENS

the coming season, I am enabled to offer the following prices:

Tested Italian Queens.....	\$1 00
Bees per lb.....	1 00
One Frame Nuclei with Tested Queen, 1/2 lb.	
Bees and 1 Frame Brood.....	2 00
2 Frame Nuclei, 1 lb. Bees & Tested Queen	3 00
3 " " 1 1/2 " " " " " "	4 00
4 " " 2 " " " " " "	5 00
1 Tested Queen and 1 lb. Bees.....	2 00
50 choice Colonies for Queen rearing for \$10 each.	

See what last season's customers say:

PENETANGUISHENE, CANADA.

Queen received all right. She is a noble looking queen and pleases me better than any I have yet received.

HARRY L. LEACH.

The queens are both giving satisfaction.

R. M. TAYLOR,

Port Dover, Can.

Those two queens I got from you are giving excellent satisfaction.

JNO. G. KNIDENGER,

Kilmanagh, Mich:

I am very much pleased with the tested queen I got from you last summer.

J. S. SEELEY,

Sodus Point, N.Y.

and hundreds of others.

I will commence mailing soon after May 1st and of course first orders are first filled, so order now. Terms cash with order. Safe arrival, and satisfaction guaranteed in every case. Sample of live workers free by mail.

THOS. HORN.

Box 1691, Sherburne, N. Y.

THE NEW HEDDON HIVE,

We have bought out the interest of the inventor in his Canadian patent, and we are in a position to make and sell the Heddon Reversible Hive, got up in any shape to suit the purchaser—either in the flat or nailed.



The engraving gives a good idea of the hive. The brood-chamber is in two sections; also the surplus arrangement, which may be interchanged or inverted at will. The cover, bottom-board, and top and bottom of each sectional case has one-half of a regular bee-space, so that the surplus cases with the sections may be placed between the two brood chambers, or the latter may be transposed or inverted—in fact, all parts of the hive are perfectly interchangeable. The brood-frames will ALL be bored for wires.

A SAMPLE HIVE

includes the bottom board and stand; a slatted honey board; a cover; two 6-inch brood chambers, each containing 8 frames, wired; two surplus arrangements, each containing 28 one-pound sections, both with wide frames and separators, both of which can be interchanged or reversed at will. Price, nailed \$2.90; nailed and painted \$3.25. It is absolutely essential to order one nailed hive as a pattern for putting those in the flat together correctly.

HIVES READY TO NAIL.

We have arranged several different combinations in these hives, so that our customers may make a selection from the sample hive nailed without waiting for us to quote prices; in ordering ask for the number which you desire, and no mistakes will be made.

No. 1 consists of the stand, bottom-board, cover, two 6-inch brood-chambers, 16 frames with holes punched for wiring, and the slatted honey-board, price \$1.25 each.

No. 2 is the same as No. 1, with the addition of one surplus arrangement, containing 28 sections, with separators—interchangeable and reversible. Price \$1.75 each; without sections, \$1.60.

No. 3 is the same as No. 2 with the addition of another surplus arrangement, and sections

and is the same in all particulars as sample hive. Price \$2.30 each; without sections, \$2.00.

Those who wish the hives *without* the stand, or honey-boards, may make the following deductions from above prices: Stands 10 cents; honey-boards 7 cents. For extra brood chambers, with frames in flat, adds 45 cents each; and for extra supers adds 40 cents each. Separators of tin are included in these prices throughout. If separators are not desired, deduct for each super 4 cents.

DISCOUNTS IN QUANTITIES.

For 5 or more hives, 5%; 10 or more, 7½%; 25 or more, 10%; 50 or more, 15% off these prices.

THE D. A. JONES CO., (Ld.)

BEETON ONT.

Beeton Printing & Publishing Co.,

FINE BOOK, JOB, & LABEL PRINTING.

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

F. H. MACPHERSON,

Manager, Beeton, Ont

3-tt.

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 GLAZINGS IN BEE CULTURE**, with a descriptive price-list of the latest improvements in HIVES, HONEY EXTRACTORS, COMB FOUNDATION, SECTION HONEY BOXES, all books and journals, and everything pertaining to Bee Culture. Nothing Patented. Simply send your address on a postal card, written plainly
A. I. ROOT, Medina Ohio

BEE-KEEPER'S GUIDE,

OR

MANUAL OF THE APIARY.

11,000 SOLD SINCE 1876,

The twelfth thousand just out. 10th thousand sold in just four months. 2,000 sold the past year. More than 50 pages and more than 50 costly illustrations were added in the 8th edition. It has been thoroughly revised and contains the very latest in respect to Bee-Keeping.

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

A. J Cook, Author and Publisher

State Agricultural College Lansing, Mich

STANLEY'S

AUTOMATIC HONEY EXTRACTOR.

The only self-reversing Honey Extractor known, will do double the amount of work of any other extractor. Send for new circulars, just out April 1st. Californians, send to Baker and Barnard, San Buenaventura, Ventura Co., Cal. Canadians, send to E. L. Gould & Co., Brantford, Ont. All others address

G. W. STANLEY, Wyoming, N. Y.

APIARIAN SUPPLIES

MANUFACTURED BY

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

Are unsurpassed for **Quality and fine Workmanship**. A specialty made of all styles of the **Simplicity Hive**, including the **Vanden-Nellis**. The "**FALCON**", **Chaff Hive**, with movable upper story, continues to receive the highest recommendations as regards its superior advantages **wintering** and handling bees at all seasons.

DOVE-TAILED SECTION.

same price as 2-piece. Also manufacturer of **VN-DEVON FOUNDATION**. Dealer in a full line of **Bee-keeper's Supplies**. Send for Illustrated Catalogue for **1886**, Free. Prices always reasonable. Mention this paper.

I. R. GOOD'S PRICE LIST.

Italian Bees and Queens For 1886.

HAVING again located at NAPPANEE, where I expect to devote my entire time to the breeding of **PURE ITALIAN BEES AND QUEENS**, can also procure and furnish **SYRIAN BEES AND QUEENS** bred in my Tennessee Apiary. All queens warranted pure to name and untested Queens warranted purely fertilized.

- Tested Queens prior to June 15th.....\$3.00
- Tested Queens, later than June 15th, each..... 2.00
- Untested Queens, prior to June 15th, each..... 1.00
- Untested Queens, later than June 15th, each. 1.00
- Six for \$5.00. 12 or more 75c. each.
- 4-Frame Nucleus, very strong, prior to June 15th, \$5.00 each, later \$4.00 each. With untested queen \$1.00 less each. Bees by the pound same price as untested queens. Will also furnish all kinds of sections and hives at A. I. Root's price.

I. R. GOOD, Nappanee, Ind

DADANTS FOUNDATION

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

- T. G. NEWMAN & SON, Chicago, Ill.,
- C. F. MUTH, Cincinnati, O.,
- JAMES HEDDON, Dowagiac, Mich.,
- F. L. DOUGHERTY, Indianapolis, Ind.,
- CHAS. H. GREEN, Berlin, Wis.,
- CHAS. HERTEL, Jr., Freeburg, Ill.,
- E. L. ARMSTRONG, Jerseyville, Ill.,
- ARTHUR TODD, 1910 Germantown Ave., Philadelphia
- E. KRETCHMER, Coburg, Iowa,
- E. F. SMITH, Smyrna, N. Y.,
- C. F. DALE, Mortonsville, Ky.,
- EZRA BAER, Dixon, Lee Co., Ill.,
- CLARK, JOHNSON & SON, Covington, Ky.
- J. B. MASON & SONS, Mechanic Falls, Me.
- J. A. HUMASON, Vienna, O.
- C. A. GRAVES, Birmingham, O.

and numbers of other dealers. Write for **SAMPLES FREE** and Price List of Supplies, accompanied with

150 COMPLIMENTARY and UNSOLICITED TESTIMONIALS from as many bee-keepers in 1885. We guarantee every inch of our Foundation equal to sample in every respect.

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

1886. **ITALIAN QUEENS.** 1886.

Six warranted Queens for \$5. Send for circulars. No circulars sent unless called for.

J. T. WILSON,
Nicholasville, Ky

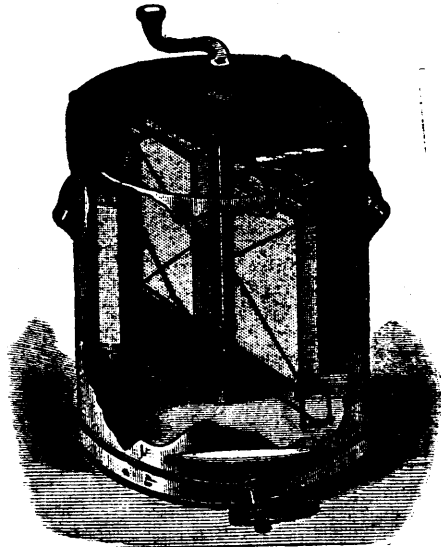
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BRANTFORD, ONT.

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