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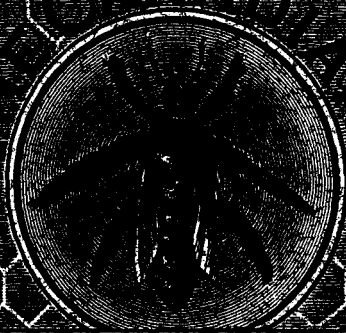
VOL. II, NO. 22.

1886

AUGUST 25

PUBLISHED EXCLUSIVELY FOR THE INTERESTS OF THE HONEY PRODUCER

INTERESTS



JOURNAL

THE FIRST \$

WEEKLY

IN THE WORLD

ONE DOLLAR PER YEAR

THE GREATEST POSSIBLE GOOD TO THE GREATEST POSSIBLE NUMBER

PUBLISHED BY

JONES, MACPHERSON & CO
BEECHER ONT

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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.

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Cook's Manual (cloth).....	\$2 25	\$2 00
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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.

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BEES AND HONEY

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

M. RICHARDSON & SON.

Port Colborne, Ont

THE 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.

"A YEAR AMONG THE BEES," by Dr. C. C. Miller. Price, 75c.

A BIRD'S-EYE VIEW OF BEE-KEEPING, by Rev. W. F. Clarke. Price 75c

FARMERS BUY THE CELEBRATED LARDINE MACHINE OIL, —AS IN— EXCELS ALL OTHERS.

Manufactured solely by

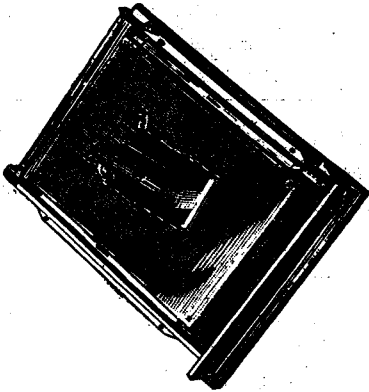
McCOLL BROS., Toronto.

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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

BARNES' FOOT-POWER MACHINERY.



Read what J. I. PARENT, of CHARLTON, N. Y., says—We cut with one of your Combined Machines, last winter, 50 chaff hives with 7-inch cap, 100 honey-racks, 500 broad frames, 2000 honey boxes, and a great deal of other work. This winter we have double the amount of bee-hives etc., to make and we expect to do 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.

SYRIAN QUEENS.

By return mail. Tested \$1.50 each, untested 75 cts., twelve for \$8; to Canada 10 cts. more each unless six or more are taken at one time.

ISRAEL GOOD,
 Sparta, Tenn.

Queen City Oil Works!

The Highest Honors and Gold Medal For Our
PEERLESS OIL,
 Manufactured only by SAMUEL ROGERS & CO.
 Toronto, Ont

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 Campbellville station, C. P. R. If by mail to

ABNER PICKET

Nassagaweya P. O., Ont.

Also agent for D. A. Jones' supplies.

SECTION CARTONS

Or Pasteboard boxes for enclosing honey sections. We sold thousands of them last season and are receiving orders for thousands of the improved for this season.

The improved Cartons are shipped in the flat all ready for the sections; all you have to do is to put on the label.

	Per 500	Per 1000
Price for 1 lb.....	\$3 50	\$6 00
" 2 lb.....	4 50	8 00

Sample by mail 5c.

Labels for the Carton 1 lb., \$1.00 per M.; 2 lb., \$1.25 per M
 14 oz. Glass Honey Jars \$5.00 per gross, also tin packages of all kinds.

Honey Labels—Best assortment in the U. S.—Send for Catalogue.

Wholesale prices to dealers.

A. O. CRAWFORD,

S. Weymouth, Mass

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.

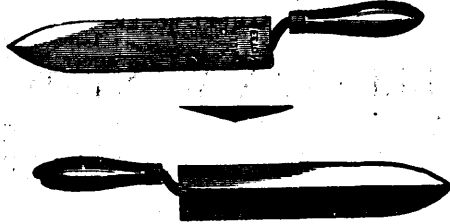
THE CHICK'S HEART can be seen beating through the shell in three days, and dead ones are plainly noticeable. After eggs have been under a hen or incubator for five days, the unfertile ones should be removed. This can be done by using an Egg Tester. We will send one of these Egg Testers free to every person sending us \$1.25, the price of one years' 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.

HONEY KNIVES.

We have a large shipment of honey knives from the makers, Lockwood Bros. Sheffield, England. These are undoubtedly the finest we have had made 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 35
 - Ebony Polished Handle, glazed polish..... 1 15
 - Wood Polished Handle, glazed polish..... 90
- If by mail, add 18c extra for each knife.

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

ESTABLISHED 1855.

BEE SWAX 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,

E. ECKERMANN & WILL,
Beeswax Bleachers and Refiners. **Syracuse, N. Y.**

THE YUCCA BRUSH!!

BY MAIL SIX CENTS EACH.

I also manufacture a first-class article of Comb Foundation, and keep in Stock Sections, Honey Knives, Cane, Smokers, etc. Write for particulars.

W. W. BLISS,
Duarte, Cal.

A YEAR AMONG THE BEES.

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

C. C. MILLER Marengo, Ill.

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ITALIAN

QUEENS BY MAIL.

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,
STATEBURG, SUMTER Co., S. C.

THE INVERTIBLE HIVE
INVERTIBLE FRAMES,

- Invertible Surplus Honey Cases,**
Entrance Feeders, Top & Bottom Feeders,
Hive-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. SHOOK
DES MOINES IOWA

CRYSTAL JARS

Self-Sealing. Cover and Jar of Flint Glass, Neatest, Best and Most Reliable.

- 1 Pint Jars,..... Per Gross, \$10 00
- 1 Quart Jars..... " 12 00
- Half-Gal. Jars..... " 15 00

Cash with order, and Goods shipped next day.

Address

TYGARD SONS.

2119 S. JANE ST., PITTSBURG, PA.

Mention C. B. J.

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 \$3.5c 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.

ITALIAN - QUEENS - 1886.

Reared in full colonies. Satisfaction guaranteed. Untested, \$1; Tested, \$2. Queens also exchanged for colonies of black bees.

F. A. GEMMILL.

Harmony Apiary, Stratford

ITALIAN AND CARNIOLAN QUEENS

By return mail, bred in separate apiaries away from other bees. Warranted Italians or untested Carniolan Queens, in June, \$1.10; 6, \$5.90; July, \$1.6, \$5. State which you prefer, BELLINZONA or GOLDEN ITALIANS. For full particulars and prices of bees, send for circular. Safe arrival and satisfaction guaranteed.

CHAS. D. DUVAL.

Spencerville, Mont. Co.

CARNIOLAN QUEENS A SPECIALTY

My apiary consists of 50 colonies, each with a Carniolan Queen fertilized by an Italian drone last season. I have no other bees. Untested Queens, safe arrival guaranteed, \$1 each. Carniolan queens fertilized by Italian drones August and September, 1885, 50c. each. Send money order or postal note. Queens to Canada, England, South America, 10 cts. each extra. Send for circular.

S. W. MORRISON, M.D.,

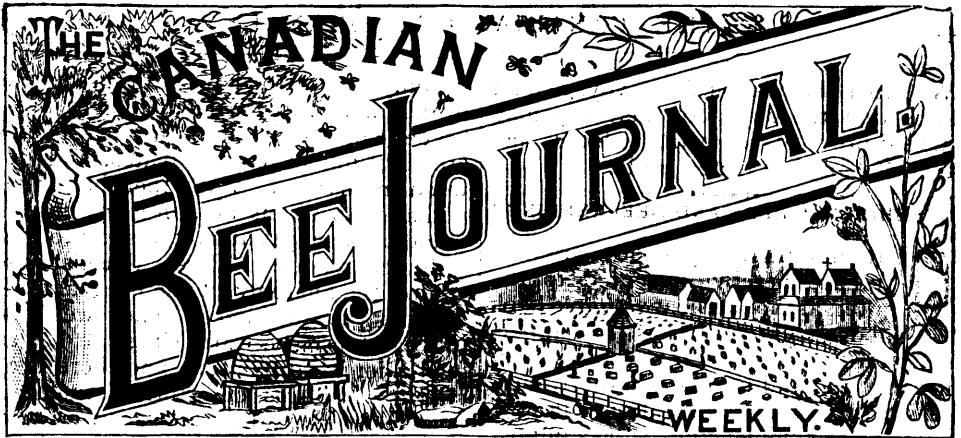
Oxford, Chester Co., Pa.

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.



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

VOL. II. No. 22. BEETON, ONTARIO, AUGUST 25, 1886 WHOLE No. 74

OUR OWN APIARY.

PUTTING UP HONEY FOR THE WHOLESALE TRADE.

JUST at present we are busy making preparations for the coming exhibitions. Our honey is being put in suitable packages and nicely labelled and placed in cases holding 60 and 30 pounds. These styles of packages conform to the size and weight of other goods of like nature and are more suitable to the wholesale trade than honey in bulk. We seldom sell to the wholesale trade any larger package than a five pound tin, showing conclusively that retail merchants prefer to handle honey similar to other canned goods. They have no waste and have besides an article which can be displayed to advantage upon the counters and shelves. We are buying up extracted honey throughout the country and are having it come to us in bulk so that we may put it up to suit our trade.

THE O. B. K. A. CONVENTION.

AS we mentioned in another column, it has been decided, instead of holding the regular annual meeting of the Ontario Bee-keepers' Association, to have a "bee-talk" on Tuesday and Wednesday, September 14th and 15th, in the evening, at 8 o'clock. Mr. Allen Pringle, Vice-President, will, it is hoped, be present, and take the meetings in charge, and, assisted

by the many other prominent bee-keepers, we have no doubt there will be a "good time." The trouble last year seemed to be that too much time was consumed in attending to the routine business of the Association, and not enough speechifying, etc., indulged in. The great bulk of bee-keepers who attend, come, not so much for the purpose of electing officers, as to hear from the older heads in the business such things as will be of practical use to them in the apiary. We look for a decided improvement in this part of the programme the coming convention.

OFF FOR THE COLONIAL.

THE Commissioners appointed by the Executive Committee for the Ontario Beekeepers' Association, met in Toronto on Monday the 16th inst., and on Friday morning they sailed from Quebec for Liverpool. Mr. J. B. Hall, who was appointed as one of the Commissioners resigned his position a short time before, finding it impossible to get away, so that the names of Ontario's representatives at the Colonial and Indian Exhibition are, S. T. Pettitt, Belmont, President O. B. K. A., and Chairman Board of Commissioners, S. Corneil, Lindsay, Secretary and Treasurer B. of C., R. McKnight, Owen Sound, and D. A. Jones. The latter was accompanied by Mrs. Jones. We expect to give the readers of the JOURNAL full accounts of the doings of the Committee every week, during their absence.

We wish them a pleasant voyage and hope that the object of their trip may indeed prove of value in the future history of Canada's honey trade.

CHESHIRE'S "BEES AND BEE-KEEPING"

OUR humblest apologies are due, and are hereby presented to, the gifted author of the invaluable book above mentioned, for this apparently tardy notice of the volume; but it came to hand just as our short, busy season for active operations in the apiary was commencing. It was impossible to give it proper attention at the moment. It must await a rainy day, or a lull of business. Not until the linden failed, did either wet weather or leisure serve our purpose, and when at length the task was begun, it was found to be, though highly agreeable, anything but easy. The perusal of this opens up a new world of wonders even to one who has been working among bees for a quarter of a century. We knew before that the bee was a highly and singularly organized insect, but were not prepared for the marvels of contrivance, wise adaptation, and effective mechanism presented in these pages. Dr. Johnson is said to have remarked that "no doubt God Almighty might have created a more delicious fruit than the strawberry, but it is quite certain he never did." So in rising from the perusal of these astonishing delineations in word and picture, one is ready to exclaim, "God Almighty might, no doubt, have created a more wonderful insect than the honey-bee, but it is quite certain he never did." Mr. Cheshire at the close of his dissertation on a single organ, the bee's eye, quotes, to concur in it, the language of a predecessor in the field of research, Swammerdam, who says:—"I cannot refrain from confessing, to the glory of the immense, incomprehensible Architect, that I have but imperfectly described and represented this small organ; for to represent it to the life in full perfection, far exceeds the utmost efforts of human knowledge." Only the first volume of this great work has been given to the public as yet. It is wholly scientific, and is chiefly devoted to microscopic investigations, with illustrative plates and wood cuts. The author is evidently an accomplished microscopist, but while his work can only

be fully understood to be appreciated by fellow scientists, no intelligent bee-keeper can read it without profit. There are eight full page steel plates, and 71 wood engravings. With their help, the verbal descriptions are, in many cases, made both simple and interesting to the ordinary reader. These illustrations exhibit the anatomy of the bee magnified from 5 to 400 times. They well repay careful study. Mr. Cheshire has a genius for word painting, and there is a charm about his descriptions that all must feel who read these pages with any care. In the midst of so much that is interesting, it is almost invidious to specify particular portions of the book, but the chapter on general structure, particularly that part relating to the circulation of the blood; the chapter on the nerve system in which the mental inferiority of the queen to the worker is clearly shown; the explanation of the methods in which worker and royal larvæ are fed; the brilliant exposition of the tongue apparatus; the chapter on the antennæ and eyes; the dissertation on wings and flight; buzzing and humming; secretion of wax and bee architecture; and last, but not least, the graphic account of the complex machinery by which the sting is worked, have attracted our special attention. The concluding portion of the work is devoted to bees and flowers; bees as fertilizers, florists, and fruit producers; and the information it contains ought to be widely disseminated as an antidote to those ignorant prejudices which in certain parts of the world have led to lawsuits against bee-keepers. The production of honey is shown to be but a fraction of the results of the bees' useful labors for man. This tiny helper has performed services in the realms of horticulture and pomology, the value and importance of which are incalculable.

Like all scientific works this volume is not merely to be read but *studied*. A single perusal dazes with amazement at the vast variety of objects comprised within the body of a bee. As you take up the several parts, and investigate them in detail and in their relations to each other, you get a more distinct view of things, and begin to comprehend the mechanism which at first only filled you with astonishment. It is highly gratifying to discover the intents and uses

of things, and this you are constantly doing as you pursue the class of investigations to which this book invites its readers.

Dr. C. C. Miller, in an appreciative notice of this work, which appeared in the *American Bee Journal*, a short time since, expressed regret that the author has exhibited an "unkindly spirit," and "personal dislike," toward Professor Cook. This is a mistake on Dr. Miller's part. A freer style of criticism prevails in England than in this country. Literary men there handle one another without gloves. John Bull is not so thin-skinned as Brother Jonathan. We are persuaded that Mr. Cheshire has not a particle of ill-will towards Professor Cook. Why should he have any? They are not rivals in the field of apicultural research, but co-workers. Criticism in the United States generally, means eulogy; in Britain, perhaps, it is too often fault-finding, still it can be said with truth concerning critics and authors:—

"No enemies they are,
But meet just like prize-fighters at a fair,
Who first shake hands before they box,
Then give each other plaguey knocks,
With all the love and kindness of a brother."

FOR THE CANADIAN BEE JOURNAL.

LAYING WORKERS AGAIN—FALL PREPARATIONS.

IN some comments on my previous remarks anent fertile workers the JOURNAL asks how I destroyed their brood. In reply I may say that I had no brood to destroy but the first lot when I discovered them, as the plan I adopted of dealing with them effectually prevents the further rearing of brood. Every four days I extract all their honey and supply them with fresh combs. Of course, under such treatment there will be no honey or labor wasted in rearing the false brood. Since my last letter I have found three other colonies in possession of the fertile workers, two of which were amenable to treatment, while the third being incorrigible, I have placed under the extracting regime as set forth above.

As to the method adopted to get rid of the brood with which the combs were partially filled when discovered. I proceeded as follows: I first extracted the honey from the combs, I then uncapped the brood and was able to throw the larger part of it out with the extractor by a very rapid revolution of the basket. The cells were then filled with cold water, and another whirl of

the extractor threw out most of the small larvae along with the water. The combs were then given to strong colonies in second stories with zinc excluders below and the bees did the rest. If friend Jones or any reader has a better plan of getting rid of spurious brood than this I would be glad to hear of it, for

When the flowers flow with honey,
Then it is that "time is money."

FALL MANAGEMENT.

No prudent bee-keeper will forget that preparations for winter must begin in August if not earlier. In using the honey extractor this month the wise apiarist will make haste very slowly. I have always been in favor of natural stores in preference to artificial for wintering, and my one year's experience in feeding has not been such as to alter that conviction. Last year the honey season ended here the last of July, and as that was a very exceptional occurrence in these parts we found ourselves in an unfortunate "lurch." I had extracted pretty closely in July depending as usual upon August and later for winter stores I never liked the idea of putting away full frames of nice clover honey in July for winter when the bees will winter just as well on buckwheat honey, but if there happens to be none of the latter I would rather give them the nice clover honey than feed them syrup for winter. I accordingly this season began in July to put by the frames of clover honey to supply whatever deficiency I might find in the fall. But I shall not require them, for we are having an excellent flow at present from the buckwheat. My advice on the winter-food question is briefly this: If you must feed for winter, feed the number one granulated sugar and feed early and about one-third more than would be required of natural stores; but never extract the honey from the hives in order to feed syrup. To get full frames of honey for winter, either early or late in the season, I practise the same plan which I see friend Corneil practises, and that is to place zinc division-boards in a few of the hives containing strong colonies to confine the queen to about half of the hive and then place your frames that you want filled for winter behind the division-board where they will be filled and capped. I often put a frame of hatching brood behind among the rest to attract the bees back more freely. This frame will also be filled with honey as fast as the young bees hatch. If zinc is scarce, instead of making the whole division-board of the perforated metal, you can simply put a strip three or four inches deep at the bottom of a wooden division-board. This will work all right. Or if you use the Langstroth hive you can put your frames to be filled in the second

story with the zinc excluder below it. Or if you use the new Heddon hive put the zinc on top of the first or second section of brood chamber and place another section or two of brood chamber on top filled with either empty combs or foundation and then by inverting you can get them filled and capped complete for winter. In using the Heddon hive so far, I prefer to have but one section of the brood chamber with queen under the section cases and I am inclined to think that a good queen will produce quite sufficient bees for winter in the half brood-chamber. Of course it must be inverted from time to time to keep it clear of honey. I think further that the other half of the brood chamber well filled with honey and capped will be sufficient to winter such a colony. What do you think, friend Heddon? Perhaps you tried it last winter. At any rate that is what I am doing. Where I have had the queen confined to one brood section through the season I have put on brood section with foundation which is being rapidly filled and capped, and this I think will winter the colony. Where both sections of brood chamber have been used for the brooding of course the bees are more numerous and more stores would be required.

In the Jones, Langstroth and other large frame hives the frames in brood nest ought to be spread in August to secure a thicker comb of honey in each frame above the bees in winter. This spreading of the frames after swarming has another important use, which, however, I must refer to at another time.

ALLEN PRINGLE.

Selby, Ont.

Though we have in the past been warm advocates of feeding sugar-syrup for winter stores, we do not think that we have ever advised extracting till the honey-flow was over, and then feed syrup for winter purposes. We agree with friend P. fully that the provident and watchful bee-keeper should be careful in using the extractor at this date. We have done little extracting since the last week in July. We shall be glad to hear from Mr. Heddon in answer to the question as to the one section of brood chamber being sufficient to rear brood in for winter. For ourselves we are of friend P's mind, and our efforts have all been directed that way.

Get your friends to take the CANADIAN BEE JOURNAL. Two names with \$2. entitles the sender to a copy of Clarke's "Bird's Eye View of Bee-Keeping" (25c.) free.

For the Canadian Bee Journal.

TRANSFERRING FROM BOX HIVES.

AS a reader of the C.B. JOURNAL has written me for my method of transferring from box hive, I think best to reply through the JOURNAL, then all can see how we do it here. In the first place the Cuban hive is about 3½ feet long, open at both ends, and when in use as a bee-hive, lies down, or in a horizontal position. It is sometimes made from a hollow tree, and sometimes out of boards, that may be any width that is at hand, for the native bee-keeper is not at all particular, about the size of his hive, it may contain 1,000 cubic inches, or 10,000, it is a hive all the same, with him. Now when we are ready to transfer it is a short job. The back end of this long hive is elevated (say 18 inches) for convenience of working, we smoke the bees back, and with a long knife, blade 16 inches, which I call the transferring knife, cut the combs loose, pull them out lay them on the table for that purpose, an assistant fits all the brood into frames, and if the combs cannot all be got out handily, the hive is changed end for end, the bees that have all clustered in the end that is next to me now are driven back with smoke, and the balance of the combs removed. All the worker brood is put into frames, and enough honey to guard against disaster, in case the bees cannot gather honey for a few days after transferring. The new hive is placed where the old one was and the bees dumped at the entrance, and allowed to run in, the same as a newly hived swarm, the bits of honey, comb &c. are put out for the bees to clean up, and the job is done, and well done, and quickly done. I have tried most of the methods of transferring, such as drumming the bees, etc., but consider them all too much fussing for the money. I can transfer a colony while neighbor Smith is drumming his bees up into a box. If the colony is in an ordinary box hive, I arm myself with a good axe, and at the first clip I make calculations to knock the cover of that box hive 15 rods at least before it strikes the ground, then with the transferring knife cut the combs loose from one side, and with another blow from the axe the way is open to lift out the combs. Now the gentleman for which this is more especially written can hold up both hands in holy horror if he likes, it costs the same. I make any job about the apiary a matter of business, and go about it as if I calculated to get it done the same season. All these fine points and hair splitting theories about the majority of the work to be done in the bee-yard is all very well for the hired man, but a more common, sure and practical method usually suits the proprietor best. I read with interest most of the discussions upon.

the different managements and manipulations; there are some manœuvres that are *too fine* for my clumsy hands, and one of them is getting nice worker comb built without full sheets of foundation. I do not say that I cannot *possibly* do it, but I say I cannot do it and make money at it, over and above the cost of foundation. I have tried the experiment several times but when I did succeed it was at the cost of certainly one half the amount of brood in the brood-chamber, and a material lessening of the amount of honey in the surplus arrangements. I have never been able to see how the bees are going to make up the time and material consumed in building comb. Bro. Hutchinson says, page 328, "not in the brood nest" in speaking of your remarks in a former article, not full sheets of foundation in the brood nest. Now I believe I can convince any man that it is an advantage to have full sheets in the brood nest. We will take an ordinary swarm, that will cover say 4 or 5 L. frames, (I mean when the surplus arrangement is on,) go to that swarm the first evening they are hived, after the bees have stopped flying, lift off the top case and see how many frames the bees are occupying below, if five take away two of the sheets, moving up the division board, you now have a brood nest of three full sheets of foundation. Now then half the bees can draw out the sheets of foundation, that it would take to build comb in the ordinary way, and the bees that were on the other two combs, and those left idle in consequence of the full sheets of foundation will have to go above, simply because they have no other place to go, and there is no chance to take on getting all worker comb. You will say a three comb brood chamber is too small, so it is, as soon as the three sheets are filled with brood add one or two more and the same bees that were necessary to draw out, and care for the brood before it was capped in the three first frames, can now draw out two more and care for the brood in them, but their farce with the enlarging of the brood nest will be increased, but not to the extent that it would have been, had the room below been left the size for five frames at the start, for the bees that have got used to carrying their honey above, will not all stop for the simple reason that two more combs have been added to the brood nest. At the end of two weeks or a little more the bee-keeper will have five frames of brood that are a pleasure to look at, no drone comb, or need of reversing for every corner will be full. I do not claim to be the originator of this system of reducing the size of the brood chamber, when first hiving prime swarms, I think I owe it to G. M. Doolittle, but I am not certain, but whoever it may be, there

is not much doubt about its being *the way*, to get surplus, but I shall have to try it further before I can go with the advocates of the empty frame. But if I cannot take that in, I can express my gratitude for the benefit I have received from following *many* of their suggestions.

A. W. OSBURN.

Apartado 278, Havana, Cuba.

For The Canadian Bee Journal.

CARNIOLANS.

IN your paper's issue of the 30th ult., I notice in an article headed "Carniolans" my name mentioned by Mr. F. Benton as a beekeeper who has discarded the Italian bee in his apiaries, which statement of Mr. Benton's is correct.

If by reading but the above article I do judge correctly, there exists a controversy between Mr. Benton and a Dr. Thom about the merits of the different races of foreign bees of which Mr. Benton is a breeder of pure queens in their native countries to insure purity, Dr. Thom, claiming as an authority in bee matters, that the Italian bee is the acknowledged "standard" or "ne plus ultra" of bee excellence, and all other varieties of foreign bees worthless, which position taken by Dr. Thom would insinuate that all beekeepers who do not share in Dr. Thom's opinion in this matter and will prefer any other variety to the Italian bee are "stubborn and silly unprogressive beekeepers," and that any queen breeders of other races than the Italian are dishonest dealers who wish to sell a worthless article. Such insinuations are anything but a compliment to any beekeeper who has discarded the Italian bee and very injurious to any queen breeder who rears queens of other races for sale, and most injurious to Mr. Benton who rears them in their native countries at great expense and trouble, and I can hardly think that Dr. Thom, who is a perfect stranger to me in every respect meant to throw such insinuations and that he did but consider it for granted that the Italian bee is the best honey bee because she is the favorite of most American beekeepers, as the Cyprian is with most European beekeepers and Mr. Benton.

If Dr. Thom will have the kindness to examine the history of the introduction and the trials of the different varieties of foreign bees ever since Mr. D. A. Jones went with Mr. Benton to Europe and Asia to "ransack" the world for the different varieties of honey bees, as the papers at that time valued the enterprise of Mr. D. A. Jones, he will find that there were found good and bad points in every variety, all of which were amply discussed in the bee papers

at that time, but it was generally conceded that the Cyprian and Mt. Lebanon were the better bees for the honey apiary and that the main objection to them was their vicious stinging propensity. The objections raised against the Italian bees were, that the queens stop breeding too early in the fall, and the stocks for that reason are going to wintering with too many old bees to come out in the spring weak. 2nd, that the Italians are very liable to spring dwindling, and 3rd, that they are of a great swarming propensity. In addition to this I have found here in Oregon that they are poor judges of the changes of weather and will exhaust their stores imprudently in rearing a large amount of brood regardless of weather, taking their chances on the weather being favorable for the gathering of stores.

As the public mind after fair trial would not settle on any variety as the best, the matter remained "in statu quo" and as the Italian bee was at that time the most gentle bee known and already widely introduced, she remained "pro tem" the favorite with American beekeepers who preferred a gentle bee to a vicious one. In the meantime the public mind was drawn toward cross-breeding and the opinion became prevalent that by judicious cross-breeding, in the course of time a cross or strain of bees might be obtained which would unite in one all the good points of the different races minus their faults. This new yet-to-be-obtained bee was at the time in the papers spoken of as the "coming bee" and some fast American beekeepers, went in the hastiness of their enthusiasm as far as to christening this "coming bee," the "Apis Americana" most probably to secure ownership beforehand, when the distinguished honor of christening such a wonderful bee of bee-perfection might perhaps with more propriety and respect be left to such reverend bee-men as the Rev. Dr. Drierzon and Rev. Mr. Langstroth our German and American fathers of progressive apiculture, if those men will be still among the living when the first queen of that perfect strain of bees ever does emerge from her royal cell.

It would not be worth while for me to argue here with Dr. Thom or any other enthusiast of the Italian or any other variety of bees, the matter of the privilege of a different opinion in our age of mental freedom, especially in an unsettled matter. The reason why I prefer the Mt. Lebanon bee to all others thus far is because a Mt. Lebanon colony of bees with young prolific queen of the previous season is the least apt to swarm that season and most surplus honey can be expected if in large hives like my Oregon Chest beehive, which is a combination of the Langs-

troth with the Quinby, having the suspended Langstroth slat, and the surplus honey arrangement of the Quinby hive.

The Carniolan queens imported from Mr. Benton I have but for cross-breeding with the Mt. Lebanon, and I have now most promising crosses. The only objection I have to the Carniolan bees is the great swarming propensity which they share with the Cyprians and Italians. I have found the Carniolans all that Mr. Benton recommends them and discovered two good points—to wit, that they will leave the hive less in bad weather than any other bees, and that they show more activity late in the fall when other bees are very drowsy, than any other bees.

With regard to Mr. Beaton, with whom I have had dealings for the last two years, and whom I have found a most honorable and reliable dealer and pleasant man, I have to say that it is my humble opinion, (which however I do not wish to force on any man), that Mr. Benton deserves not only the most liberal patronage of all able beekeepers, who wish to procure pure queens for cross-breeding, but also an annual subsidy of all such beekeepers who can afford it, as his business is very expensive, and he is laboring under great disadvantages for the advancement of apiculture in unhealthy countries where his life and health are at stake.

GUST MURHARD.

Portland, Oregon, July 26th, 1886.

An Essay read before the Wellington Bee-keepers Association held in Fergus, August 14th, 1886.

PREPARATION FOR WINTER.

WHERE we down in a southern latitude, little, if anything, need be said of "preparation for winter." But living where we do in an atmosphere moving the mercury from ten above to twenty below zero for some seventy-five or ninety days in the year, this question is of no small importance. There can be no doubt, however, that successful wintering of bees often depends very largely on due preparation for it. And this preparation begins when summer is yet with us in all her glory—from August 1st to August 15th.

During this period brood-rearing is a prime essential. The bees now active in the hive will have disappeared before the advent of real cold. Hence the bees which are to pass through the winter and nurse the brood in early spring must now be reared. In order to this there should be ample stores in the hive or coming in from natural or artificial supply. As in case a small quantity of food is stored up and none coming in, brood-rearing will be seriously retarded.

Space for the queen to deposit her eggs is necessary. To secure this the extractor may have to be used, or else full frames displaced by empty frames, by simply lifting out the former and placing them behind the division-board, or in upper story, if the contents are needed by the colony. There should be in each stock a vigorous queen. To have this in most cases a young queen should be there. For it is well known that a queen's egg-laying capacity is best seen during the month subsequent to her beginning to lay. Hence, when there is the slightest indication of decreasing egg-producing power, remove her. Bees in sufficient numbers to warm and feed the eggs and embryo should be on hand. And this number must not be estimated by the hive space they occupy in a hot day, but rather by that filled on some chilly day or evening which August or September furnishes frequently in this latitude. For if the brood is exposed by a withdrawal of the bees induced by the feeling of cold, the condition of the stock is rendered worse than had none of the exposed brood been there.

Separate the frames leaving at least two inches from centre to centre, that the cells on top half may be drawn out and stores deposited in best shape for access by bees in winter. Thus a process the opposite to that employed in spring when to make the most of the warming power of the bees we place the combs near each other.

Watch the weather; and on the approach of a cool spell, just do with the bees as we do with ourselves and our chambers—increase our clothing and close the openings. There is much utility to bees in being "happed" as the thoughtful human mother does her offspring when she feels a change from a warmer to a colder temperature is imminent.

And not later than first frost by which honey plants are killed, see that from twenty to thirty pounds of stores are in each hive. If there is a deficiency, feed either good honey or granulated sugar syrup in the proportions of two parts of sugar to one part of water and feed as rapidly as they can deposit it in cells.

If they are to be wintered on summer stands they will require to be surrounded by two walls from two to twelve inches apart, according to location and the material used in packing. The material used varies greatly—paper, mill seeds, flax and chaff, leaves, sawdust, straw and hay, wool and cotton, being used according to the fancy or convenience of the beekeeper. And if to be wintered in cellar, clamp or bee house, leave them in all cases alone. Any movement necessary in taking to winter repository should be done so carefully as not to break that "cluster"

they delight to form in the latter end of autumn and which seems so favorable to their longevity.

J. R. BLACK.

Garafaxa, Co. Wellington, Ont.

FOR THE CANADIAN BEE JOURNAL.

FUTURE PROSPECTS.

OUR honey crop has once more been well nigh harvested, and although the crop—that is the average yield per colony—has not come up to the average yield of last year, bees came through the winter well generally, and the result is the honey crop of 1886 is larger than that of 1885.

A portion of our crop has found an outlet at the Colonial and Indian Exhibition, and we will hope that the honey which is on its way to England may be the means of opening a large and permanent outlet for the future. But let us not be too sanguine, and, above all, let us make every effort to develop other fields, and resort to the best means of so doing. I have in my possession reports from a great many Canadian beekeepers, a goodly number of them extensive ones, and I am posted perhaps as well as most, if not any, as to the wholesale and retail price in Canada. Were I to give prices for which honey is being sold and bought in Canada, this year's crop, I would rudely open the eyes of many. It is being handled wholesale at prices ranging from 5½c. per lb. to 11½c. per lb., and retail from 16 lbs. for \$1 to 20 cts. per lb. These figures are for first class extracted clover, thistle, and, in some instances, a little Linden honey mixed with it.

I do not now speak of the prices at which the petty bee-keeper having only a few pounds of honey for sale has sold it, and, at which the "apiarist" has for so long cast the blame of helping to depreciate the price of honey, but I speak of large transactions.

Comb honey, although I have purchased at 10c. and 12½c. per lb., demands a steadier price, the production of it is more limited, the demand still keen and 14c. per lb. is a fair price at which to quote it. This great variation of price, wholesale and retail, giving us on the one hand perhaps more than a good honey profit, on the other slaughtering figures. To what shall we attribute it, this state of affairs? True in a large measure to causes over which we have no control, but is it not in a measure to improper organization. Most emphatically yes. In a paper read by Mr. T. W. Cowan before the conference of British bee-keepers on July 31st, and reported in the *British Bee Journal*, we have some suggestions thrown out from which we can draw valuable and practical conclusions for ourselves. The

British bee-keepers have a membership of upwards of 10,000. The county associations are affiliated to the number of forty counties. Mr. Cowan says: "In these associations the end sought is to determine the principles which render successful production possible, and what individual effort has failed to do the principle of co-operation is rapidly accomplishing."

For some years a few have made an effort to have the county associations affiliated with the Ontario, but heretofore it has failed. No more opportune time than the present could be found. The Ontario Bee-keepers' Association incorporated and an annual grant of \$500 to be distributed for the benefit and advancement of its members will offer alone a strong inducement to the county associations to take steps to stand on the same ground with the Ontario.

This form of organization in Ontario properly carried out by a large membership, every one active and making every effort by sending in reports of honey crop, increasing the membership, giving all information of value to the association, would give us an association and co-operation which cannot but help to put bee-keepers upon a more solid footing. We are passing through a stage through which every new industry must pass, and are rapidly increasing the production of an article to which (as food) the public have, as yet, learned to have no demand. The price is coming down and is placing it at a figure that will open for it doors which have heretofore been shut against it, and the result will be, a larger market, a greater demand, and by proper efforts on our part we will be able from day to day to produce the article at a lower figure. All this, and the securing of a more uniform price, can be hastened by thorough organization on our part.

Owing to incorporation we will be on an entirely new footing; let us get on solid ground from the commencement. Would it not be well for county associations to discuss the question of affiliation at their very next meeting, and either express their views by letter or by delegates at the next meeting of the Ontario Bee-keepers' Association, which, if I mistake not, does not meet until winter, therefore giving ample time to all to meet and express their views. This is a vital question for bee-keepers, and the sooner correctly settled the better for the rising industry.

R. F. HOLTERMANN.

Brantford, Ont.

At a meeting of the commissioners, who form the majority of the executive committee of the O. B. K. A., it was decided that the annual business meet-

ing of the association should not be held until after the return of the commissioners from the Indian and Colonial Exhibition now going on. This would make the date of meeting about December. At the meeting to be held then the association will require to be re-formed to meet the requirements of the government in the matter of chartered associations. Another reason for holding the meeting at this date, is that we will then be in a position to receive from the commissioners a full report of their trip and the outcome of their arrangements for a future trade of Canadian honey in England; also a financial statement of their sales and the prices realized. Were it left until the usual time of meeting the report would be stale, and little interest at that time would be manifested. In the meantime it is thought best by the president and executive that a "bee talk" should be had during the last week of the exhibition at Toronto and the matter was left with the Secretary-Treasurer to decide as to the date of meeting etc. Mr. Couse set apart the evenings of Tuesday and Wednesday Sept. 14th and 15th. The place of meeting will probably be decided before another issue of the JOURNAL, when it will be given. The probabilities are that the city council will, as in former years, grant us the use of the council chamber for that purpose.

FOR THE CANADIAN BEE JOURNAL.

PROMACHUS VERTEBRATUS? SAY.

I am not quite satisfied as to the specific identity of the "bug" you last sent me, but of Dr. Williston's six species it agrees best with *P. vertebratus*, yet it may be an undescribed form. From the condition of the specimen when it reached me, I judge it was captured in Ontario, if so, it is the first reported capture and I would be very thankful for a large series of specimens.

All members of the genus prey on other insects largely on Hymenoptera. Often on the honey bee. A related species *P. fitchii* O. S. is especially destructive, one individual killing 141 bees in a day.

Another related species *P. bastardii* is common around Toronto. I have seen them capture and kill bumble bees. They dart upwards with an ill-natured "bizz" and pounce on the flying bee from above grasping it under the wings with their powerful fore legs while with the hind legs

they prevent the bee from turning up the abdomen or in any way using its sting. The immense beak is quickly thrust into the thorax of the bee which dies almost instantly. A few seconds' enjoyment of the sweetest tit bit and *Promachus* is ready for another victim.

Should this new insect become numerous it may prove a formidable enemy to bee-keepers.

If the species be Canadian I will send you a full description. But please send me more specimens.

WM. BRODIE.

325 Parliament St., Toronto.

The "bug" referred to above came from Mr. D. McFarlane of Tilsonburg, Ont. He will note Mr. Brodie's remarks, and if possible send him further specimens, when they will be reported on in the *JOURNAL*.

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.

DUMMIES FOR CONTRACTING BROOD CHAMBER.

QUERY No. 105.—In his book on bees Dr. Miller speaks of using division boards and dummies to contract brood chambers. I see no description of dummies in the book. Will he please describe them in the *C. B. J.*?—G. W.

DR. DUNCAN, EMBRO, ONT.—It is likely they mean the same thing.

H. D. CUTTING, CLINTON, MICH.—I presume Dr. Miller will answer this.

DR. A. B. MASON, WAGON WORKS, O.—Perhaps he will if you ask him. Try it and see.

PROF. A. J. COOK, LANSING, MICH.—I suppose they are the same. I prefer the former name.

O. O. POPPLETON, WILLIAMSTOWN, IOWA.—This question is for Dr. Miller only to answer.

DR. J. C. THOM, STREETSVILLE, ONT.—As this is referred to Dr. Miller to answer, I need not describe them.

ALLEN PRINGLE, SELBY, ONT.—Dr. Miller will doubtless answer. I have not yet had the pleasure of reading the Doctor's book.

G. M. DOOLITTLE, BORODINO, N.Y.—I use one inch board the size of a frame with a top bar to a frame nailed to it for it to hang by.

H. COUSE, THE GRANGE, ONT.—It has been my impression that dummy is another name for division board. We will hear from the author.

DR. C. C. MILLER, MARENGO, ILL.—I was surprised G. W. could not find description of dummy and still more surprised when I could not find it myself. It is simply a plain inch board just the size of a brood frame with a top bar nailed on it. Most of them are, however, only $\frac{3}{8}$ inch thick, the top bar being $\frac{3}{8}$ x $\frac{3}{8}$.

J. E. POND, FOXBORO, MASS.—A division board, as I understand it, (I don't know that Dr. Miller will agree with me, however), is one that fills the whole hive tightly, while a dummy is a division board the same size as the frames of comb in the hive, and is used simply to fill up space. The bees cannot get by the division boards, but can travel all around the dummies.

JAS. HEDDON, DOWAGIAC, MICH.—This valuable contraction system which gives us control in breeding workers, so that we may go to the expense of rearing them to be on hand only when needed, is fully described and illustrated in one of my articles in the *American Bee Journal* for 1885, page, 487, and in my book, pages 82-3. With the New Hive, no dummies are used or needed, as has been intimated in a back number of this *JOURNAL*, by some contributor.

THICK OR THIN COMBS FOR EXTRACTING FROM.

QUERY No. 106.—I have some 300 closed end frames, two inches wide filled with drone comb, which are used for the extractor. Would combs one and one-half inches thick be preferable to these thicker combs? If so, why?—R. M. R.

H. D. CUTTING, CLINTON, MICH.—Yes, for many reasons.

G. M. DOOLITTLE, BORODINO, N.Y.—I think I should prefer the thick combs.

O. O. POPPLETON, WILLIAMSTOWN, IOWA.—No, I wish all my drone comb was two inches thick.

ALLEN PRINGLE, SELBY, ONT.—I should think not, if they are simply used for storing and extracting.

DR. J. C. THOM, STREETSVILLE, ONT.—I do not see any reason why the thinner combs would be preferable.

PROF. A. J. COOK, LANSING, MICH.—I think not, for extracting, unless the combs trouble by breaking out.

M. EMIGH, HOLBROOK, ONT.—I would prefer

the combs wide. The queen will not be so likely to lay in them.

DR. C. C. MILLER, MARENGO, ILL.—There may be an advantage in the larger surface the thinner combs would give in, the same cubical space. Would not honey ripen faster?

DR. DUNCAN, EMBRO, ONT.—Combs ought to be the same thickness both in the supers and in the brood-chamber, because you could change them if desired to build up or feed in the fall, if your hives are light.

JAMES HEDDON, DOWAGIAC, MICH.—Yes, if the queen is allowed access to them. In that case, I should prefer all worker combs. If, however, queen-excluding honey-boards, or dividers, are used, I should use them now I had them.

H. COUSE, THE GRANGE, ONT.—Can't say from experience, as I don't think any of my store combs are more than one and one-half inches wide. One advantage in the wider combs would be, the queen would not be so apt to lay in them.

J. E. POND, FOXBORO, MASS.—My impression is that they would not, and for the reason that more honey in proportion, (and largely so) will be stored in the deeper cells, as it takes as much time etc., to cap the shallow cells, and but a trifle more time to fill the deeper ones. The rule is that honey is stored in deep cells, and under no circumstances is brood sealed up in cells more than seven-sixteenths deep.

DR. A. B. MASON, WAGON WORKS, O.—Yes, and I prefer them even thinner. For eighteen years I have worked for extracted honey, and the thick combs, full and sealed over, are too heavy to handle and are very liable to be injured in the extractor, unless they lay evenly against the sides of the comb basket. From what experience I have had with thick combs, it seems to me the bees do not evaporate the honey as rapidly as in thinner ones.

BY THE EDITOR.—We prefer one and one-half inches to two inches. Our reasons for the preference are these: the shallower the cells the more combs it takes to fill the space, thus giving more surface for evaporation, and the honey is ripened much sooner. We have examined honey sealed over in both the deep and the shallow frame and found the latter much the thicker and apparently richer. To test this matter let any person take sections from the same super with

two inch combs or more, then others with one and one-half, or less, and note the difference in the quality of honey.

SUNDRY SELECTIONS.

REMARKS ON WINTERING.

W. J. MARTIN.—If you were going to winter bees in a damp cellar, what temperature would you prefer it?

Not below 45° and not above 50°, when colonies are uniform in strength. For light, small colonies we would prefer the temperature from 50° to 60°, according to size.

What number of combs and distance apart do you consider best for an average colony?

Depends entirely on size of comb. Think from 5 to 6 square feet of comb, if kept the proper distance apart, is better than more.

When would you wish the queen to lay eggs from which to raise bees to winter best?

In time to have the bees hatched and from fifteen to thirty days old before going into winter quarters.

Would dry cedar sawdust packed behind the division board be a benefit?

Certainly.

Would you prefer the half-story on and filled with the same material?

Yes.

What kind of bee-quilt is the better, the old one, or a fresh one of open material?

Belgrave, Ont., Aug. 21st, 1886.

We prefer a fresh quilt and of open material that the moisture may pass off. But very strong colonies that can produce sufficient heat to drive moisture from the brood chamber would winter well with the old cloth which would be covered with propolis.

THE CANADIAN BEE JOURNAL

JONES, MACPHERSON, & Co.,

EDITORS AND PUBLISHERS,

BEETON, ONTARIO.

WEEKLY, \$1.00 per Year, Postpaid.

BEETON, ONTARIO, AUGUST 25TH, 1886.

In reference to the Bray Clamp that is advertised in our columns, we would say that having noted Mr. Bray's success and management of that particular style of clamp for the last four years we can assure our readers that it possesses merit. Notwithstanding the fact that we have a number of bee houses and cellars in

which to winter our bees we shall use the system in two or three of our yards the coming winter.

Friend Clarke, not content with being a hibernationist, must needs come out as a tricyclist, so we learn from the Guelph Mercury in the following paragraph:—Rev. W. F. Clarke, who for some time past found walking a difficulty and painful, owing to sciatica, has purchased a challenge tricycle, manufactured in his native city of Coventry, England, and hopes to secure pleasant and speedy locomotion, by its use, as soon as he has acquired the mastery and management of it. We wish the experiment success.—We add our wish for a successful experiment to that of the Mercury.

HONEY IN EXCHANGE FOR SUPPLIES.

We are already decided that this will be a great advantage to the producer. They can thus dispose of their honey and lay in a stock of supplies for next season. We have dozens of our customers now in correspondence, and, as we can take all the honey that comes at a fair price, we expect to hear from lots more. We wish to impress one or two matters on the minds of our customers to save trouble and correspondence: When writing us, always send a sample of the honey you wish to sell, and say how much you have to dispose of. We can then advise you at once as to whether everything is satisfactory, and thus save a good deal of correspondence. We shall in this issue prepare a price-list, which will be subject to weekly changes, and which will appear regularly. The prices quoted this week are a good deal higher than those at which large quantities of honey have been bought, but as we pay for honey in supplies, we give for it just what we expect to get. It may be well here for us to say that we sell very little honey in a retail way. Our sales are all to the wholesale trade, and the prices quoted in our "Honey Column" are our figures to that class of purchasers.

CONVENTION NOTICES.

Mount Forest Bee-Keepers' Convention, in Town Hall, Mt Forest, on Sept. 2nd at 2.30 p. m. J. H. DAVISON, Secretary.

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. CURTING, Sec., Clinton, Mich.

The St. Joseph (Mo.) Inter-State Bee-keepers' Association will hold its annual meeting on Wednesday evening, Aug. 11, 1886. Program later. E. T. ABBOTT, Sec., St. Jos. (Mo.)

North American, at Indianapolis, Ind., Oct. 12, 13 and 14. F. L. DOUGHERTY, Sec. Indianapolis, Ind.

BRANT BEE-KEEPERS' ASSOCIATION.—The above association will meet at the Kirby House, Brantford, at 2 p. m. Saturday, August 28th. Fall management of bees, marketing of honey and kindred topics will be brought up. All are invited to take part.

R. F. HOLTERMANN, Brantford, Sec., Treas.

The Alvinston Bee-Keepers' Association will meet in the Council Chamber, Alvinston, on Wednesday, Sept. 1st, at 10 o'clock a. m. It is expected that a number of prominent Bee-Keepers will be present. Bee-Keepers of the county of Lampton are especially requested to attend as the members wish to extend this to a County association. J. R. KITCHIN, Secretary.

The Iowa State Bee-Keepers Association will meet on the Fair Grounds in Des Moines Tuesday, September 7th, 1886, at 2 o'clock p. m., continuing in session during that and the following two or three days. A large and substantial tent has been secured and now at hand for the use of the society. Any or all of the 6,000 bee-keepers of our State are urgently requested to be present and help make the meeting a pleasant and profitable one, and a hearty invitation is extended to all visiting brothers from other States. O. O. POPPLETON, President. A. J. NORRIS, Secretary.

SPECIAL NOTICES.

REDUCED PRICE OF SECTIONS.

We have a good many thousand sections cut and stacked up in boxes ready for shipment, and if there are any who feel like laying in a good lot of sections for the season of 1887, we will give them a specially low quotation, so that after counting the interest on the money for eight or ten months, there will still be a good margin of profit in their favor. Of course these quotations will only apply to regular stock, unless where orders are for over 10,000 in odd sizes. Regular sizes are 3 1/2 x 4 1/2 and 4 1/2 x 4 1/2 and in widths of either 1 1/2 or 1 3/4 inches. The prices we quote are, per 1,000, \$4.25; 10,000 or over, \$3.75. By the way, we didn't mention that these prices are for one-piece Linden (formerly Basswood) V groove sections. Dovetailed and spruce sections, we will furnish at 10% off price-list rates.

PRICES CURRENT

BEE-SWAX

Boston August 25th 1886

We pay 35c in trade for good pure Beeswax, delivered at Boston, 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

Brood Foundation, cut to "Jones' size" per pound... 47c
over 50 lbs. 45c
cut to other sizes .. 48c
over 50 lbs. 46c
Section .. in sheets per pound 58c
Section Foundation cut to fit 3 1/2 x 4 1/2 and 4 1/2 x 4 1/2, per lb. 50c
Brood Foundation, starters, being wide enough for Frames but not, three to ten inches deep... 43c

HONEY MARKETS.

BEETON.

For extracted honey, put up in our style 60 lb. tins, (packages allowed 30c.) we offer, in supplies of any kind:

Bright, clear honey in Linden, clover or Cts distinct flavors..... per lb. 09
 Bright, clear honey in mixed flavor.. " 08½
 Amber colored " " " " " 08

These prices are for honey delivered in Beeton, freight paid.

CHICAGO.

Since my last quotation honey has come forward very freely and from information now at hand it would appear that the Middle States will have all the Honey produced at home this season that can be marketed or consumed, and that we shall not be apt to draw upon the Eastern States as we did last year. Best grades of white comb to-day at thirteen cents, Extracted six cents and beeswax 25 cents.

R. A. BURNETT.

Chicago.

CINCINNATI.

No change in the market. Demand is slow for all kinds and shapes of Honey. Prices are nominal. Extracted honey ranges between 14x 15 cts in a jobbing way. Demand for beeswax is good and arrivals are fair. We pay 20 cts. per lb. for good yellow.

CHAS. F. MUTH & SON.

DETROIT HONEY MARKET.

Honey is selling slow. Fruit seems to occupy the attention of buyers. Best comb in one pound sections put up in attractive crates sells at 13 cents per pound, occasional sales at 14 cents. We pay 23 cents for fair average wax.

M. H. HUNT.

Bell Branch.

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.

NEW YORK.

The honey market is almost devoid of interest, more particularly in comb honey. We find quite a large stock in dealers' hands, carried over, although our stock is light; what we have is dark and off grades. It is difficult to tell what prices will be on the coming crop, but from reports received from nearly every section of the country we infer the crop will be heavy, and prices will rule accordingly. Present quotations are as follows:—Fancy white comb 1 lb. sections, 10 to 12c.; fancy white comb, 2 lb. sections, 8 to 10c.; buckwheat comb honey, 1 & 2 lb. sections, 5 to 8c.; extracted white clover, 6c.; extracted California honey, 4½ to 5c.; extracted southern, per gal., 45 to 55c.; beeswax, 23 to 25c.

McCAUL & HILDRETH BROS.

We will send Vol. I. of the C. B. J. nicely bound in cloth to new subscribers for \$1.25 or clubbed with current Volume for \$2.00.

EXCHANGE AND MART.

40 COLONIES of Bees for sale at \$5 each. J. HAMBLY, Stirton, Ont.

FOR Bees, Queens, or Honey, we will not be undersold. Bees, full colonies, by the pound or nuclei. Queens, tested or untested. Address, ILLA MILCHENER, Low Banks, Ont.

ADVERTISEMENTS

FOR SALE.

A few colonies of Italian bees. Some Jones' stock in single or double walled hives. S. G. RUSSELL, Thornbury.

Do You

Want to Buy some First-Class Colonies of Bees

• * * NOW ? * * *

Owing to our largely increasing supply-business and the difficulty in securing trained labor for our bee-farms, we will sell for the next month colonies (up to 200) at unprecedentedly low prices. We offer them at once, so that purchasers may have an opportunity of deriving some benefit from them yet. Prospects here are in favor of a first class flow from fall flowers. The bees will be shipped in the Jones' single-walled hive.

Prices will be:
 Colonies, including hive and 5 or 6 frames of comb (balance of 12 empty) with good queen \$5 50
 Over four colonies..... 5 25
 Ten and over..... 5 00
 Colonies including hive and 7 or 8 frames of comb (balance of 12 empty) with good queen..... 6 50
 Over four..... 6 25
 Ten and over..... 6 00

The combs are nice and straight and each one measures about one square foot. The queens are, in most instances suitable to breed from—all will produce good honey gathering progeny. Nearly all of them are last year's tested queens.

TERMS—Cash with order—Delivered F. O. B. car to go by express—and safely packed.

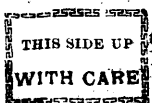
THE D. A. JONES Co. Ld., Beeton.

July, 30, 1886.

OUR PAGE OF SPECIALTIES.

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

Shipping Labels.



These are for pasting on the tops of cases.
 Price, per 10...5c. by mail, 6c.
 " " 100.25 by mail, 27
 " " 1000.1 50 by mail, 1 60

Gem Jars

		Gross.	Half-gross
"Crown" brand	1 Pint	\$14 75	\$7 50
"	1 Quart	15 75	8 00
"	1/2 Gallon	19 00	9 75

Glass Packages



The new screw top, which is taking so well we can ship at an hour's notice. They hold exactly one pound of honey and make a splendid package for jams or jellies afterwards.

Prices per gross.....	\$10 00
" half "	5 25
" per dozen.....	90

Show Cards.



Size 12x18 in. each...05
 " " " per 10...40
 These are just the thing for hanging in the stores where your honey is placed for sale.

Lithographed Labels for Tins

We have lately reduced the prices of these very much. They are now

	Per 1000	Per 500	Per 100
5 pound labels.....	\$8 00	\$4 25	\$ 90
2 1/2 " "	5 00	2 75	65
1 " "	3 50	2 00	50
1/2 " "	1 75	1 15	30
1/4 " "	1 75	1 15	30
Labels for tops of tins.	90	55	15
Printing name and address, first 100.....	30		
Each subsequent 100 up to 500.....	12		
Printing name and address, per 500.....	75		
" " " " 1000.....	1 25		

60 lb. Tins for Extracted Honey

WE MAKE THEM.

For shipping honey in bulk, this package takes the lead. It is the most convenient size, is encased in wood so that it will stand any amount of handling. Has a large screw top so that granulated honey may be taken out as desired.

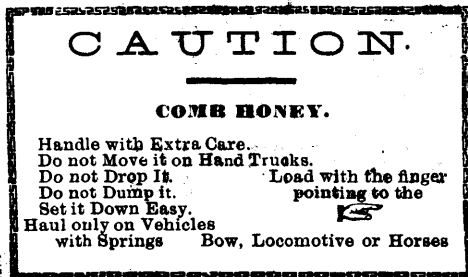
This is the package recommended by the commissioners to the Colonial exhibition. We have sufficient to store 100,000 lbs. of honey ready to ship by return freight or express.

SCALE OF PRICES.

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

The cases are made of planed lumber.

Shipping Labels for Comb Honey



These are 7 1/2 x 5 1/2 inches, printed in red ink, in large bold faced type, on heavy paper and are invaluable to all shippers of comb honey. Keep them in stock and can furnish them by return mail. Shipments to England should have these on. Prices: 25, 12c.; 50, 20c.; 100, 35c.; 500, \$1.50; 1000, \$2.75.

PRICES.

25, 12c.; 50, 20c.; 100, 35c.; 500, \$1.50; 1000, \$2.75.

Honey Boxes For Sale.



We have in stock a large lot of Manilla Boxes, made to hold the 4 1/2 x 4 1/2 Sections, on which the Honey Comb Labels, A and B are used, (see illustration), and we can offer them at very reasonable rates. Each box has a nice tape handle, and the package is certainly a very beautiful one.

MANILLA BOXES. Per 1000. Per 100. Each
 4 1/2 x 4 1/2.....\$14 00 \$1 50 2 cents.
 Send 3 cent stamp for sample.

Dextrine.

This comes to you in the shape of a powder, and is used for the purpose of gumming honey-labels on wood and tin. Dissolve it in a little hot water, applying with a brush, and brush the gum over as well as under the label. Put up in packages of quarter half and one pound:

1/4 pound.....	9c.	By mail 6c. extra
1/2 "	15	" " 12
1 "	25	" " 24

Suitable for the Season.

THE Winter Problem Solved!

After twelve years of experimenting I have succeeded in solving this great problem of wintering bees without loss. I have also overcome Spring Dwindling so perfectly that with me it is a thing of the past. Four years ago I built my first underground clamp and since that time I have each year wintered a large number of colonies without the loss of one. It is positively the only perfect system of wintering and springing bees. See Canadian Bee Journal, Nov. 18, 1885, page 531.)

I Am Making Models of this Clamp in Cardboard

with three hives packed in 't as I prepare them for winter, with printed directions for using, for the

Small Sum of One Dollar.

The Model Is so Complete and Simple that a child can understand it.

MODELS SENT BY MAIL.

SAMUEL BRAY,

ALLISTON P.O.,

ONT.



Flat Bottom Comb Foundation.
High side-walls, 4 to 14 square feet to the pound
Wholesale and retail. Circular and samples free

J. VANDEUSEN & SONS,
SOLE MANUFACTURERS,
SPROUT BROOK, MONT. CO N. Y.

DAYS 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.

Feeders.

The demand for feeders seems to be growing. We offer three different styles suitable for different seasons :

ENTRANCE FEEDERS.

Double the usual size, each..... 15c
" " per 100.....\$12 50c

THE CANADIAN FEEDER.

This is for fall feeding and enables you to feed 15 to 20 lbs. at once with no danger of robbing.

Made up, each.....\$ 60
" " per 25..... 12 50
In flat, each..... 40
" " per 25..... 8 75
" " 100..... 30 00



THE D. A. JONES CO.

A BIRD'S EYE VIEW OF BEE KEEPING

—BY—

WM F. CLARKE,

*** IS * NOW * READY. ***

The Price is 25c., five for \$1.

Special terms to the Trade. It is Interesting, Readable and Practical.

JONES, McPHERSON & CO.
PUBLISHERS, BEETON, ONTARIO.

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,

3-1-1. Manager, Beeton, Ont

FRIENDS If you are in any way interested in

BEES AND HONEY.

We will with pleasure send you a sample copy of our **SEMI-MONTHLY GLEANINGS IN BEE CULTURE**, with 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.

13,000 SOLD SINCE 1876,

The fourteenth thousand just out. 10th thousand sold in just four months. 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 Michigan

MUTH'S HONEY EXTRACTOR.

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

CHAS. E. MUTH & SON.

Cor. Freeman & Central Avenues, Cincinnati, O.

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 **Van Dusen-Nellis**. The **FALCON**, **CHAT** Hive, with movable upper story, continue to receive the highest recommendations as regards its superior advantages for **wintering** and **nourishing** bees at all seasons.

DOVE-TAILED SECTION.

same price as one-piece. Also manufacturer of **VAN-DERVOORT FOUNDATION**. Dealer in a full line of **Bee-Keepers' Supplies**. Send for Illustrated Catalogue for **1886**. Free. **Prices always reasonable**. Mention this paper.

I. R. GOODE'S PRICED LIST.

Barnado Rev. P.

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.

- Six Warranted Italian Queens for.....\$ 5
- Twelve..... 9
- Single Queen..... 1
- First quality Sections.....\$3.75 per 1000.

I am up with my orders and expect to be able to send Queens by return mail from this on.

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. E. MASON & SONS, Mechanic Falls, Me.
- J. A. HUMASON, Vienna, O.
- C. J. GRAVES, Birmingham, O.

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

COMPLIMENTARY

and **UNSOLICITED TESTIMONIALS** from as many bee-keepers in 1883. We **Guarantee every inch of our Foundation equal to sample in every respect.**

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

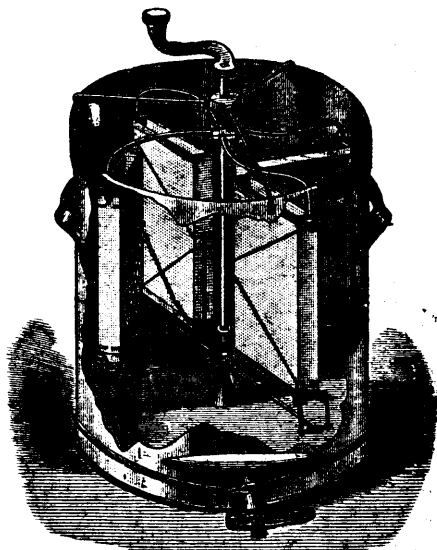
1886. **ITALIAN QUEENS.** 1886.

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

J. T. WILSON,
Nicholasville, Ky

Honey Labels, Cans and Packages.

We have an entirely new design of honey labels specially got up to develop the honey market, a handsome and practical lithograph. Send 5 cents for samples. We are handling the latest improvements in honey cans, the Ross pressed cover, and can supply them and other styles of can from 1lb. to 60 lb., with labels at bottom prices. The



STANLEY AUTOMATIC HONEY EXTRACTOR

is supplied by us from Brantford, Ont., at about the same price as that of patentee and manufacturer, Mr. G. W. Stanley, Wyoming, N. Y., with whom we have made arrangements as his sole agents in Canada. Comb and extracted Honey wanted in exchange for Honey Extractors, Honey Knives, Hives and Comb Foundation.

Send for price list of goods.

E. L. GOULD & CO,

BRANTFORD, ONT.

FRANK W. JONES,

BEDFORD, QUE. AGENT FOR

Pelham, Vandervort and Root Foundation Mills

and Manufacturer of Apiarian Supplies.