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VOL. II, NO. 32.

1886

NOVEMBER 3.

PUBLISHED EXCLUSIVELY IN THE INTERESTS OF THE HONEY PRODUCER



JOURNAL

APR 24 1874

THE FIRST \$ WEEKLY IN THE WORLD

BIBLIOTHEQUE NATIONALE

ONE DOLLAR PER YEAR

THE GREATEST POSSIBLE GOOD TO THE GREATEST POSSIBLE NUMBER

PUBLISHED BY
JONES, MACPHERSON & CO.
BEETON ONT.

CHAS. B. STEPHENSON

PUBLISHERS' NOTES.

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

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

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

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

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

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

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

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

Subscription Price, \$1.00 per Annum Postage free for Canada and the United States; to England, Germany, etc, 70 cents per year extra; and to a countries not in the postal Union, \$1.00

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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).....	\$2.25	\$2.00
A B C in Bee Culture (cloth).....	2.25	2.00
Quinby's New Bee-Keeping (cloth).....	2.00	2.25
Alley's Handy Book (cloth).....	2.00	2.25
Langstroth on the Honey Bee (cloth).....	3.00	2.75
Heddon's Success in Bee Culture... 1.50	1.40	
"A year among the Bees, by Dr. C. C. Miller.....	1.75	1.60
A Bird's-eye view of Bee-keeping by Rev. W. F. Clarke.....	1.25	1.15

"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.

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

BEEES AND HONEY

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

M. RICHARDSON & SON.

Port Colborne, Ont

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. Lange troth. 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, I. Root, in paper 50c.

SUCCESS IN BEE CULTURE as practised and advised by James Heddon—price 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 25c

FARMERS BUY THE CELEBRATED

LARDINE MACHINE OIL,

—AS IT—

EXCELS ALL OTHERS.

Manufactured solely by

McCOLL BROS., Toronto.

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YES! I take the Poultry Monthly and consider it the best Magazine published, by a large majority. My fowls are now the best paying stock that I own. I have cleared over \$400 thus far, and business is just booming. I would advise every poultry keeper to subscribe for it without delay, as it is brim full of practical information.



NO! I did not subscribe for the Poultry Monthly, but intend to do so at once. I am told it is the best poultry journal published. I said I was too poor. My hens did not lay. They sickened and died. I had no poultry paper to tell me what to do, all because I wanted to save a dollar. I had to sell my place under mortgage. The "old woman" has gone back on me. My hair is getting thin, and the fact is I feel bad.

Special Offer For One Dollar

We want to place the MONTHLY in the hands of every one interested in poultry and pet stock, and will send the paper for the balance of this year free to all who subscribe now at \$1.00 for 1887 and mention the C. B. Journal.

Remember, the regular price of subscription is \$1.25 per annum, so do not fail to take advantage of this liberal offer.

Address,

THE POULTRY MONTHLY.

P. O. Box 215, Toronto, Can.

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., \$1.25 per M.; 2 lb, \$1.25 per M
14 oz. Glass Honey Jars \$3.00 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

THE CANADIAN BEE JOURNAL

AND

Bee-Keepers' Magazine

Both for the price of the

CANADIAN BEE JOURNAL.

See advertisement on another page for particulars

Tools For Bee-Keepers

HAMMERS.

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

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

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

SCREW DRIVERS.

With good hardwood handles and of the best steel—nicely finished, round bits, in two kinds, No. 1, 3 inch bit 18c.; No. 2, 6 inch bit, 20c.

TWO-FOOT SQUARES.

In iron squares we have two kinds—the first of these is marked down to 3/4th of an inch, and is marked on one side only, the price is, each, 20c.

The other style is marked on both sides down to 4/8th of an inch—price, each, 35c.

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

TWO FOOT RULES.

A splendid line in rules we offer at, each, 18c.

Then we have a nice box-wood rule at, each, 25c.

HAND SAWS.

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

PANEL SAWS.

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

The 20 inch are silver steel (same make) price \$1. These last are a beautiful saw for that money.

PLANES.

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

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

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

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.

PREMIUM LIST!

PRESENTED FOR NEW SUBSCRIBERS.

WE WISH TO LARGELY INCREASE THE PRESENT LIST OF THE

CANADIAN BEE JOURNAL

before the new year, and to do this we make offers of the most liberal nature:

ONE SUBSCRIPTION.

- To all new subscribers who send their names at once we will forward a copy of the little book, "Foul Brood, Its Management and Cure," for \$1.00—value.....\$1 10
 One subscription to the JOURNAL with \$1.15 will entitle you to a copy of the new book "A Bird's Eye View of Bee-Keeping," by Wm. F. Clarke, Guelph,—value 25c—free.
 One subscription to the JOURNAL with \$1.25 will entitle you to a virgin queen (value 50c) during the season of 1887—free.

TWO SUBSCRIPTIONS.

- Two new subscribers with \$2 will entitle the sender to any one of the premiums below, free:
 One copy of Clarke's "Bird's Eye View of Bee-Keeping."
 A virgin queen during season of 1887—value 50c.
 5 Show Cards (two colors Honey for Sale.)
 One Winter Feeder (made up).

THREE SUBSCRIPTIONS.

- Three new subscribers with \$3 will entitle the sender to any one of the premiums below, free:
 One copy of Haddon's "Success in Bee Culture"—value 50
 One \$ Queen during the season of 1887.
 One Canadian Feeder (made up).

FOUR SUBSCRIPTIONS.

- Four new subscribers with \$4 will entitle the sender to his own JOURNAL for one year, and a copy of "A Bird's Eye View" both free, or four names and \$4 will entitle the sender to any of the premiums below, free:
 One Queen, worth \$1.50, during the season of 1887.
 One copy of Dr. C. C. Miller's new book "A Year Among the Bees," value..... 75

FIVE SUBSCRIPTIONS.

- Five new names with \$5 entitles the sender to any of the following premiums free:
 One copy Root's A.B.C. (in paper) postpaid, value..... 1 07
 One Honey Knife, by mail, postpaid, value..... 1 08

SIX SUBSCRIPTIONS.

- Six new names with \$6 will give you free any one of the following:
 Root's A.B.C. in Bee Culture (cloth) value..... 1 25
 Cook's "Manual of the Apiary" (cloth) value..... 1 25
 Honey Knife, ebony-polished handle, value, postpaid..... 1 33
 One No. 3 Smoker, fancy finish..... 1 30
 Bound Vol. I, CANADIAN BEE JOURNAL..... 1 25
 One Queen, (season of 1887)..... 2 00

TEN SUBSCRIPTIONS.

- Ten new names with \$10 will give you free any of the following.
 One force pump (per express) value..... 2 00
 One Queen Nursery 20 cages (per express)..... 2 50
 One Queen (season of 1887) selected, tested..... 3 00

FIFTEEN SUBSCRIPTIONS.

- Fifteen new names with \$15 will give you free, One No. 1, Wax Extractor, value..... 3 50
 One Heddon Hive, painted and complete, value..... 3 25
 1000 Leaflets, "Honey, Some Reasons Why It Should Be Eaten," value..... 3 25

TWENTY SUBSCRIBERS.

- Twenty new names with \$20 will procure for you free.
 Any style of Lithograph Labels you may desire to the value of..... 5 00
 Two queens, selected tested (season of 1887) at \$3 each..... 6 00

TWENTY-FIVE SUBSCRIPTIONS.

- Twenty-five new names with \$25 will give you free, One Honey Extractor (Jones Patent)..... 8 00
 Or one Set Honey Scales (240 lb) with tin scoop, stamped..... 7 10

Address all your communications to

JONES, MACPHERSON & CO., Beeton, Ontario



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

VOL. II. No. 32. **BEETON, ONT., NOVEMBER 3, 1886** WHOLE No 84

OUR OWN APIARY.

DESCRIPTION OF OUR COMBINATION HIVE.

WE believe that this hive has never been fully described in the JOURNAL nor in our circular. In the latter it is called the "comb honey hive." In reality, however, it is intended for either comb or extracted honey; for extracted honey where bee-keepers object to disturbing the brood-chamber, and for comb honey the brood-chamber is of such a size as to force bees into the sections as soon as the harvest is ready. The hive is not so large that the bees will take too much time to fill the brood-chamber. The inside dimensions of the hives are as follows.—Length $10\frac{3}{8}$ in., width $13\frac{3}{4}$ in., depth $12\frac{1}{2}$ in. The inside measurement of frames is $10\frac{3}{8} \times 12\frac{1}{2}$ in.; in other words it is the frame of the ordinary Jones hive turned on its side. Eight frames and division board go to each hive, or nine frames when no division board is used. There are those who object to using a hive with so deep a frame as in the ordinary Jones hive for comb honey, while the frame turned on its side meets their views. Where Jones' hives are in use at present if it is desired to produce both comb and extracted honey, and some of these hives are required, the combs may be easily transferred from the old frame and fastened in the new by the use of transferring sticks until the bees attach them (the combs) to the

frames. If you wish to use the hive for extracted honey a second story of exactly the same dimensions as the brood-chamber, but minus the bottom-board and cover, is placed over the top of the brood-chamber. To prevent the queen from ascending into the extracting or surplus department use the perforated honey board; this gives you half a hive of eighteen frames from which to extract and enables you to leave the brood-chamber always intact, so that any damage which some bee-keepers claim, is done by extracting from the brood-chamber, is thus obviated. If comb honey is desired, supers $4\frac{3}{8}$ inches deep are placed over the brood-chamber, they may be tiered up as in the ordinary way. The second story is so made that it will take either $3\frac{1}{2} \times 4\frac{1}{4}$ or $4\frac{1}{4} \times 4\frac{1}{4}$ sections. In the first instance 1 strips are used, in the second skeleton crates, or should you desire, section frames may be used in the surplus arrangement; these are arranged so that they may be inverted at will.

Quite a number of these hives are in use and we shall be able to give our readers the opinion and experience of those who have tried them during the past season.

LAST PREPARATIONS FOR WINTER.

This is the season of the year when the final "look-over" should take place—the colonies should all be gone carefully over, and examined to see that everything is sweet and clean, tha

there are not too many combs, and last but not least, that all the colonies have sufficient stores.

If you winter in clamps, where the bees can get a chance to fly whenever the weather is sufficiently warm to admit the work of clamping should be done at once, as even when in clamps they can fly as those outside till the weather gets too cold, and they are safe from sudden changes of weather. This applies equally to packing on stands. Where bees are wintered in bee-house or cellar the precautions mentioned in the first paragraph, should be taken, and when the weather appears to have "settled down" for the winter, the bees should be carefully carried to the bee-house or cellar and treated as has been explained in previous numbers of the JOURNAL.

See our combination offer of the
CANADIAN BEE JOURNAL,
 and Bee-Keepers' Magazine on
 page 636.

CANADA AT THE COLONIAL.

MR. JONES writes under date Oct. 9th, as follows:—The Exhibition closes Nov. 10th, and from present appearances the larger proportion of our stock will be sold in a retail way before that date. We are certainly creating a demand for Canadian honey and have done much towards overcoming prejudices, which have arisen against the foreign product, owing to the fact that much of the American honey was adulterated, not by American producers, but by middle men. We are frequently asked "Where shall we get more Canadian honey when present purchases are consumed? Who will be your agents in England?" The latter accompanied by a caution against certain parties who have become notorious as American honey adulterers. This is a matter over which we must exercise much care. We must see that our honey reaches the consumer in the same pure state that it leaves our hands. American honey will never be looked upon as pure unless the producers adopt some such plan as we have. We are quite sanguine that the object for which

we have been sent here is reaching a successful issue and that in the future we shall find a market for all the surplus honey we can produce at fair prices. Leading British bee-keepers speak of the quality of our honey in glowing terms; English ladies, especially, seem to think it superior to the ordinary production to which they are accustomed. Almost every day many bee-keepers visit us, watch our mode of disposing of the honey and examine our packages, they are convinced that we are popularizing the use of honey and in future the quantity consumed will be much greater than heretofore. The British Bee-keepers Association tendered the Ontario delegates a banquet which was a very brilliant affair. All the Associations in England, Ireland and Scotland were represented. The unexpected kindness and attention we are receiving at the hands of the British bee-keepers could not be surpassed. Our trip here is one long to be remembered and we only hope that we may, in the near future, have the privilege of reciprocating in some way. A full report of the banquet and convention will be found in the *British Bee Journal*.

In a letter to a friend in Canada, speaking of the honey sent by the Canadian bee-keepers to the South Kensington Exhibition, Mr. Corneil says:

"We have had all the hard work we care for. My back became so lame from handling boxes, &c., that I could hardly dress myself yesterday, but I am better to-day. We had in all 695 packages, two hundred of which are encased tins and all the rest boxes that require to be lugged about and opened with the "nail puller" we bought from Toronto, which surprises the "natives" here. The honey is in pretty good shape. My own little crates containing two one-pound sections sell readily at half-a-crown, 60 cents, I now wish we had put up more in that way."

We reproduce from the *British Bee Journal* their report of the conference. Editorially speaking of the meeting the *Bee Journal* says:

"The bee-keepers of Great Britain have good reason to look back on the gathering that took place on Wednesday, the 6th of October, at the Exhibition at South Kensington, with no slight degree of hopefulness and complacency. The primary object of the meeting, namely, to extend the hand of friendship and fellowship to those

who in a distant country are occupied in the same pursuit as themselves, was one that would commend itself to all imbued with fraternal feelings. But while this was the principal cause that introduced so many to gather together, other thoughts must have flashed across their minds when they contemplated the great number that were present at the luncheon at midday and at the conversazione in the evening.

It seems but a short time ago that bee-keeping was an industry struggling for a bare existence, scarcely known or recognised, disregarded by most people, practised by few; but prescient minds conceived the idea that this industry, so weak and so obscure, might be fostered and become a boon to many cottagers and labourers; and fraught with this view they brushed aside the indifference of those around, and by dint of perseverance, energy, and tact—never losing hope, ever marching on, they at length attained their sought-for end. Some that have not reaped,—some have fallen by the way; but still many in our midst that in the past took an active part in the movement can look backwards with joy and thankfulness on the results of their laborious, and with hopefulness can contemplate the future that still lies before them. The sight of so many bee-keepers thus brought together,—representatives of the respective places in which the lot of each is cast,—will cause them 'to renew their strength,' and with more determined resolve proceed on their onward way, and to strive to overtake their still unfinished work.

The day of the Conference at South Kensington will be one that will ever be remembered by those present on the occasion. The arrangements were most satisfactory. The feelings that predominated in the breasts of British bee-keepers toward their Canadian brethren were hearty and sincere, and those feelings found a ready response in the hearts of those whom on this day they delighted to honour. Though embarked in the same pursuit, there will be, we are assured, no undue rivalry, but both, Canadians and British, will combine with all their strength to extend and increase the industry which they have so much at heart; and we may argue, from the spirit that pervaded the meeting, that these endeavours will not be without their full realisation."

A report of the banquet is as follows:

"On Wednesday, October 6th., a quarterly conference of the members of the British Bee-keepers' Association was held at the Colonial and Indian Exhibition. Mr. Cowan, Chairman of the Council, presided, amongst those present

being a large number of prominent representatives of the branch associations.

Mr. W. H. Ellis, President of the Devonshire Association, brought forward the question of introducing a better honey-producing bee than the Ligurian bee, and said that Mr. Woodbury, who had introduced that bee into this country, had attempted also to introduce the Indian bee (*Apis dorsata*), believing that it was a better bee than the Ligurian, and that, as it was much larger, it would exterminate all the other bees (laughter). Following upon the footsteps of that gentleman, he had done all in his power to carry out the views of that gentleman. He had been promised by Mr. Douglas, who had come to England from India for the purpose of taking back Ligurian bees, that specimens of the *Dorsata* should be sent over, but he had heard nothing more about it. He suggested that the question should be referred to a small committee for consideration.

Mr. D. Stewart stated that a number of experiments were being made in Canada with a view of improving the indigenous bees. They did not, however, want to exterminate any species, but only to improve them, and by judicious crossing to obtain a better honey-producing bee, one which would be able to tap the red clover.

The chairman said the subject which Mr. Ellis had raised was a very interesting one, and one which might be very properly discussed this evening when the Canadian bee-keepers would be present and report upon their experiments. He had lately seen Mr. Douglas, who had told him that there were no bees in India which were worth anything at all, and that the *apis dorsata* was worthless as a honey bee. Whether they were useful for crossing remained to be proved. Mr. Douglas was importing Ligurian bees, as he considered they were superior to anything they had in India. The subject then dropped.

A question of considerable interest to County Associations, namely, the grouping the different county centres for third-class examination purposes was discussed, and a resolution duly passed recommending the same for the consideration of the Examining Board.

The members of the British Bee-keepers' Association afterwards met in the Quadrant, where an excellent luncheon served by Spiers and Pond was given in honour of the Colonial visitors, at which upwards of 100 ladies and gentlemen sat down, amongst whom were Mr. T. W. Cowan, the Hon. and Rev. and Mrs. Henry Bligh, the Rev. G. Raynor, the Rev. F. G. Jenyns, the Rev. J. Lawson Sission, the

Rev. W. E. Burkitt, Miss Eyton, Mr. D. A. Jones (Beeton, Ontario), Dr. and Mrs. May (Canada), Mr. S. Corneil (Ontario), Mr. McKnight, (Canada), Pasteur Descoulayes and Mademoiselle Descoulayes (Switzerland), Mr. W. Raitt, Mr. F. Cheshire, Miss Gayton, Mr. J. M. and Miss Hooker, Mr. A. Neighbor, Mr. J. H. Howard, Mr. T. Blow, Mr. J. Baldwin, Mr. W. P. Meadows, Captain Bush, R. N., Captain Campbell, Mr. F. H. Meggy, Mr. D. and Mrs. Stewart, Mr. and Mrs. Otto Hehner, Mr. F. Lyon, Mr. Sambles, Mr. Henderson, Mr. Lemare, Mr. Garrat, the Rev. Dr. Bartrum, Mr. Horton Ellis, Mr. and Mrs. Zehetmayr, and others.

Mr. Cowan presided, and the Rev. Mr. Scott and the Rev. Dr. Bartrum said grace before and after luncheon.

The Chairman, in proposing the toast of the Queen, said he was sure that the spirit of loyalty to Her Majesty was equally as strong in the hearts of their Colonial friends as in those of Englishmen generally. Every bee-keeper knew that if he wished to have strong colonies he must have a good queen. Fortunately in England they had a good Queen, and it was during her reign that Britain's colonial possessions had grown to gigantic power and strength. (Loud cheers.)

The Hon. and Rev. Henry Bligh proposed the health of the Prince and Princess of Wales and the other members of the Royal Family. He said that the thanks of all bee-keepers were specially due to the Prince of Wales who was President of the Executive of the Colonial Exhibition, for his kindness in giving the necessary permission for the holding of their recent Honey Show, which was a grand success, and of which the meeting held that day was the outcome. Not many weeks before their Royal Highness the Prince and Princess had attended the Bee Exhibition held at Norwich, where they evinced the greatest interest in the wonders of the bee tent. Later on in the year, and in another part of the country, Princess Beatrice had kindly assisted their cause by opening the Bee Show held at Southampton, where she gave the prizes to successful exhibitors. He thought the work in which they were engaged was a national one,—he might almost say an imperial one, for they took the greatest pleasure in labouring hand in hand with their brethren in all parts of the British Empire.

The Rev. G. Raynor, in proposing 'Prosperity to the Colonies,' said he thought the Colonies were certain to be prosperous, because they contained a population possessed of all those characteristics of the Anglo-Saxon race which

had shown such wonderful ability for colonising, far greater than any other nation of the globe. When Englishmen looked on and saw the wondrous production of their Colonies (Greater Britain, as they had been termed) they might well doubt whether the mother country could compete with her Colonies of that day. What the future would develop no one could tell, but when they saw that the Colonies could bring to an Exhibition like the present one forty tons of the most superb comb and extracted honey, it behoved the mother country to look around and exert all her energies to keep pace with her children. The difficulty of doing so was apparent in many ways, and not least when they looked at the productions of wheat grain in the Colonies of Australia and New Zealand—far finer than anything that could be produced in Britain. Thirty-five years ago in Kangaroo Island, which was at the present time devoted to the breeding of Italian bees in their pure state, the Legislature of South Australia prohibited the introduction of any other race of bees in that island. They could boast of nothing like that in the old country. They imported Italian bees, but did not attempt to keep a race pure. He thought it was very likely that the Exhibition would become a permanency, in which event they would, he was delighted to say, have many opportunities of fraternising with their brother bee-keepers from the other side of the Atlantic, which he hoped would tend to increase the bonds of amity between the mother country and her children.

Dr. May (Commissioner for Education, Canada,) said he could not find adequate words wherewith to express his acknowledgments of the kind manner in which the toast had been proposed and accepted of 'Prosperity to our Colonies.' The first thing upon which he must congratulate the B. B. K. A. was that they had a taste for the beautiful, which was evident by the presence of so many ladies at that gathering—a proof that bee-keepers were loyal to other queens besides the queen-bee. (Laughter.) On behalf of the Colonies he was glad to say they were a prospering hive who were proud of their connection with the parent stock, and far from entering into rivalry they wished to work hand in hand with the mother country. He hoped they would not think him egotistic if he spoke of his own colony in particular. Very little had been known heretofore about Canada in the old country. Canada had been described, only recently, as being fifty miles wide, and separated by a belt of trees from the north pole. (Laughter.) That was an extraordinary state-

ment. The fact was that they had an area of about 3,500,000 square miles, which made their territory something like the size of Europe. They had a climate which was often spoken of as six months of winter and six months of summer. In that section of Ontario from which their friends the honey-producers came, the winter commenced in the latter part of December and terminated in March. If they could draw a line straight across the Atlantic from South Ontario it would be found to strike somewhere about the latitude of Rome. They would, therefore, understand that Canada was a tract of land which was very prolific and literally flowing with milk and honey. They were a most hospitable people there, and he was sure that if any of their friends in England would pay a visit to Canada they would find that to be a fact. With regard to the honey of his country, their English friends would be enabled to judge for themselves. There was no doubt that Canadians were a people full of indomitable perseverance and energy. They were not content to sit down and be satisfied with present successes. Mr. Jones, as they all knew, had done very much for bee-keeping. He was called the king-bee in his own country. In spite of his unique position in the bee-world he was not satisfied, because he could not find a bee with a proboscis sufficiently long to enable it to gather honey from all sources. He had been all over the world in search of such a bee which he was determined to find or breed if possible. If they could not discover a bee with the desired proboscis they must endeavor to gain their purpose by giving artificial aid to the little insect. (Laughter.) He then referred to the excellent system of free education which prevailed in Ontario, whereby the sons and daughters of rich and poor were educated alike, by which means latent talent, which was frequently to be met with in the children of the poorest classes, was given free scope for development. They also had a Mechanics' Institute, supported by Government for the instruction of adults. He was sorry his education in regard to bees had been very much neglected, but he remembered that little poem which began, 'How doth the little busy bee,' &c., and if they would allow him to improvise upon that, he would say:—

Canada is a great country for honey,
It is there farmers and bee-keepers make lots of money.

Our bees extract nectar from flowers so sweet,
That all nations consider our honey a treat.

(Loud laughter.) With regard to the loyalty of the Canadian people, they claim to be no way inferior to their English brethren. Anything

that affected the liberty of England was a matter of the greatest interest and solicitude to her children across the ocean, who were justly proud of their illustrious parentage. (Loud cheers.)

Mr. Stewart proposed the toast of the 'Ontario Bee-keepers' Association,' coupling with it the names of Mr. S. Corneil and Mr. McKnight, two gentlemen who, as representatives of that Association, had honored them with their company that day. He recommended all present not to leave the Exhibition without seeing the splendid display of honey from Canada then on view. They might be quite sure of the courtesy of the gentlemen named. He had experienced it, and was much gratified with what he had witnessed under their guidance. Although English bee-keepers had made great strides of late years, they would still find something to learn from their Canadian fellow-workers.

Mr. S. Corneil said it afforded him great pleasure to be present at that meeting. Bee-keeping in Ontario was quite a new industry. It was only a very few years ago since he remembered noticing in one of the papers an announcement that their friend Mr. Jones was taking a barrel of honey per day. That would be considered a very small affair in the present day. It was, however, only during the last twelve or fifteen years that the industry had grown to such great proportions. He was quite sure that the news of the cordial reception he and his friends had met with from English bee-keepers would be received with gratitude by his fellow-countrymen. Bee-keepers all over the world had a great deal in common. They wished to discuss and compare notes. They were all learners. He had learnt several matters of importance since his arrival in London. With regard to the production of honey in Canada, he well knew that they had climatic advantages, owing to the large amount of sunshine with which they were favored during the summer months. Their climate was everything that could be desired for the secretion of nectar in the flowers. The assistance rendered by bees to the agriculturist was well appreciated in his country. They gathered the finest honey from the clover fields, and the farmers found from common observation that when their farms were close to a large apiary of bees, their fields yielded them far more seeds per acre than would otherwise be the case. Thus the bees conferred a double benefit on man; so much so that most farmers took to bee-keeping in order to increase their crops of clover seed. In Canada there were only five or six millions of people. They

were scattered over a very large extent of territory. Hitherto Canadian bee-keepers had kept at home all the honey they produced. In Britain there were a great many more than five million people, and having heard that honey was constantly being imported from other countries into England, the bee-keepers of Canada thought that whatever profits were to be obtained by imports, friends might as well get them as strangers. They had therefore come over in the hope of securing a small share in the advantages of the honey trade.

Mr. McKnight desired to thank the British Bee-keepers' Association in the name and on behalf of Canadian bee-keepers for the splendid entertainment afforded to their delegates. They recognised the right hand of fellowship extended from the mother country. He could tell his audience that he and his friends would carry home the most pleasing recollections of the way in which they had been entertained by the bee-keepers of Britain. They, as representatives of the Ontario Association, came over to show what their country could produce. Their land was veritably the Canaan of America flowing with milk and honey. If anyone doubted that, let him make his way to the honey exhibition, where he would find conclusive evidence of the fact. They came over to make glad the hearts of their own mother England. Every mother ought to be proud of her offspring, and it must afford her gratification when they conducted themselves in life so as to win her approbation. He was sure that England must be proud when she saw what they had been doing beyond the seas. They had proved that they had not been lying on their oars, and in fact that they had added as much to the glory of Great Britain as her soldiers and sailors had done in years past. They had made primeval forests disappear, and in their place raise up the fruits of the earth. Those were the battlefields on which their victories had been fought and won, and it required a stout heart to engage in those fights. It was an old saying that bee-keepers are a very fine class of people. (Laughter.) Well, there was no question that they possessed some excellent characteristics. Their pursuit necessitated a large amount of moral courage, patience and perseverance. One seldom found a successful bee-keeper to be a cross-grained and bad-hearted man. Possibly the reason of this was that he had a peculiar being to deal with, and one who would defend its home and property with Spartan courage. (Cheers.)

The Chairman regretted the absence of Mr. Pettit, the President of the Ontario Bee-keepers' Association, who had been obliged to leave

that day. Before his departure he requested the Chairman to express his cordial acknowledgments of the kindness of the B. B. K. A.

The Rev. F. Jenyns said he had been asked to propose the health of those who were amongst them as visitors, and whose presence added much to the pleasure of the gathering. He trusted they would do their best to carry into their respective districts a knowledge of what they had seen and heard that day. The meeting was honored by the presence of two distinguished visitors, namely, the Secretary of the Swiss Association, a most advanced bee-keeper, and also the President of the Devonshire Association, whose connection and relationship with Mr. Woodbury would alone entitle him to the respect of all bee-keepers. He felt sure all present would be able to look back on that day with happy remembrances, for it was a remarkable day, not only for the pleasure it afforded to so many bee-keepers of coming together, but because it showed the wonderful development of their favorite industry, which, upon a retrospect of a few years, one would hardly have believed possible. That was a source of great gratification to the B. B. K. A., to whose effort that result, to a large extent, was due. Of course, they could not but be delighted to find that their objects and aims had spread so far west as Ontario. He hoped that meeting would tend to promote the good work in which they were engaged, and strengthen the bonds of friendship which he believed existed among all bee-keepers.

Paateur Descoulayes (who spoke in French), Secretary of the Societe Romande d'Apiculture, said it gave him the greatest pleasure to be able to be present, and to thank them on behalf of himself and other visitors present. He said the bee-keepers in Switzerland were greatly indebted to their Chairman (Mr. Cowan) for much information, always willingly given by him at all times personally, and to his writings. He was well known and appreciated by the Continental bee-keepers. He compared the B. B. K. A. to a large and strong hive that did its work well.

Mr. Horton Ellis also briefly acknowledged the toast, expressing his great pleasure at being present on so memorable an occasion; he added a few words to the effect that he looked forward to the time when an improvement in the honey bee might take place, by means of judicious crossing of the breeds, possibly the Indian with the Ligurian.

The proceedings in the luncheon-room being adjourned, the guests were conducted to the honey-show in the Exhibition, where the mag-

nificent display of Canadian honey, exhibited by twenty-seven members of the Ontario Association, was inspected, their being about forty tons of comb and extracted honey."

The report of the convention held after the luncheon will appear in next issue of the JOURNAL, space will not permit of it in this issue.

Read at the Indianapolis Convention.

FOUL BROOD.

THIS much hackneyed subject has appeared on the programmes of every bee-keepers' convention, county, State or National—so far as my information extends—for the past twenty-five years, or since the first organization of bee-keepers on this continent. Like all unsolved, yet important problems in apiculture, it will not "down" until the whole round of experimenting has been completed, and not even then, unless the necessary means for its cure have been discovered and successfully applied. To this noble element, in the mental "make up," characteristic of Americans, we owe the grand triumphs in science, art, and invention, which, in the aggregate, places the United States far in the "lead" of all nations on the globe. Were it not for this untiring disposition on the part of our apiarists, to seek out and correct the evils which have beset our chosen pursuit, and to render available all discoveries and appliances, both scientific and mechanical, bee-keeping would to-day be where our fathers left it thirty years ago.

In this headlong rush of improvement, as might be expected, mistakes are often made, good things are condemned, and bad ones showed into prominence; yet through the agency of a few patient and careful investigators, assisted by the great corrector—time—the truth finally emerges from the confused mass of clashing opinions all the brighter for having passed the fiery ordeal.

The subject under consideration forms no exception to this general method of treatment, but rather stands as its chief representative. Scores of theories have from time to time been propounded, all confirmed by some and exploded by others, and still our "little pets" continue to be starved, boiled and burned,

It is the purpose of this essay to suggest that probably the true theory and radical cure of foul brood has already been discovered and confirmed, but either through prejudice or faulty experiment, a suspicion of "humbug" has been cast upon it, and so, many suffering apiarists failed to avail themselves of its kindly aid. I refer to what is known as the "phenol cure"

advanced by Mr. Cheshire, of England, the details of whose extensive experiments are familiar to most apiarists. I will not detain you by attempting to enlighten you as to what foul brood is, its appearance and indescribable yet never-to-be-mistaken odor, etc., but I will recite my own personal experience and final complete triumph over it, leaving others to judge the value of the method employed.

In October, 1885, I took charge of an apiary in Cuba, numbering nearly 400 colonies in two-story hives, situated on the side of a hill and completely protected by wide, high sheds from sun and rain. The utmost cleanliness and good order prevailed in all its appointments. The high and dry country and delicious climate left nothing in outward appearance to suggest disease, and yet I found nearly 100 colonies afflicted with foul brood, fifty of which were very bad indeed. The then superintendent had for some time been boiling hives and frames, burning combs and starving the bees, but had about given up in despair, saying that he believed the disease would continue to increase until the whole apiary would be utterly destroyed. I suggested that now would be a fitting opportunity of testing the phenol cure, but I was assured that this cure had been thoroughly tested and found wanting; that its originator was either a humbug, or that his bees had a different kind of foul brood.

That phenol had been used with a lavish hand was attested by numerous empty bottles bearing that label, and by others of larger size containing the liquid mixed ready for use, but that Mr. Cheshire was a humbug I could not tolerate for a moment, and the idea of two distinct kinds of real foul brood was certainly very doubtful. However, I determined on entering on my duties as "new superintendent," to give the formula of Mr. Cheshire a full and fair trial, and if successful to wait sufficient time for the disease to reappear, if it would, before giving my experience to the bee-keeping public. I procured several bottles of pure phenol crystals, dissolved them by placing the bottles in hot water, and put one small measure full of the liquid into a tin pail, then with the same measure I added 499 parts of the mixture composed of $\frac{1}{2}$ pure honey and $\frac{3}{4}$ water, and made a plain mark on the inside of the pail as high up from the bottom as the liquid came, and so had a correct measure by which I could make feed rapidly.

When heated to 150°, Fahr., the bees would eat it with avidity. I placed well filled combs of this feed in open hives in all the infected places, and besides visited the bad cases reg-

ularly every three days, taking out the combs one by one and thoroughly sprinkling them with the liquid. In two or three weeks I could perceive a marked improvement, and in three months the disease had almost entirely disappeared, except in three or four mild cases, purposely left to see if they would get well without treatment. As they did not they were then taken in hand and cured.

Nearly a year has passed, and from frequent and very recent advices direct from the apiary, I learn that it *has not* reappeared, but that the bees are in fine condition, and give promise of great results when the season for surplus again arrives. In the experiments made with phenol, before the one I have recited, the solution was entirely *too strong*, as it turned the combs red; it was used *too sparingly*, and lastly it was not half sweet enough, nor warm enough, and the bees would hardly eat it at all.

Foul brood is not "indigenous" in Cuba, there not being a case on record in all the native apiaries; then how could it occur in this particular apiary? From several circumstances I am led to believe that it came through queens imported from infected districts in some of the British North American provinces. I have made many experiments, and have satisfied myself that the bacilli producing the disease belong mainly to the queen's ovaries. I would like to point out cases where re-queening is necessary in treating the disease, and make several suggestions, but as my essay is now longer than intended, I will close by recommending all interested to follow Mr. Cheshire's formula literally and accurately, and they will not regret it.

A. J. KING.

New York.

OO
 OOO The balance of the year FREE to all who OOO
 OOO subscribe for the CANADIAN BEE JOURNAL OOO
 OOO NOW. See premium offers page 624. OOO
 OOO

Read at Indianapolis Convention.
RENDERING OF COMBS INTO WAX.

WHE rendering of comb into beeswax can be effected by artificial heat, or by the sun's rays. The heating on stoves or by steam is the most usual way, but many inexperienced persons spoil their wax either by melting it without water, or by overboiling, or by using dirty iron kettles. When comb is melted over a stove, it is not absolutely necessary to have an apparatus expressly made for the purpose. Any ordinary boiler will answer. A great

deal of water should be used, and a moderate heat applied. When the wax is thoroughly melted, it can be dipped off the top, by using a piece of wire-cloth shaped like a dipper, hung in the kettle to prevent the coarsest impurities from being dipped out. We have never seen any old combs, no matter how old, that did not make nice yellow wax when treated in this manner, or by the use of a wax-extractor. As a matter of course a good wax-extractor, if properly used, will give cleaner wax at the first melting.

If steam is used to melt comb, it should not be turned directly on the comb, but into the water below it, the steam often damaging the wax, and making it grainy and green looking. This same unpleasant result is sometimes attained by over-boiling.

If some wax remains in the dregs, it is not advisable to throw away these residues. We have never yet seen any process that separated them so completely that they could be called worthless. Wax-bleachers usually press the wax out of them in a small press while hot. But a cheaper way, on a small scale, is to preserve them, or rather the best of them in a box, exposed to the weather, until more comb has to be melted, when they can be melted again with it. The exposure to the weather dissolves the foreign substances, but not the wax, which, to all appearances, is indestructible.

Cappings of honey are melted in the same manner as old combs. It is well, however, to work them, first, in warm water to separate the honey that is left. This sweetened water can be used to advantage in cider or wine making, and for vinegar. Honey-vinegar is the very best that is made.

We have many times heard it said that it did not pay to melt old combs, but this is a mistake. It is not advisable to melt them with nice new comb, but any apiarist who will try rational methods, can find a profit in melting the very oldest and dirtiest combs that can be found.

The heat of the sun, in rendering comb, makes the finest beeswax, as it not only melts it, but partly bleaches it, and we have to thank our Italian brothers for the first idea of this, as well as for the invention of the extractor. Thus far, however, little use has been made of this discovery, but the time is not far distant when the solar extractors will be as plentifully found as steam or stove extractors. This method will have the advantage of giving clean wax at the first melting, without any danger of spoiling it.

C. P. DADANT.

Hamilton, Ill.

C. W. Bates, West Sumner, Maine.—"I like the JOURNAL."

FOR THE CANADIAN BEE JOURNAL.

THE HEDDON HIVE.

NOTICE, on pages 547 and 589, thoughts concerning my late invention which certainly need a few remarks by the inventor.

While we were experimenting with the new hive, during two summers, before the public knew ought about it, we revolved in our minds conceptions of many difficulties and opposition that would rise up against the successful introduction of the new principles and rights of the inventor. Among those not anticipated, however, arises the one of alteration, under the supposition of "Improvement." Nearly twenty kind friends have privately suggested to me what they, no doubt, believe to be inventions and improvements. All of these suggestions related to the detail construction of the hive, or in other words, methods by which my lately discovered principles might best be clothed; and nearly all of them had been carefully considered, a part practically tested, and all discarded as inferior, during our three seasons experimenting.

While invention always involves device, device, by no means, always involves invention, and among all the devices kindly suggested to me, only the one of D. S. Hall, found described on page 547 possesses the merit of invention.

Now, were we like Mr. Hall and some others, unable to support the frames when the case was inverted, by the use of the thumb screws or were we unable to nail on the sides of the hives so that their pressure would not loosen the nailing, we should be glad to adopt friend Hall's invention, but as we have completely overcome these difficulties, without extra expense, and as thumb set-screws are much cheaper, more easily attached, and much more quickly manipulated, and never swell, rot out, or fail in any manner, during the lifetime of the hive, there is no reason why we should, and several reasons why we should not exchange them for Mr. Hall's invention. I believe that Mr. Hall and others, will soon learn that when our hive is well constructed, the frames being made of good, dry pine, of exact dimensions, the screws being of proper size, boiled in tallow, there is no such thing as failure, and like ourselves, will have no drooping down of frames in their apiary, and will prefer them to any other arrangement.

While I am well aware that the detailed construction of my hive may be wide open to improvement, and while I am thankful for all suggestions in regard thereto, I am confident that nineteen-twentieths of all attempts at such improvements will not only prove futile but a damage to all who adopt them, therefore let us be slow in changing, or breaking away from uni-

formity of construction. Several have wondered why we didn't make the brood and surplus cases of equal depth and otherwise alike.

We went all over this ground during our first years' experimenting and while there are two or three reasons for such construction, there are more than a dozen weighty ones against it.

I believe I am not at all prejudiced in my preferences, for any alterations in the detailed construction of the hive leaves it no less my property, both morally and legally, as in fact is any hive which contains even one of the principles of my invention, no matter by whom made or what may be the name given the hive, but I do feel that there is a great advantage to all concerned, in having uniformity of detail construction, as well as of principles and functions, and I will say to all brother bee-keepers that I believe they will do well if before adopting any alterations in construction, they will await the sanction of the inventor who having discovered the principles of the hive certainly should be able to judge wisely of valuable devices in detail construction, even if we had not the genius to devise them.

In closing this topic, I feel it a duty to express my appreciation of Mr. D. S. Hall's genius shown in his invention, and his kindness in presenting it first to me and then to your readers.

JAMES HEDDON.

Dowagiac, Mich.

The above article will be continued next week under the heading, "Inventor's Rights."

SUNDRY SELECTIONS.

"A CORRECTION.

A. L. SWINSON.—In my article, page 592, C. B. J., there is an error. The sentence should read, "Five out of the twelve answers affirm my own opinion—that the drones from pure queens that are mated are not as good as the mother stock, and that they are *contaminative*." Should read, *contaminative*, full stop after, and not "certaminative." "Of others claiming them to be as good as queen stock before being mated, (should be *comma* here and not period.) I would ask of them,—" The word as printed "certaminative" and without full stop after it, and period after word mated, when I put comma, destroys the sense of the first part of my communication. Goldsboro, N.C., Oct. 25, 1886.

ROBBING, FEEDING, ETC.

D. KENNEDY.—I wish you to answer the following questions through the C. B. J., at as early a date as possible, and before putting the questions will give my reason for so doing. I

got an entrance feeder from you on the 31st of last August placed it in position on a hive I thought too light and commenced feeding; fed, as I thought, nearly enough. Bees crowding around the hive. I generally placed the feeder on at night and filled again in the morning then took it off again to let the bees fly. Now, I placed it on another hive and did the same to it. In a few days I lifted the fed hive, and lo! it was lighter than when I began feeding. Now, I placed my hives on a scale, weighed them and noted the deficiency intending to make them all come up to 30 lbs. of stores each for winter. Found some needed 5 lbs. and others 10, and some 15 lbs.; I have some Gallop hives which I tipped back and fed behind division board; others in front with the feeder. To all was fed the amount or quantity required. Then I found that some was short 11 lbs. that only wanted 5 lbs. before feeding and the one I commenced feeding first was completely cleared out, not a bit left and very few bees, these I shook out before another hive. Some ran in, but most of them were too feeble and perished. This finished that one. Now, a colony had a surplus of 8 lbs. after I had fed 68 lbs. to 7 colonies and lost the eighth, I weighed again, found a deficiency of 45 lbs., one of my strong ones now short 20 lbs. This was something new to me, I had thought my bees busy, but it must be the robbers. I looked at Heddon on robbing and Cook. The C. B. J. was consulted, and the Bird's-Eye View interviewed. "Close up the Entrance;" was the way to escape. I did so, but not in time. I believe this robbing has been going on the whole of the past season as my bees did very little for me. Extracting may have induced the first. I have a neighbor who has 13 or 14 colonies, about 50 rods off. These must be the robbers. Please advise me in this matter, for if there is no way to prevent this robbing I might as well, and better, give up keeping bees. The colony I have in the Heddon hive seems to not be molested, or they guard their home better. The questions are as well put as I can, but you will please add any advice your experience may deem best and you will greatly oblige.

Bethany, Ont., Oct. 18, 1886.

We presume your bees are "blacks," friend Kennedy. If so, and your neighbor's bees are Italians, or some other breed, the mystery is pretty well explained in the one word—robbers. But there is another condition which would reduce the stores just about as much, if the first suggestion is not right. The honey flow has been short—in fact the bees have been unable to gather anything during the past ten weeks, and they must *live*—you have, instead of

feeding up *all at once* and thus forcing them to store the feed away for future use, been giving them just enough to increase brooding and while brooding is going on, of course, the consumption of stores would be greater. Not only would what you fed in entrance feeder be taken up, but the stores of honey would be broken on to meet the requirements of brooding. It is a well-known fact amongst advanced bee-keepers that stimulative feeding in the fall—and you was doing nothing more—is sure consumption for any stores in the hive. Never attempt to feed up for winter with the "entrance" feeder, the "Canadian" feeders is the one for this purpose and holds from 12 to 14 lbs. syrup, which, under proper conditions, will all be stored in one night.

What induces or causes bees to rob?

Getting a taste of sweets when nothing is coming in from the fields induces robbing—also feeding in the open air.

Can it be stopped and how?

You can stop it by contracting the entrance to one-bee space, ordinarily? if very bad, wet hay or straw shaken down over the entrance will have the desired effect.

Is there any way to know when robbing has commenced?

Robbing is to be known by the actions of the bees. They show more fight, and are otherwise crosser.

If bees have been robbed this fall, will robbers attack the bees next season if placed on the same stands?

Not likely, unless they are still weak, and there can be no honey gathered in the fields.

Will bees so robbed winter well on sugar fed stores?

As well as any others. There is less danger of robbing where sugar is fed than where honey is fed back.

How soon ought I to put bees in cellar, I have sawdust in section crates placed on top of the hives, now ought I to pack behind division board before putting bees in cellar?

You may pack behind the division boards with dry straw, or if the sawdust is dry it will be all right. See "Our own apiary" in this issue, relative to putting into winter quarters.

STILL WELL PLEASED WITH IT.

A. Lake, Branchton.—"I am well pleased with BEE JOURNAL."

C. F. Hochstein, Hawley, Pa.—"I like your BEE JOURNAL very much,"

Wm. Martin, Ekland, Mich.—"I like your BEE JOURNAL very much so far."

Mrs. C. Dowker, Parkhill, Ont.—"I would not attempt to keep bees without it."

Rev. D. Beattie, Campbellford, Ont.—"I hail its weekly visits with much pleasure and profit."

Geo. Cook, Collingwood, Ont.—"I like the JOURNAL very much; would not be without it."

D. Keddie, Vernon, Ont.—"Enclosed find subscription to CANADIAN BEE JOURNAL, which still continues to please."

Chas. Everts, Pierpont, Ohio.—"I like the JOURNAL very much; you may count me a permanent subscriber for the same."

G. J. Flansburgh, So Bethlehem, N.Y.—"The visits of a weekly bee-publication pleases me, especially one so good as yours."

Jay Dinnick, Watertown, Jeff Co., N.Y.—"The CANADIAN BEE JOURNAL has met with a very pleasant reception upon my table."

G. L. McLaughlin, Cartwright, Ont.—"I am very much pleased with the JOURNAL, and would not be without it for many times the price."

A. W. Darby, Alburgh, Vt.—"I am well pleased with sample of JOURNAL received, if the future numbers are as good I shall like it well."

Geo. F. Beach, Meadows, N.B.—"Enclosed find two years subscription. I don't want to miss a single number of the JOURNAL, I take such interest in it."

THE CANADIAN BEE JOURNAL

JONES, MACPHERSON, & Co.,

EDITORS AND PUBLISHERS,

BEETON, ONTARIO.

WEEKLY, \$1.00 per Year, Postpaid.

BEETON, ONTARIO, NOVEMBER 3, 1886.

See the few out of many recommendations from subscribers who are just renewing their subscriptions.

We are issuing many thousand extra copies of the JOURNAL, and are reaping a rich harvest from the general distribution we are giving them.

There is yet room for many more to undertake to get up a club—and win some of the premiums we are offering—to these premiums we add the *balance of this year free.*

SPECIAL NOTICES.

INCREASE YOUR HONEY SALES.

By a judicious distribution of our leaflets, "Honey, some reasons why it should be eaten" you can sell every pound of honey you have. Customers who used them last season speak very highly of them. Prices with name and address, per 250, \$1.25; 500, \$2; 1000, \$3.25. Send for samples.

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 $3\frac{1}{2} \times 4\frac{1}{2}$ and $4\frac{1}{2} \times 4\frac{1}{2}$ and in widths of either $1\frac{1}{2}$ or $1\frac{3}{4}$ 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.

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.

ONTARIO BEE-KEEPERS' ASSOCIATION will meet in annual convention in Toronto (probably at the city Hall) on Tuesday and Wednesday, 7th and 8th, 1886, when the commissioners of the association will make a report of their trip to England, and other business of importance will be transacted. A full attendance is requested. W. COUSE, Sec.-Treas., Meadowvale, Oct. 25th, 1886.

GREAT UNITED CONVENTION.—The New York State, Eastern New York also the New Jersey and Eastern Bee-Keepers Association will hold their great united Convention in Albany, N. Y., January 18th., 19th. and 20th. This Convention will be one of the largest, if not the largest, ever held anywhere in this country, and it behooves every bee-keeper to attend—a grand exhibit of apiarian fixtures is promised—An unusually brilliant programme will be prepared and announced later. Joint Secretaries.—GEO. H. KNICKERBOCKER, JOHN ASPINWALL, F. E. JOHNSON.

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. 10
Bright, clear honey in mixed flavor.. " 09½
Amber colored " " 09

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

HORNING'S MILLS, ONT.

Demand for honey is very slow. We are offering now for best extracted 10 cents, other

qualities 8 and 9 cents. White comb honey 15 cents, 25 cents allowed for package. We offer the above prices in supplies of any kind except foundation.

S. P. HODGSON.

DETROIT HONEY MARKET.

The market is well supplied with comb honey and no change in prices. Best in one pound sections, 12 to 13 cts. Beeswax, 23 cts.

M. H. HUNT.

Bell Branch.

CINCINNATI.

There is a fair demand for choice comb honey in 1 and 2 lb. sections, which brings 12-15 cts. a lb. in a jobbing way according to quality and neatness of package. There is also a fair retail and jobbing demand for extracted honey in square glass jars, for table use, while the order trade for dark grades—from manufacturers—is improving. Range of prices for extracted honey is $3\frac{1}{2}$ to $7\frac{1}{2}$ per lb. on arrival. Beeswax is in good demand and good yellow brings readily 20 cts. a lb. on arrival.

CHAS. F. MUTH & SON.

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.

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 market for new crop comb honey is just opening. We note an improvement in sales and prices. Most of the comb honey that has arrived is badly colored, which makes it second grade, and we suppose is due to a poor season and long finishing. We quote 1886 crop as follows:—Fancy white comb, 1 lb. sections, clean and neat packages, 15 to 16c.; fancy white comb, 2 lb. sections, clean and neat packages, 12 to 13c.; fair to good, 1 and 2 lb. sections, clean and neat packages, 10 to 14c.; fancy buckwheat, 1 & 2 lb. sections, clean and neat packages, 9 to 12c.; extracted white clover, kegs or small barrels, $6\frac{1}{2}$ to 7c.; extracted California honey, 60 lb. cans, 5 to 5 $\frac{1}{2}$ c.; California Comb, 10 to 11c.; beeswax, 22 to 24c.

MCCAUL & HILDRETH BROS.

PRICES CURRENT

BEESWAX

Beeton, October 27th, 1886

We pay 33c 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		
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 $3\frac{1}{2} \times 4\frac{1}{2}$ and $4\frac{1}{2} \times 4\frac{1}{2}$	per lb.	60c
Brood Foundation, starters, being wide enough for		
Frames but only three to ten inches deep	43c

ADVERTISEMENTS

WANTED!

Comb and Extracted Honey.

QUOTE PRICES.

R. F. HOLTERMANN,

Brantford, Ont.

BEEKEEPERS' MAGAZINE
 Reduced to **25 Cents** per year
 after JANUARY 1st, 1887.
 SAMPLE COPIES FREE.

BARRYTOWN, N. Y.

A GRAND COMBINATION OFFER

We have arranged with the publishers whereby we can offer the

BEE-KEEPERS' MAGAZINE

OF NEW YORK, AND THE

CANADIAN BEE JOURNAL

For the regular price of the

CANADIAN :: BEE :: JOURNAL.

The "Bee-Keeper's Magazine" is a 32-page monthly, the price of which, in 1886, was \$1.00. The publishers, however, have so reduced the price that we are enabled to make this offer. This will give bee-keepers the advantages of two bee journals for the price of one.

120 ACRES SELECTED.

High, gray hummock and pine lands, not subject to over-flow, situated on the

GULF COAST RIDGE,

In Tropical Florida, 80° 50' lon. west of Gr. and 26° 35' north latitude, 16 miles south east of Fort Meyers, 2 $\frac{1}{2}$ miles distant of Ostogo Bay, crossed in its whole length by the lovely Estero Creek, for the culture of Oranges, Mangoes, Grapes, Pine Apples, Bananas, Cocoa-nuts, Datepalms, ect., and winter vegetables. Climate grand and delightful. Health unsurpassed. Water good and healthful. \$25 per acre, in lots to suit purchaser. This offer holds good till 1st of Dec. next, after that prices advance.

50 colonies Syro-Italian bees for sale. Cause of sale: Failing eyesight. Apply to.

GUSTAVE DAMKOHLER,

Punta Bassa, Monroe Co., Florida.

Queen City Oil Works!

The Highest Honors and Gold Medal For Our

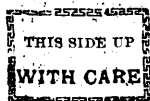
—**PEERLESS OIL**—
 Manufactured only by

SAMUEL ROGERS & CO.

Toronto, On

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



Show Cards.

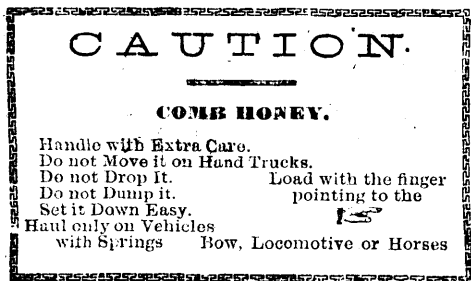
Size 12x18 in. each..05
" " " " per 10..40
These are just the thing for hanging in the stores where your honey is placed for sale.

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 1/2 " " " " " " " "	3 50	2 00	50
1 " " " " " " " "	1 75	1 15	30
1/2 " " " " " " " "	1 75	1 15	30
1/4 " " " " " " " "	90	55	15
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

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. 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.

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

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.

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 MAINE BEE JOURNAL

is the only publication in Maine devoted entirely to Bee-Culture. It is a monthly, full of interesting and instructive reading. The subscription price is only 50 cents a year in advance. Samples copies free. Address
t f JOURNAL, Thomaston, Me

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.

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 00c

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.....\$ 50
" " per 25..... 10 00
In flat, each..... 35
" " per 25..... 7 50
" " " 100..... 25 00

THE D. A. JONES CO.



THE CHAPMAN HONEY PLANT.

In accordance with a previous notice in Bee Periodicals, I am now prepared to fill orders for the seed of the above plant at the following prices —

½ oz., \$1; 1 oz., \$2; 2 oz., \$3; 4 oz., \$5; ½ lb., \$8.
One ounce contains from 1600 to 1800 seeds.

On account of extreme drouth my stock of seed is limited and persons ordering will be served in rotation. The seed should be sown in the early spring and general directions for cultivation will be given on each package.

This plant is not an obnoxious weed and is as easily eradicated as clover. Having carefully watched its habit of growth and its honey-producing qualities for the past six years I believe those who commence its cultivation in a liberal way will be better pleased than by commencing with a small quantity of seed. It has been tested by prominent bee-keepers all the way from Vermont to Nebraska and Ontario. We refer to the report of the Committee appointed by the North American Bee-Keepers' Association held at Detroit in 1885. The Committee reported at the Indianapolis, Ind., convention held Oct. 12th to 14th, and their report will be found in all Bee Journals publishing the report of that convention. Write all orders plainly and give your post office address in full.

H. CHAPMAN,

83-103 Versailles, Cattaraugus Co., N. Y

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.

FOUNDATION MILL FOR SALE

I have still on hand one 12 inch Root Mill, latest pattern, new this spring, and used very little, in good condition every way for which I will take \$26. Just as good as new, everything included, free at express office. First come, first served. Samples of its work sent free.

83-t f FRANK W. JONES, Bedford, Que.

A BIRD'S EYE VIEW OF BEE KEEPING

—BY—

REV. WM. F. CLARKE

IS NOW READY.

The Price is 25c., Five for \$1.00.

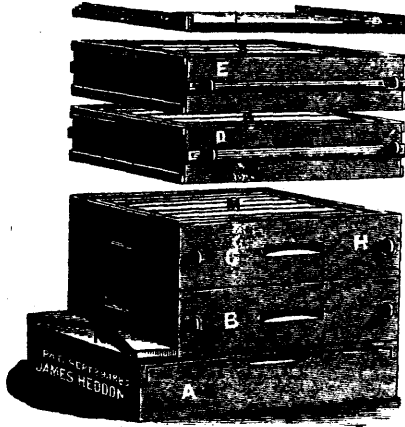
Special Terms to the Trade. It is Interesting, Readable and Practical

JONES, MACPHERSON & 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, COME 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 70 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. F. MUTH & SON.

Cor. Freeman & Central Avenues Cincinnati

Sept. 1st, 1886

Jan. 1st, 1887.

REDUCTION

For balance of 1886. From Sept. 1st, 1886, to Jan. 1st, 1887, will make prices on **SECTIONS \$4.00 Per 1000**, and larger quantities proportionately less. **FOUNDATION, 35c Per lb.** for brood and **45c** for **SECTIONS**. Equal, if not superior, to any other make. **Seven and one-half (7 1/2) per cent reduction on all other goods in Price List.**

Dealers, wanting **LARGE QUANTITIES**, to stock up for the season of 1887, will be given special prices on application.

Remember my goods are noted the world over for fine quality and workmanship. Try me and be convinced.

W. T. FALCONER,

Jamestown, N.Y.

Manufacturer and dealer in full line **Apiarian Supplies.**

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.

ESTABLISHED 1865.

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,

R. ECKERMANN & WELLS,

Beeswax Bleachers and Refiners. Syracuse, N.Y.

DADANT'S 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. HERTZEL, 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. F. MASON & SONS, Mechanic Falls, Me.
J. A. HUMASON, Vienna, O.
C. J. GRAVES, Birmingham, O.

and numbers 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.

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

J. T. WILSON,
Nicholasville, Ky

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

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; 5, \$5.00; July, \$1.65. State which you prefer, HOLLINZONA or GOLDEN ITALIANS. For full particulars and prices of bees, send for circular. Safe arrival and satisfaction guaranteed.

CHAS. D. DUVALL,
Spencerville, Mont. Co.



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.

THE

Winter Problem Solved!

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

I Am Making Revolving Models of this Clamp in Cardboard

with three hives packed in it as I prepare them for winter, noted 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.

FRANK W. JONES,

BEDFORD, QUE. AGENT FOR

Pelham, Vandervort and Root Foundation Mills

Dealer in and Manufacturer of Apiarian Supplies.