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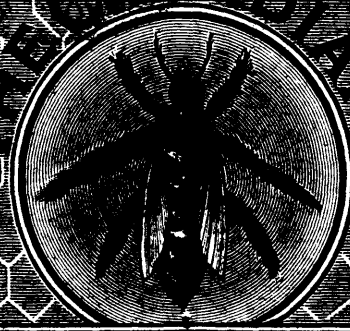
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CPBJ

VOL. II. NO. 25.

1886

SEPTEMBER 15.

PUBLISHED EXCLUSIVELY IN THE INTERESTS OF THE HONEY PRODUCER



JOURNAL

APR 24 1874

THE FIRST WEEKLY IN THE WORLD

ONE DOLLAR PER YEAR

THE GREATEST POSSIBLE GOOD TO THE GREATEST POSSIBLE NUMBER

PUBLISHED BY

JONES, MACPHERSON & CO.

BELTON ONT.

SKRIBNER & CO.

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

The number on each wrapper or address-label will show the expiring number of your subscription, and by comparing this with the Whole No. on the JOURNAL you can ascertain your exact standing.

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THE CANADIAN BEE JOURNAL

AND "Gleanings," semi-monthly.....	\$1.75
"American Bee Journal," weekly.....	1.75
"American Apiculturist," monthly.....	1.75
"Bee-Keepers' Magazine," monthly.....	1.75
"Bee-Keeper's Guide," monthly.....	1.75
"Texas Bee Journal".....	1.80
"Rays of Light".....	1.35

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 50	2 25
Alley's Handy Book (cloth).....	2 50	25
Langstroth on the HoneyBee (clh)....	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. 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 25c

FARMERS BUY THE CELEBRATED

LARDINE MACHINE OIL,

—AS IN—

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.

We want to place the MONTHLY in the hands of every one interested in poultry and pet stock, and will send the paper for a full year for \$1 to all who subscribe this month. The regular price is \$1.25 per annum.

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., \$1.00 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

FOR SALE.

A few colonies of Italian bees: Some Jones' stock in single or double walled hives.

S. G. RUSSELL, Thornbury.

Queen City Oil Works!

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

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, 5 inch bit 18c.; No. 2, 6 inch bit, 20c.

TWO-FOOT SQUARES.

In iron squares we have two kinds—the first of these is marked down to 1/4th 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 1/4 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.

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.

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.

ESTABLISHED 1855.

BEESWAX HEADQUARTERS

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

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

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. cars to go by express—and safely packed.

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

Aug. 30, 1886.

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.

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. DUVALL,
Spencerville, Mont. Co.

120 ACRES SELECTED.

High, gray hammock 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 1/2 miles distant of Ostego 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 plentiful. \$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 Rassa, Monroe Co., Florida.

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 INVERTIBLE HIVE

INVERTIBLE FRAMES,

Invertible Surplus Honey Cases,
Entrance Feeders, Top & Bottom Feeders,
Hive-Lifting Device, Honey Extractors,
Wax Extractors, Comb Foundation, etc

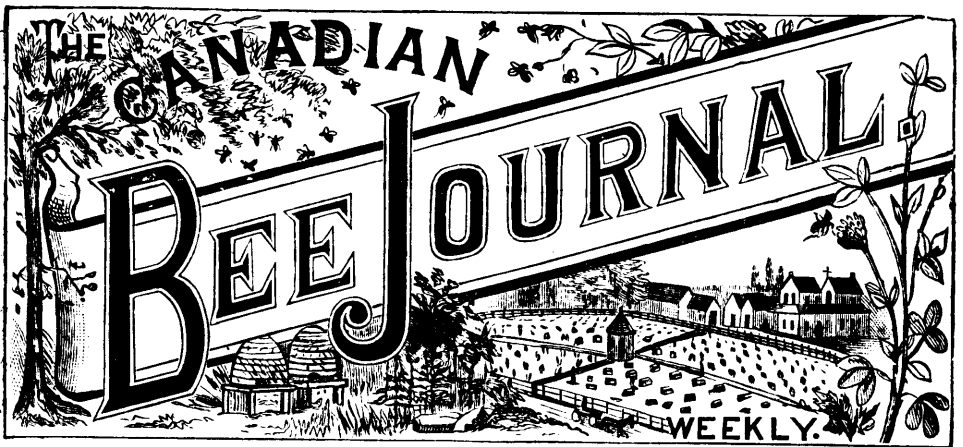
My new Illustrated Catalogue is now ready, and will be mailed to all who apply for it. Address

J. M. SHUCK
DES MOINES IOWA

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

ABNER PICKET
Nassagaweya P. O., Ont.
Also agent for D. A. Jones' supplies.



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

VOL. II, No. 25. BEETON, ONT., SEPTEMBER 15, 1886 WHOLE No 77

THE ASSOCIATION MEETING.

THE prospects are for a good meeting, though as we go to press, nothing in the way of a report can be given. A full report will appear in future issues.

THE EXHIBIT AT TORONTO.

EVERYTHING is in order and competent judges say that it is the most tasty and best exhibit ever made. True, there has been much greater bulk of honey, but as this has only been a very average honey season the exhibit is good. Again, the amount of honey taken to England is so much less for the exhibit here. Supplies take a leading place in the show, and almost "everything under the sun" is here displayed. The principal exhibitors in this line are The D. A. Jones Co., of Beeton, and E. L. Goold & Co., of Brantford, the latter in charge of Mr. R. F. Holtermann.

The Heddon Hive also the light Heddon are eagerly sought after and closely examined, much being said pro and con regarding it. The Stanley Extractor also receives its share of examination. On Wednesday of last week the exhibition was formerly opened by Sir John A. Macdonald and Lieut.-Governor Robinson, and after the ceremony was performed the party visited the different exhibits. The Premier was very much interested in what he saw and wished to understand all about the different

articles exhibited. While the use and method of manufacture of comb foundation was being explained to him by the writer, the Premier indulged in a very good joke at the expense of honey producers in general and President Withrow. Listening very attentively till near the close of the explanation as to how the bees were saved the extra labor of drawing out comb and given more time for honey-gathering, he broke in as follows: "But, Mr. President, let us consider this a moment. You promised us that nothing of an immoral or wrong nature would be permitted on the grounds?"

"Certainly, and we have endeavored to do all this." "Well," said Sir John, "here we have a systematically arranged plan of defrauding the busy little bee out of its hard earned labors. Now we must look further into this and have a stop put to such proceedings."

At which the entire party laughed heartily.

After complimenting the exhibits highly the party left to visit the machinery hall. The judging has yet to be done at time of writing (Thursday a.m.) a full report will appear in next issue of the CANADIAN BEE JOURNAL.

THE SILVER MEDAL

which was given for the largest and best display of apiarian supplies, fell to The D. A. Jones Co., whose exhibit in the eyes of old judges surpassed its usual excellence, while the bronze medal went to E. L. Goold & Co., whose show was

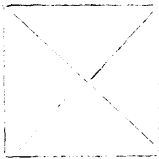
really a credit to them, and helped very much to make the entire exhibition much more complete than former years had found it.

THE HEDDON HIVE.

This hive swept all before it, and attached to it are three prizes—two first and one second. One first, as being the best hive for procuring the largest yield of comb honey; the second, first, was for the best section crate and system of manipulation while the third ticket—a second prize—was given to the new queen-excluding honey-board, which was shown as the "best and most practical and new invention for the apiarist." In the first two instances the Shuck hive was shown against it.

HONEY ON A STICK.

This, as the boys term it, is as popular as ever, and as the sides of sections which are strewed outside and inside the building would make a very respectable pile of kindling, but it is a most excellent way of disposing of unfinished or "off-color" sections. They are cut from corner to corner as follows and



this gives us for each section 20 cents, which is a very good price for such, besides assisting to educate the people into the eating of honey.

A CHANGE IN THE LIST.

The prize list of the honey and apiarian supplies department will stand a good deal of "fixing" to have it conform to the real intentions of those interested in the welfare of the Association. For instance, as the list now is, any dealer in honey can buy it up, and show against the actual producer, and by this means in most instances, can, by careful selection, out-do the latter. This is manifestly not as it is intended, and the committee in charge of this department will be memorialized to so change the list as to have the producer compete with the producer and not with the honey-merchant, or in other words the honey shown must have been *produced* by the exhibitor and if the committee then see fit to give a prize open to all-comers for best and largest display of honey—why, all well and good.

HONEY PLANTS.

Mrs. A. Gilchrist, of Guelph, showed

a nice assortment of plants arranged properly and named with both the botanical and "every-day" names.

SUNDRIES.

Mr. Thomas Ramage, Richview, took two prizes in all in class No. 2—open to bee-keeper's with less than 25 colonies. He also took second on wax.

Jacob Alpaugh, St. Thomas, received first prize on a new style of quilt for covering hives, which is a really good thing and was deserving of all it got.

Mr. Martin Emigh, Holbrook, had the largest quantity of comb honey on exhibit. Mr. Alpaugh following, while Mr. Thomas Goodger, Woodstock, came in third.

For variety of honey "in glass" Mr. Jacob Spence "took the cake" but we are sorry that this exhibit was not complete as soon as it should have been giving to the building in an incomplete appearance.

FOUNDATION VS. EMPTY FRAMES.

I WAS much pleased in reading Brother Osburn's article on page 428. It is in such friendly discussions as these that we get at *bottom facts*. No one would use foundation in the brood-nest, when hiving swarms, quicker than I would, did I find it *profitable* to do so.

This plan that Brother Osburn suggests, viz., that of giving a swarm several frames of foundation at time of hiving, then, after the bees have settled down to *business* and will not swarm out, remove part of the frames, and afterwards return them, one or two at a time, was suggested last year by a correspondent of the *A. B. J.* It seems *probable* that by this method nearly, if not quite, as good results might be attained as though *empty frames* were used, but why perform all this *laborious* labor, simply to be able to use foundation, and not lose any more than the price of the foundation? That is how it strikes me.

W. Z. HUTCHINSON.

Rogersville, Genesee Co., Mich.

The Willamette Valley Bee-Keepers' Association will meet in the Grange Hall, in McMinnville, on Sept. 21st and 22nd, 1886. A full attendance of members, and others interested is desired. E. J. Hadley, Sec.; Frank S. Harding, Pres.

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.

WATERLOO CO. BEE-KEEPERS' ASSOCIATION.—The next meeting of this association will be held in Elmira, on Saturday, Sept. 18th, in Vogt's Hall, at 12.30 p.m. A. GROH, Secretary.

OUR PORTRAIT GALLERY.

THE REV. W. F. CLARKE.

IN accordance with a long-cherished purpose, we start in the present issue, a portrait gallery, in which we shall publish engravings of prominent Canadian bee-keepers, together with brief sketches of their history. It is fitting that we should begin with the well-known name at the head of this article, since the wearer of it, though by no means an aged man yet, may be said to be the pioneer and patriarch of improved modern bee-keeping in this country. Mr. Clarke's first article on this subject appeared in the initial number of the *Canada Farmer*, Jan., 1864. His editorship of that journal was the

five years, he pursued the study of apiarian science with unflagging interest, and wrote many articles on the practical manipulation of the hive. He was one of the first to introduce the Italian bee, honey-extractor, and other improved appliances to the bee-keepers of Canada. He represented the Dominion at the Apicultural Conventions held at Indianapolis, Dec. 21st and 22nd, 1871, and at Cincinnati, in Feb., 1872, out of which by the harmonious blending of conflicting interests, the North American Bee-keepers' Association, now so prosperous, was organized. Mr. Clarke has had the honor of being twice elected president of this important organization. During the earlier period of its history, and until laid aside by ill-health for a time, he was one of its most active members and officers. On the



means of drawing his attention to apiculture. It was the only branch of husbandry with which he was not more or less familiar. He had written on various agricultural topics previously, in the *Montreal Witness* and other papers, and on assuming charge of a paper devoted to the interests of the farm, felt that he must acquaint himself with every department of the business. A perusal of Langstroth "On the honey bee" and Quinby's mysteries of bee-keeping, not only awakened interest in this pursuit, but convinced him that to write on bee-keeping, he must keep bees, which he began to do in the spring of 1864. Mr. Clarke edited the *Canada Farmer* for five years, at the expiration of which time it was absorbed into the *Globe* newspaper. During these

death of the lamented Samuel Wagner, founder of the *American Bee Journal*, Mr. Clarke, at the request of many leading bee-keepers, took hold of that periodical, effected its removal from Washington, D.C., to Chicago, and personally managed it until Dec., 1873, when responsibilities connected with the Ontario Agricultural College, requiring his presence in this country, he was obliged to transfer its management to other hands. It may be of interest to state that Mr. Clarke is the father of the Ontario Agricultural College, having suggested the idea of it to the Hon. John Carling, then Provincial Minister of Agriculture, and under his patronage and auspices, matured the plan of the institution. In Dec., 1873, the *American Bee Journal* became

the property of Mr. Thos. G. Newman, the present editor and proprietor, but Mr. Clarke remained its responsible editor for more than a year subsequently, and continued to contribute to its columns regularly until sickness compelled his retirement from that and all other literary work. Acting both on medical advice and his own inclinations, he betook himself to farm-life, and it speaks volumes for the healthfulness of agricultural pursuits, that he soon regained health and vigor. A series of papers entitled, "My Farm of Lindenbank," which appeared in the *Montreal Witness*, detailed the history of the three years thus occupied. With recruited health contributions to the *American Bee Journal* and other periodicals were resumed, and for some years past, Mr. Clarke has been one of the most prolific apicultural writers on this continent. His labors have not been confined to prose. He is poet-laureate of the bee world. In 1872 he won a \$45 prize offered by the proprietors of the *Bee-Keepers' Magazine*, New York, for the best poem on the honey-bee. He has contributed a number of brief poems to the bee journals, and in imitation of the ancient poet Virgil, has recently written a "Georgic" with which most of our readers are familiar under the title of "A Bird's-Eye View of Bee-Keeping." A number of our most successful bee-keepers in this country got their first inspiration from him in some shape or other. Dr. Thom is one of his disciples. Chas. Mitchell and other Listowel bee-keepers were inducted by him into the mysteries of the art. Circumstances have compelled him to make a "side-show" of bee-keeping rather than a business. Twenty-four colonies has been the most he has ever had at any one time, and the pursuit has been a matter of scientific investigation and labor *pro bono publico*, instead of being followed for personal gain. Mr. Clarke is an Englishman, and was born in the city of Coventry, March 31st, 1824. He was educated for the ministry, having been one of the earlier students in the Congregational College of British North America. Before going to college, he spent a couple of years on a new Canadian farm, and there contracted that love of agriculture, which has been with him a strong, if not a "ruling passion" ever since. Mr. Clarke's first settlement in the ministry was at Burford and Scotland, Ont., 1844-6. Subsequently, he had charges in Wakeman, Ohio; Norwich, Ont., London, Ont., Waukesha, Wis., Victoria, Vancouver's Island, Guelph, Welland, Listowel and Speedside, Ont. He is passing the evening of a very busy life in partial retirement at Guelph:—preaching as occasion offers in Congregational and other vacant pulpits,

writing for apicultural and other journals as the spirit moves him, and carrying on a small apiary, as of old with an eye to scientific interest, rather than pecuniary profit.

PRIZE POEM ON "THE BEE"

BY W. F. CLARKE, OF GUELPH, ONTARIO.

[This poem won a \$45 prize offered by the proprietors of the "Bee-Keeper's Magazine," New York, in 1872, for the best poem on the honey-bee.]

Where in the realm of nature do we see
A worthier study than the honey-bee?
What curious instinct dictates every art
Whereby this little creature acts its part!
How do the marvels of the hive combine
All other insect wonders to outshine!

A swift-winged forager, the bee sets forth,
Scouting from east to west, from south to north,
Intent on gathering, with industrious haste,
Sweetness that else upon the earth would waste;
And whereso'er the wanderer may roam,
Laden she flies unerring to her home.

A skilful manufacturer, she makes,
By some internal process, pearly wax,
A substance plastic, soft and delicate,
Beyond the power of man to imitate—
Suited to house the growing insect brood,
Or to encase the store of luscious food.

The bee is mathematical, and well
Illustrates Euclid in her form of cell;
Sir Isaac Newton, Simpson, or Legendre,
To none of these great masters need we send her;
For she has found what they could never see,
A "royal highway" to geometry.

The bee's a warrior bold, and never saw
Foe who could make her from the field withdraw;
In single combat, or in army fight,
No bee has ever shown the feather white—
"Ready, aye ready," any time to rally,
And at a moment's notice forth sally.

The bee's a model citizen—ease, food,
Life, all is yielded to the public good;
No individual interests weigh a grain
Where there are public interests to maintain;
As in old Rome, when all were for the State,
Rich helped the poor, and poor men loved the great

The bee, in ages past was little known
In characters of worker, queen and drone;
Absurdest theories and superstitions
Usurped the place of rational positions,
And, while a dozen bees remained alive,
No man durst search the mysteries of the hive.

Each autumn, when the tempting stores of honey
Excited appetite or love of money,
The faithful workers forfeited their lives,
That man might get the contents of the hives;
A tragic finish to the busy season,
For which necessity was made the reason.

Now, thanks to science and its handmaid, art,
The apiculturist acts a wiser part;
The comb is built upon the moving frame,
With smoke or sweet the fiery bees we tame,
Control the busy inmates of the hive,
Obtain their stores yet save them all alive.

The brisk Italian now assumes the place
Of the familiar, black, old fashioned race—
Nimble, more energetic, more prolific,
And, happily, in temper more pacific ;
A more untiring and adventurous rover,
And able to suck honey from red clover.*

Of old a super-glass, or honey-box,
Was placed above each of the thriftier stocks,
In hope they might be tempted there to store
A surplusage of twenty pounds or more
Of first-class honey ; but a lazy fit
Would oftentimes prevent their doing it.

Now in these palmy days of honey slinging,
The bees are kept without cessation bringing
New stores of sweet, which quickly we transfer
Into the mel-extracting cylinder,
And thence by use of force centrifugal,
Get honey by the pail or barrel full.

The march of progress is not over yet,
Nor will be till our apiarians get
A plan of making artificial comb,
And thus provide the bee a finished home,
To which all hands shall busily fetch honey,
And smiling bee-men turn it into money.

†Next we find a bee like the Egyptian
For storing honey, but of a description
Quite opposite in temper, and without
That ugly inclination to dart out
The venomous sting, on slightest provocation,—
Nature's worst form of counter-irritation.

With all facilities for honey getting
A race of bees that will admit of petting ;
Each household of an apiary possessed,
Bee-keeping followed with unflagging zest,
Honey and milk shall flow all countries through,
And "home, sweet home," obtain a meaning new.

*License of poetry claimed here. The writer has never been able to satisfy himself that the Italian bee gathers from red clover, but it is often asserted as a fact, and clover was wanted here as a rhyme to "rover."

†Mitchell, the introducer of this bee, proved a fraud.

QUEEN INTRODUCTION.

THE following is one of the papers read before the British Bee-keepers' Conference at South Kensington, July 31st. It is written by Rev. G. Raynor, M. A., and takes in the whole subject pretty exhaustively :

"The subject of queen introduction, in its various forms, is so extensive, and the opinions of skilful, practical apiarists differ so widely in regard to the success of the numerous methods employed, that, in addressing to you a few remarks thereupon, I feel that I am treading upon somewhat dangerous ground, and, in briefly referring to the several plans in general use both in this and in other countries, I will be careful to recommend those only which have proved most successful in my own practice.

Most practical apiarists will, I think, allow that upon the condition of the colony which is to receive the alien queen, as well as upon the

animus displayed by the queen, very much depends.

We all know that when our bees are in the midst of gathering in a plentiful harvest, in other words, when all goes well and prospers, and the future as well as the present looks bright and cheerful, with no heavy clouds of depression brooding over them—as with men so with bees—all feeling of irascibility is laid aside, and universal benevolence reigns supreme ; in short, under such happy circumstances, irritability disappears, and the sting remains in its sheath.

The summer months then, when honey is briskly coming in, are the best time for changing and introducing queens. All queens, and especially virgin queens, can be more safely introduced when the bees are storing honey than at any other time. But it is often more convenient to the apiarist to introduce his queens in the spring or autumn, that is to say, in a time of dearth. Taking, then, a leaf from the book of nature, at such times we should feed our bees—feed them continuously, for a day or two before removing their queen, during the time of introduction and after liberating the alien—and feed them from the top of the hive, since top-feeding is least conducive to robbing, and produces the least excitement or confusion in the hive, a state against which it is most important to guard.

The subject may be treated under the two heads of—

I. DIRECT INTRODUCTION. II. INTRODUCTION BY CAGE.

1. *Direct Introduction.*—By which I understand the introduction of a queen, unaccompanied by attendant bees, since to me it appears that the insertion of a comb, or combs, containing hatching bees, brood, and a queen, appertains rather to uniting than to direct introduction, although, in a certain sense, the introduction is direct. In the practice of this system, as a rule, I may remark in passing that I have not been very successful, although I can well believe that in the hands of others it may have proved more of a success. As we all know much will depend upon conditions, time, and other things. If the colony consists chiefly of young bees, with hatching brood, the plan generally succeeds. About mid-day on a fine summer's day, when the honey flow is abundant, we may safely interchange simultaneously a couple of brood frames, with queen, in any two colonies, without the loss of queens or workers. The operation consists of simply removing the two frames, from each hive, to a frame box,—taking care that the queen is inside between the frames carrying them carefully to, and inserting them in, the other hive. This I have repeatedly practised, mostly as an experiment. But I do not

consider this, strictly speaking, queen introduction, and, tried under any other conditions than those named, the plan with me has proved a failure.

The methods of direct introduction, pure and simple, by which I have generally succeeded, are: 1. By immersing the queen in honey; 2. By dispossessing the bees of their combs; 3. By smoking in at the entrance; and 4. By puff-ball (*Lycoperdon*), and by chloroform.

Firstly, then, *By immersing the Queen in honey.* On removing the queen from the hive, to make room for the alien, I am very careful to avoid arousing the bees. Since skilful, quiet manipulation is a most important factor in all systems of introduction, it is well on finding the queen to slip a pipe-cover cage over her, and to close the hive for an hour or two, noting the frame on which she is caged. On reopening the caged queen is removed from the hive, the hive is carefully closed, and the alien queen, having been first immersed in warm liquid honey, is taken up in a teaspoon and placed inside the central feeding-hole, which is immediately closed. The hive is not opened again for two or three days, unless any unusual commotion, betokening an encasement, is noticed at the entrance. I have rarely lost a queen by this process.

Secondly, *By dispossessing the Bees of their Combs.* In their normal condition bees will always show fight on the introduction of strange bees to a well-stocked hive, whether by entrance or otherwise. But deprive the same bees of their possessions—combs, brood, and honey,—and they will unite with any others presented to them without a struggle. In the colonies therefore, in fixed-comb hives, such as skeps, the bees are driven out by the ordinary method, and their queen is removed. By driving the bees are thoroughly subdued, and all the fight is taken out of them. The hive from which they were driven is now placed upon a board, or cloth, and raised in front, and the bees are shaken upon the board. As they run into the hive the alien queen (with accompanying bees if any) is dropped into their midst, and all joyfully enter together.

I have experimented, on this plan, with many hundreds of colonies—condemned bees and others—and I can truthfully assert that it has never failed in a single instance. The same method is easy of application to colonies in frame hives by removing their queen, and shaking or brushing the bees from their combs, and allowing them to run into an empty skep placed on the stand of their hive. The combs are returned, the frame-hive takes the place of the skep, out of which the bees are shaken, as before,

and the new queen is dropped amongst them as they run into their former abode. Neither syrup nor scent is used, as I have found them quite unnecessary, and the operation is performed in a more cleanly manner without either, there being, moreover, less danger of attracting robber bees. The method may be practised at any time, indeed I have introduced queens thus in mid-winter by removing the hive into a warm room. In spring or autumn, morning and evening are the best times, when all the bees are at home, and there is no danger of inciting to robbing.

Thirdly, *By Smoking in at the entrance.* During the honey season many apiarists introduce their queens direct, whether virgin or fecundated, by driving them in at the entrance of the hive by smoke. The smoke of tobacco, which has a partially stupefying effect upon the bees, is usually recommended. The time selected is the evening of a fine summer's day, when the bees, pleased with their bountiful income, are in the best of tempers. The queen of the hive is removed with as little disturbance as possible, the hive is closed, and sufficient smoke is injected at the entrance to partially stupefy the bees. The alien queen is then placed within the entrance, and driven into the hive by a few puffs of smoke. This method has generally been successful with me. Professor Hasbruck, an American authority, makes the following statement:— 'It is surprising to one who has never tried it, with what care and success queens of all kinds, virgin as well as fertile, can be smoked into the entrances of hives at twilight. Bees are not on the look-out for strangers at this time of day, and they are ready to accept anything put into their hives, especially if the smell of all is made alike with a little smoke. I have not caged a queen of any kind for the last two years, and I have scarcely lost one in this time in introducing them at the entrance, and I have not found it necessary to resort to tobacco-smoke either, as Mr. Alley recommends.'

If tobacco smoke can be dispensed with, it is certainly an advantage, as I have a strong objection to stupefying bees in the honey-season, believing it to be, not only injurious, but dangerous to the lives of the bees. Whenever anaesthetics are used, *during the honey season*, the dose should be so small as to quiet the bees only, not large enough even to produce partial coma or stupefaction.

Fourthly, *By Puff-ball and by Chloroform.* I will add here a very simple method of introduction by means of puff-ball, well suited to timid persons, which may be practised in spring and autumn, and which I have always found success-

ful as applied to colonies in skeps. The bees are first of all fumigated to complete stupefaction, and while in this state removed from the hive and placed in an empty skep, the queen being picked out and reserved. The sleeping bees are carried in the skep to the distance of a few yards from their old hive and location, and the skep is set down bottom upwards, the bees being sheltered from the sun's rays, but in no way confined. The combs of their old hive are cleared of any few remaining bees, the new queen and her attendants are put in possession, and the hive placed upon its old stand. As the bees recover from their sleep they fly back to their old abode, and, being thoroughly subdued by the treatment they have received, and rejoiced to find again their old home, with wings vibrating with pleasure, accept the new queen. This plan must be practised during fine weather only, in the early part of the day, before the bees are flying freely, and when there is no fear of robbing or of the bees being chilled. A free circulation of air around the sleeping bees soon restores them to life, and in half an hour or less, they will all have returned to their hive.

A partial stupefaction by chloroform, as a means of queen introduction, has of late been successfully practised by Mr. D. A. Jones, the eminent Canadian apiarist, who, in conjunction with Mr. Frank Benton, established the apiaries in Cyprus and Syria for breeding and exporting queens of those races. The process, by which Mr. Jones claims to have introduced fifty queens in fifty minutes, he thus explains: 'I take an ordinary bee-smoker with a straight barrel, or fuel-box. Tapering smokers, such as Clark's, would not be as good, as there would be more difficulty in fitting the sponges. I then get three sponges that fit moderately tight to the inside of the barrel when pushed in. Then press one sponge into the bottom of the barrel; damp the second sponge with one teaspoonful of chloroform, and put it in next; then put the third sponge on the top. You then have the sponge filled with chloroform between the two dry ones. Adjust the nozzle of the smoker and you are ready for operations. Proceed to your queenless colonies and puff in the chloroform, at the entrance, the same as you would smoke them, for, say, a quarter of a minute; then proceed to the next, and so on, for, say, about two minutes; return to the first hive again, and give them a few more puffs with your chloroform smoker, and let your queen run in. Do this until you have gone over all those you first puffed. Thus the bees in each hive have had about two minutes in which to get sleepy before the queen is introduced. Now, if this is in the middle of the day, and the bees

are returning from the fields, I return to the first hive after, say, two minutes, and give them a third dose, as the returning bees require a little snuff to keep them quiet. I have the past season taken the worst cases of fertile workers, and the most difficult queenless colonies that I ever had to deal with, and I never missed yet. Now, why does it work, or why use it? Simply because there is a principle governing the introduction of queens, namely, that the bees must be kept quiet and without a desire to kill the queen, and the queen must act as if just hatched—she must be quiet and innocent, and must exhibit no fear. The chloroform is distributed equally into all portions of the hive by this system; and if the entrance is not too large, the chloroform remains some time about the hive and combs, thus keeping the bees in a sort of quiet, sleepy state, and they come out of that condition so gradually that the queen, being in with them, gets enough, so that her movements are satisfactory to the bees and there is no danger of her being balled. We have also been experimenting the last season and we intend to continue our experiments on introducing queens during the honey season, without chloroform and without caging. It can, and has been done, as we have ourselves done it very frequently, but it requires *considerable experience* to know *just the circumstances* under which she will be accepted, and to be able to detect any hostile act of the bees and guard against it in time.'

Mr. A. I. Root, the author of that excellent book, *The A. B. C. of Bee Culture*, remarks on Mr. Jones' plan of 'Direct Introduction': 'It is my impression that one hundred queens may be turned loose at the entrances of one hundred queenless hives without losing more than five per cent on an average, if it is done during the honey season, and towards the close of a day that has furnished abundant forage. Where queens are plentiful and apiarists pressed for time, I should recommend this plan of introducing, but it requires, as friend Jones wisely remarks, *considerable experience* to know *just the circumstances* under which she will be accepted.'

The only other method of direct introduction which demands notice is that which is said to have been originally discovered by Huber, viz., that 'If a colony of bees have no queen, and no means of rearing one, they will invariably accept a fertile queen when presented to them.' This rule requires, of course, an absence of brood and eggs, which seems to be the only stipulated condition, no matter how many or how few, how old or how young, the bees may be, or at what season of the year the introduction is made, it is bound to succeed. To an assertion so utterly absurd I can only say *Credat Jūdæus*.

If any one wishes to make the experiment, and has no objection to losing his queens, and demoralising his bees, let him deprive a colony of its queen and its combs, and place it upon empty combs, and those containing honey only. Give the bees time to discover the loss of their queen and offer them another at the entrance, or the top of the hive, and she will be at once seized and encased, and either maimed and rendered useless, or killed outright. This, and not a kindly reception, is what invariably takes place, in my experience, and I have tried the method many a time in my earlier days—in those happy days gone by. Colonies which have been long queenless are the least disposed of all others to receive a queen.

II. *Introduction by Cage.*—The cages which I have used most successfully are: 1, The Raynor; 2, Alley's; 3, The Pipe-cover; 4, The Peet; and 5, The Betsinger cages.

Firstly, *By the Raynor Cage.*—This cage, which has been in use some twelve years, and, judging from its extensive sale, has met with general approval, is supplied by most dealers in bee-furniture. The cage itself is made of fine wire, a far better material than zinc, and permitting freer communication with the queen.

The operation of removing a queen and introducing another in her stead may be thus described:

First, in the case of a moveable-comb hive. The queen of the hive must be secured and the hive closed. The cage, with its lower door closed, is then placed in the hive through the central, or feeding hole, being pushed down between two combs, and the same queen inserted through the upper door, which must be securely closed.

After twelve hours' confinement, a little smoke is given at the entrance of the hive, and the upper door of the cage opened, the queen, disturbed by the smoke, walks out, and is removed. The new queen takes her place, and after twenty-four hours, if there be no excitement apparent amongst the bees at the entrance, the lower door of the cage is opened by pushing down the wire, and the queen is released without the least disturbance of the hive. Secondly, in the case of a skep or fixed-comb hive. Here the only plan is to drive the bees, secure the queen, and proceed as before; when the queen being securely caged in the centre of the skep, the hive placed on a sheet, and wedged up in front, the bees are shaken out in front, and return to their hive. The remaining procedure is precisely the same as in the former case of the moveable-comb hive. Where the latter is used, an inspection is advised a few hours after setting free the queen; but if this be done at night, the following morning is

soon enough to examine. The cage may be used upon the plan of allowing the bees to liberate the queen by leaving the bottom door open and plugging the lower end of the cage with food, by removing which the bees will set free the queen. The food used for this purpose is a mixture of the finest powdered white sugar and honey to the consistency of dough. The queen and bees partaking of the same food, an amicable union is generally secured by the time the food is consumed, and the queen is free.

(Continued next week.)

PROGRAM OF THE NORTH AMERICAN BEE-KEEPERS' SOCIETY.

FIRST DAY—TUESDAY.

FORENOON Session, 10 a. m.—Convention called to order. Address of welcome by Gov. I. P. Gray. Response by the president, H. D. Cutting. Welcome to the city mayor, Calib S. Denny. Thanks, Dr. C. C. Miller, president of the N. W. Society. Calling the roll of members of last year. Payment of annual dues. Reception of new members and distribution of badges, reports of secretary and treasurer. Announcements.

Afternoon Session, 2 p. m., Special Business.—Annual address of the president; "Bee Studies," Prof. A. J. Cook, Agricultural College, Michigan; "Apicultural Journalism," John Aspinwall, Barrytown, N. Y.; "Bee Literature," Thomas G. Newman, Chicago, Ill.; The coming Bee, what encouragement have we to work for her advent? R. L. Taylor, Lapeer, Mich. Subject for discussion has "Apis Americana" been reached?

Evening Session, 7.30 p. m.—Announcements. Miscellaneous business. Discussion of questions that may have accumulated during the day.

SECOND DAY—WEDNESDAY.

Morning Session, 9 a. m.—Announcements. Communication. Call of N. W. Society to elect officers. Election of officers of Indiana State Society. Call to order. "Rendering Comb into Bees Wax," C. P. Dadant, Hamilton, Ill. "Foul Brood," A. J. King, New York. Selection of place for holding meeting in 1887. Election of officers.

Afternoon Session, 2 p. m.—Announcements. Miscellaneous business; "Bee-keeping and Apiculture," Prof. N. W. McLain, U. S. Apicultural Station, Aurora; "Feeding Bees for Winter," Jos. McNeill, Hudson, N. Y.; "Wintering," Dr. B. Mason, Wagon Work, Ohio; Subject for discussion, "Is the use of Foundation Necessary in Modern Bee Culture?" "Are Perforated Honey Boards a Success? Unassigned papers.

Evening Session, 7.30 p. m.—Announcements. Miscellaneous business. Discussion of questions in question box. Social communications.

THIRD DAY—THURSDAY.

Morning Session, 9 a. m.—Announcements. Miscellaneous business. Communications. "A Talk on Hives," James Heddon, Dowagiac, Mich.; "Reversible Hives and Frames," J. E. Pond, Jr. North Attleboro, Mass.; "Drones and Drone

Comb," W. Z. Hutchinson, Rogersville, Mich.; Reports of vice-presidents; "Progress of Bee-keeping in Indiana," Jonas Scholl, Lyons Station, Ind.

Afternoon Session, 2 p. m.—Announcements. Miscellaneous business. Explanation of various articles on exhibition. Many good things are yet to be added to the program not sufficiently developed to give.

FRANK L. DOUGHERTY.

SUNDRY SELECTIONS.

THE SOLAR WAX EXTRACTOR.

J. C. THOM.—Would Mr. Demaree kindly give a full description of his Solar wax extractor with any suggested improvements, in an early issue of the *C. B. J.*?

Streetsville, Ont., August 23rd, 1886.

BEES BROODING LATE IN THE FALL.

H. L. SUTTON.—I read the *C. B. J.* carefully, I have watched carefully answers to questions that would have taken time, care and expense if I ever would have gained the knowledge required. In fact I have found on several occasions that one question receiving an answer through the *JOURNAL* is worth more than the \$1 paid for the *JOURNAL*. My trouble is with my double story hives; out of 40 hives there are only about 14 that have sufficient honey in the lower story to winter on; it is not uncommon to find hives with less than five pounds of honey in the lower story, all the rest completely filled with brood and pollen. Will you please tell me through your *JOURNAL* as soon as possible, how I can supply them with stores in the proper place; some of the hives, I changed full frames of capped honey with full frames of capped brood, and find that the bees carried nearly all the honey up and filled it with brood. What is to be done in such a case?

Dutton, Ont., Aug. 20th, 1886.

As soon as brooding is over exchange the combs from the upper story to the lower one and the bees will not remove it again, as long as brooding is going on they will make way for it.

BEE LORE

FOREIGN AND OTHERWISE, BUT ALL INTERESTING

A correspondent in the *A. B. J.* says: "Some time ago a fine, large swarm of bees rested on the top branch of a high live-oak tree in my apiary, beyond all ready means of securing it. On the principle that a swarm will not bear much disturbance while it is forming a cluster, I took a shot-gun, loaded it with fine bird shot,

and deliberately fired into it. This brought at once to the ground some portion of the bees. As they were about fairly gathered again into a cluster, a servant emptied the contents of his gun into the swarm. The bees now took wing, and went with precipitation back to the hive. I then secured them by artificial means."

W. B. Webster, in the *British Bee Journal* says: "Frightening bees with carbolic acid vapour is more effective if properly applied than smoke, in the case of straw skeps it is the same. I have frequently advised bee-keepers not to pump the fumes into the hive; but many do not seem satisfied unless they can 'go at' their smokers or fumigators as though they were pumpers on a fire-engine when the word is passed 'Down with her.' You simply want to breathe, if I may use the expression, with the fumigator at about the same rate as you breathe yourself, shifting it about to drive the bees back. The air passed out of a fumigator must be thoroughly impregnated with the carbolic acid vapour, and must pass over the sponge at least twice to be thoroughly effective. I have driven hundreds of straw skeps with the fumigator both in private and in the bee-tent, and have not used smoke in my own apiary for two seasons."

The value of honey imported into the United Kingdom during the month of July, '86, amounted to 6505*l.* [From a return supplied to E. H. Bellairs, Esq., Wingfield House, near Christchurch, by the Principal of H. M. Statistical Office.]—*B. B. J.*

The other day a grocer at Chestertown, Del., exhibited in front of his store a twenty-five pound box of honey, and shortly after it was laid bare to the hungry gaze of the passing throng, a couple of bees alighted upon it and began to fill their pockets. The grocer had no trouble in driving them off, and after they had flown away he went back in his store to wait upon his customers. Presently a customer came in and told him if he wanted to save any of that honey he had better call off the bees. He went out to investigate, and the sight that met his eyes caused him to use several real bad words. Those two bees that he had driven off had gone home and given the snap away, and the whole family had returned to make honey while the sun shone. When the grocer came upon the scene, the bees so completely covered the honey that it could not be seen. He grabbed up a piece of wrapping paper, and shaking it wildly before him, said "Shoo bees!" but the bees didn't shoo worth a cent. They knew that they had struck a soft thing, and no buttery fingered grocer was going to drive them off. They looked

up knowingly at him, as much as to say, "Don't be alarmed boys, he's got 'em again," but as he still continued to disturb them, they selected four out of their number who had the longest and hottest stingers, to go and reason with him. Their argument was a strong one, and had the desired effect, for the grocer retired from the scene with a hop, skip and jump, and didn't go near the place again till the honey had all disappeared together with the bees.—*Peck's Sun.*

The following thoughts from an exchange have some sound sense in them. These several industries fit well together and while each may be a benefit to the other, neither one to a great extent conflicts with the other:—It seems unwise that all fruit growers do not keep bees. The blossoms from whence the fruit is produced afford ample pasturage for the bees, and the insects save what would be lost and unprofitable without them. The bees possess the advantage of requiring no room of consequence on the surface of the ground. Their work is literally in the air, where they do not come in conflict with anything else. The proper method of fruit growing is to utilize the orchards for all they will produce. Bees are necessary to orchards in some respects, but as they are capable of rewarding their keeper without entailing upon him the necessity of procuring material from which to produce honey they always insure a profit. There are those who maintain that there is but little profit to be obtained from bees, but profit means that which is over and in excess of the total cost, and whether it be great or small it is so much gained and saved. The fruit grower has some advantages for keeping bees. He naturally is compelled to provide feeding material for insects, and if he does not realize the honey given by his trees he allows himself to be deprived of so much that is just as salable as the fruit, and which is produced at less expense, not so perishable, and more easily shipped. We might extend the field of operations and claim that trees, bees and poultry could together occupy the same land, but until the fruit grower realizes that he should keep bees, and is willing to give the colonies his attention (which is not necessarily great), he should not undertake the other. Success means to utilize all the available space and to leave no stone unturned in order to accomplish all the ends desired. Honey is a valuable commercial product, and the demand is annually increased.

"Bees unquestionably possess the power of memory," says a scientific writer. So does the man on whose neck the bees happen to hold a caucus.

THE CANADIAN BEE JOURNAL

JONES, MACPHERSON, & Co.,

EDITORS AND PUBLISHERS,

BEETON, ONTARIO.

WEEKLY, \$1.00 per Year, Postpaid.

BEETON, ONTARIO, SEPTEMBER 15, 1886

THOMAS HORN AGAIN.

We have probably twenty complaints relative to Mr. Horn, of Sherburne, N.Y., and we have written him several letters with reference to them and other matters, to none of which has he deigned a reply. We have also a letter from an attorney-at-law at Sherburne, N.Y., saying that numerous complaints have been made as to Mr. Horn's performances, and that he has several claims left with him for collection. This attorney-at-law is also postmaster. We may say that in no case have we had a letter expressing satisfaction at their treatment by Mr. Horn. When his advertisement was sent us it was inserted at once, seeing that he advertised continually in other journals, and that his business transactions with us for the season of 1885 were satisfactory, we took it for granted that he was all right. Had he been a new man we should most decidedly have made enquiry before accepting his advertisement. This experience will teach us to be even more careful in the future with respect to advertisements before insertion is allowed them in the JOURNAL.

CONVENTION NOTICES.

THE NORTH AMERICAN BEE-KEEPERS' SOCIETY will hold its seventeenth annual Convention at Indianapolis, Ind., Oct. 12, 13 and 14, 1886. The meeting will be held in Pfaffins Music Hall, over 82 and 84 North Pennsylvania Street, one of the most pleasantly situated halls in the city, with good ventilation and plenty of light. The society headquarters will be at the Occidental Hotel, corner of Washington and Ills. Sts., near the heart of the city and but a short distance from the hall. The regular rate of this hotel is \$3 per day, special rates to those in attendance at the convention will be \$1.50 per day. The North Western Bee-Keepers' Society, the Indiana State, the Eastern Indiana, with various county and joint societies, will meet in union with the N. A., making it one of the most formidable meetings of bee-keepers ever held in the country. Everything possible will be done to make this meeting a pleasant and interesting one. An earnest cordial invitation is extended to all. FRANK L. DOUGHERTY, Secretary.

SPECIAL NOTICES.

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

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 Heddon'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.

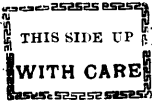
- Twenty-five new names with \$25 will give you free, One Honey Extractor (Jones Patent).... 8 00
 Or one Set Honey Scales (240 lb) with tin scoop, stamped..... 7 10

Address all your communications to

JONES, MACPHERSON & CO.,—Beeton, Ontario.

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
2½ " " ".....	5 00	2 75	65
1 " " ".....	3 50	2 00	50
½ " " ".....	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

Shipping Labels for Comb Honey

CAUTION.

COMB HONEY.

Handle with Extra Care.
Do not Move it on Hand Trucks.
Do not Drop it. Load with the finger pointing to the
Do not Dump it. pointing to the
Set it Down Easy.
Haul only on Vehicles with Springs Bow, Locomotive or Horses

These are 7½ x 5½ 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
" " " ½ 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 4½x4½ 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
4½x4½.....	\$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:

¼ pound.....	9c.	By mail 6c. extra
½ " ".....	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 it 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,

ROUT 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—

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-t.f. 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 CLEANINGS 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 30 pages and more than 30 costly illustrations were added in the 8th. It has been thoroughly revised and contains the very best 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, O.

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 (7½) 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**.

I. R. GOOD'S Barnado Key P PRICE LIST.

Italian Bees and Queens For 1886.

HAVING in located at **NAPPANEE**, where I expect 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 pure and fertilized.

- Six War ed Italian Queens for.....\$ 5
- Twelve..... 9
- Single..... 1
- First qua 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. KRETCHEMER, Coburg, Iowa,
- E. F. SMITH, Smyrna, N. Y.,
- C. F. DALE, Mortonville, Ky.,
- EZRA BAER, Dixon, Lee Co., Ill.,
- CLARK, JOHNSON & SON, Covington, Ky
- J. F. MASON & SONS, Mechanic Falls, Me.
- 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

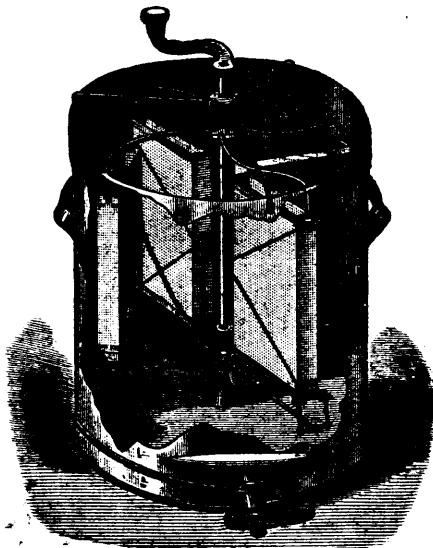
1886. **ITALIAN QUEENS.** 1886.

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.