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# THE CANADIAN BEE JOURNAL

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

VOL. VII, No. 14.

BÉTON, ONT., OCT. 1, 1891.

WHOLE No. 295

## THE CANADIAN BEE JOURNAL

Devoted exclusively to the interests of the Honey Producer.

Seventy-five Cents per annum In Advance.

### ADVERTISING RATES.

All advertisements will be inserted at the following rates

#### STANDING ADVERTISEMENTS.

Time.	1 in.	2 in.	3 in.	4 in.	1 col.	page
1 month .....	\$2.00	\$3.00	\$4.50	\$4.50	\$6.50	\$10.00
3 months .....	3 00	4 50	5 50	6 50	11 00	17 00
6 months .....	4 00	5 50	7 00	9 00	15 00	25 00
9 months .....	6 00	9 00	12 00	15 00	21 00	40 00
12 months .....	10 00	15 00	20 00	25 00	40 00	75 00

#### Breeders' Illustrated Directory.

One-fifth column, \$8 per year; \$5 for 6 mos. All yearly advertisements payable quarterly in advance.

#### Condensed Directory.

Occupying one-half inch space, THREE DOLLARS per annum.

#### Transient Advertisements.

10 cents per line the first insertion, and 5 cents per line for each subsequent insertion.

Space measured by a scale of solid nonpareil of which there are eleven lines to the inch, and about nine words to each line.

#### Exchange and Mart.

Advertisements for this Department will be inserted at the uniform rate of 25 CENTS each insertion—not to exceed five lines—and 5 cents each additional line each insertion. If you desire your advt. in this column, be particular to mention the fact, else it will be inserted in our regular advertising columns. This column is specially intended for those who have poultry, eggs, bees, or other goods for exchange for something else and for the purpose of advertising bees, honey, poultry, etc., for sale. Cash must accompany advt. Five insertions without charge, \$1.

#### STRICTLY CASH IN ADVANCE

Contract advertisements may be changed to suit the seasons. Transient advertisements inserted till forbid and charged accordingly. All advertisements received for THE CANADIAN BEE JOURNAL are inserted, without extra charge, in THE CANADIAN POULTRY JOURNAL.

THE D. A. JONES Co., Ld., Béton, Publishers.

## PUBLISHERS' NOTES.

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

THE JOURNAL will be continued to each address until otherwise ordered and all arrears paid.

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

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

Subscription Price, 75c. per Annum. Postage free for Canada and the United States; to England, Germany, etc., 10 cents per year extra; and to all countries not in the postal Union, 50c. extra per annum.

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.

Communications on any subject of interest to the fraternity are always welcome, and are 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.

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 do not accept any advertisements of a suspicious or swindling nature, but our readers must not expect us to be responsible should our advertisers not do as they agree. They will find it a good rule to be careful about extraordinary bargains, and in doubtful cases not to pay for goods before delivery.

#### Clubbing Rates.

THE CANADIAN BEE JOURNAL and	
THE CANADIAN POULTRY JOURNAL .....	\$1 00
THE CANADIAN BEE JOURNAL and premium queen 1 00	
Both JOURNALS and premium queen.....	1 25

#### Job Printing.

All we ask is the privilege of an opportunity to estimate. Free use of all our cuts given to those who favor us with orders. Specimen sheets furnished on application.

# The Wide Awake Bee-Keeper

Who reads the BEE-KEEPERS'S REVIEW one year, or even a few months, is almost certain to become a regular subscriber. As an incentive to new subscribers to thus become acquainted with the REVIEW, I will send it during the three succeeding months for 20 cents in stamps, and I will also send three back numbers, selecting those of which I happen to have the most, but

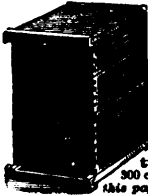
of different issues. A list of all the special topics that have been discussed, the numbers in which they may be found, and the price of each will also be sent. Remember the Review has been enlarged, a beautiful cover added, and the price raised to \$1.00 W. S. Hutchison, Flint, Michigan.

## 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

CHAS. F. MUTH & SON.

or, Freeman & Central Avenues, Cincinnati



## BEEES AND HONEY

The Dovesided Strongest, Best and Cheapest BEE-HIVE for all purposes. Please everybody. Send your address to the Largest Bee-Hive Factory in the World for sample copy of **Gleanings in Bee Culture** (a \$1 illustrated semi-monthly), and a 44 p. illustrated catalogue of Bee-Keepers' Supplies. Our **A B C of Bee Culture** is a cyclopaedia of 400 pp., 6x10, and 500 cuts. Price in cloth, \$1.25. Mention this paper. A. I. ROOTH, Medina, O.

## ALLEY'S IMPROVED AUTOMATIC

## SWARM HIVER

Thoroughly tested and guaranteed to SELF HIVE every swarm that issues. Sample by mail for \$1.00. American Apiculturist one year and swarmer by mail \$1.50. Sample Apiculturist giving full illustrated description of Swarmer free

H. ALLEY, Wenham, Mass.

## Michigan Lands For Sale!

# 12,000 ACRES

### GOOD FARMING LAND

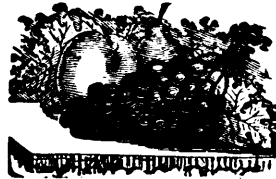
—TITLE PERFECT—

On Michigan Central and, Detroit & Alpena and Loun Lake Railroads, at prices from \$2 to \$5 per acre. These lands are close to enterprising new towns, churches, schools, etc., and will be sold on most favorable terms. Apply to R. M. PIERCE, West Bay City, or to J. W. CURTIS, Whittemore, Michigan

## BARNES' FOOT-POWER MACHINERY



Read what J. J. Parent, of Charlton, N. Y., says:—"we cut with one of your Combined Machines, last winter 50 chaff bins with 7 inc cap, 100 honey racks, 500 broad frames, 3000 honey boxes, and a great deal other work. This winter we have double the number of bee hives, etc. to make and we expect to do it all with this saw. It will do all you say it will." Catalogue and price list free. Address W. F. & JOHN BARNES, 5 Ruby st. Rockford, Ill.



# Wilson's Nurseries!

—ESTABLISHED 1876—

## CHATHAM. - - ONT.

Largest variety, Best Quality, Lowest prices. All the worthy old and promising new Fruit, Nut and Ornamental Trees, Bushes, Vines; Roses Plants, Bulbs, side-walks, floors, bees, etc., and washing buggies, windows, etc. Galvanized Iron, \$3.50, Brass, \$4.00. Wilson's improved Woven Wire Tree Guards, for hindering Rabbits, Mice, etc., 50 cts. per doz \$4 per 100. Great Dane and St. Bernard Dogs, 8 weeks old, \$30 to \$25 each, smooth-coated Fox Terrier, 8 weeks old, \$5 to \$10 each. Above dogs are from the best blood of Europe and America and won the best kennel prizes in Toronto and Greatest Bench shows in '89 and '90, where there were hundreds of competitors.

### TERMS:

CASH—small but sure profits. Send your address now for my large catalogue and Guide to Fruit Growers, which will be issued about March—free to intending purchasers.

## F. W. WILSON,

Nurseryman

Chatham, Ont.

MENTION THIS JOURNAL.

Piso's Remedy for Catarrh is the Best, Easiest to Use and Cheapest.

# CATARRH

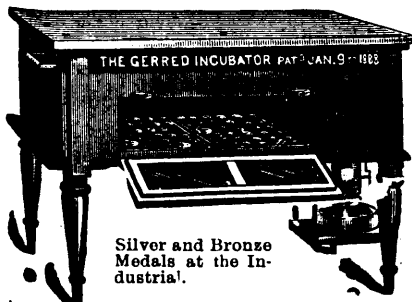
Sold by druggists or sent by mail, 50c.  
E. T. Hazeltine, Warren, Pa., U. S. A.

## CARNOLIAN -:- QUEENS.

I expect to continue the breeding of Choice Carnolian Queens next season, and orders will be booked from date. No money sent until queens are ready to ship. JOHN ANDREWS, Paten's Mills, Wash. Co. N.

# CONSUMPTION SURELY CURED

TO THE EDITOR—Please inform your readers that I have a positive remedy for the above named disease. By its timely use thousands of hopeless cases have been permanently cured. I shall be glad to send two bottles of my remedy FREE to any of your readers who have consumption if they will send me their Post Office Address. Respectfully, T. A. SLOCUM, M. C., 136 West Adelaide St., Toronto, Ont.



Silver and Bronze Medals at the Industrial.

Address E. J. OTTER, Manager, Gerred Incubator Co., 90 De Grassi street, Toronto.

All sizes for 100 and 200 egg machines. Send for descriptive circular. MENTION THIS JOURNAL.

## BROWN LEGHORNS

Benner's Prize-Winning Strain.

EGGS for sale from a grand pen of my strain of Brown Leghorns at \$1.50 per 13, \$2 per 26. Satisfaction guaranteed. This pen is headed by a fine cock, winning 1st as a cockerel, by Bicknell, at Owen Sound, 1890, score 94, and 1st as a cock at Owen Sound, 1891, score 93, by J. K. Felch, a fine large bird. One hen has won three first and two special prizes three years in succession, and looks like a pullet; scored by Felch as a pullet, 96; as a hen by Felch, 95; one pullet scored by Bicknell last year 95; also 2nd prize hen at Owen Sound last year, score 94, and other hens and pullets that will score from 93 to 95.

Will sell Exhibition Cockerels and Pullets in the fall  
Address

J. C. BEINER, Owen Sound.

Care Polson Iron Works. MENTION THIS JOURNAL.

1882-Chester Poultry Yards-1891

**E. J. OTTER,**

90 DE GRASSI ST., TORONTO.

IMPORTER AND BREEDER OF

**EXHIBITION DARK BRAHMAS,  
ORNAMENTAL BANTAMS.**

My birds are second to none. They have won since 1890, 97 inoney prizes; 4 specials. Birds for sale at all times. Eggs in season, \$3 per 13, or 26 for \$5. Satisfaction guaranteed.

**THOMAS A. DUFF,**  
267 LANSLOWNE AVE., TORONTO,

BREEDER AND IMPORTER OF

**WHITE AND BLACK MINORCAS,  
AND HOMING PIGEONS.**

I have a great number of chicks for sale. If you want stock to win with you should write now and secure the best. My record at New York, Detroit, Toronto, Hamilton, London, Brampton, Bowmanville and New Hamburg, proves that there is no better stock in America.

My Homers (breeders) consist of the best stock that money could buy in Belgium, England and America. I have young birds bred from these in my loft that have flown 236 miles when five months old. Call and inspect my stock.



## WILL A. LANE,

TURNERVILLE, ONTARIO

Has for sale some extra fine young **Mammeth Bronze Turkeys**. Get his special Fall Announcement.

MODERATE PRICES. \* SUPERIOR STOCK.

**JOHN GRAY. ROBT. BLOYE. T. R. WOODS.**

## JOHN GRAY & CO'Y

BREEDERS AND IMPORTERS OF

Golden, Silver, White Wyandottes

BLACK MINORCAS,

WHITE PLYMOUTH ROCKS,

WHITE MINORCAS.

The quality of our stock is second to none in America. We will sell nothing but good birds to any one. Our birds have won in the hottest competition. We select the choicest specimens for breeding purposes, and consequently have a lot of fine chicks for sale at all times. We have added to our already fine stock 1st prize cock, 1st prize hen, golden Wyandottes; 2nd prize silver cock at Toronto, 1891, also the best white Wyandotte cockerel in Canada last winter, score 97. You will hear from us at the winter show. If you want good birds at

**REASONABLE PRICES,**

you can get them right here.

EGGS IN SEASON, \$3 PER 13.

Also Homing Pigeons, Guinea Pigs,  
Fancy Rats, Mice, Rabbits, etc.

All communications sent to

**JOHN GRAY, - TODMORDEN, ONT.**

EXCHANGE AND MART

25 CENTS pays for a five line advertisement in this column. Five weeks for one dollar. Try it.

FOR SALE.—Silver Laced Wyandottes and Silver Spangled Hamburg Chicks. Good stock and at reasonable prices. M. B. HAQUE, Inglewood, Ont. Correspondence invited.

C. L. MATTHEWS, Danville, P. Q., breeder of barred Plymouth Rocks, S. C. Brown Leghorns, B. B. R. and B. R. Games. Chicks for sale at reasonable prices. Common pigeons 15 cents each.

CLEARING SALE of choice W. Wyandottes, R. C. B. Leghorns, Plymouth Rocks, Toulouse Geese, Pekin Ducks and about 20 colonies bees; all at a sacrifice. R. J. GRACEY, Wellandport, Ont.

FOR SALE OR EXCHANGE for honey. 1 Barnes' foot-power saw, 3 honey tanks holds 500 pounds each, 1 Jones Honey Extractor, 27 Jones Hives (bodies) with frames, also 500 Hoffman frames L size. EDW. LUNAU, Buttonville.

ARE YOU IN NEED? I have Brown and White Leghorn Cockerels, \$1.50 to \$3; pullets, \$1 to \$2; B. P. Rock Cockerels, \$1.50. Yes that is very cheap for good birds but I want the money. GEORGE H. GRILLS, Box 330, Belleville.

QUEENS—We have a few left, tested Queens, Italians, which we will sell at \$1 each to clean out. First come, first served. Address E. L. GOULD, & Co., Brantford, manufacturers of bee-keepers' supplies and dealers in Bees, Queens and Honey.

WE are now able to ship by first Express, in fact we are shipping every day all the Foundation ordered. Knives, Force Pumps; in short, we endeavor to have everything go by first train after the order is received. D. A. JONES CO., Beeton.

FOR SALE.—A grand lot of Ornamental Bants including Japanese, Golden, Seabrights, Pekin and Games. B. B. R., I have some birds that will please you, sent on approval if required. I will exchange Ornamental Bants for other stock or sell for cash at: Japs, \$10 per toio; Golden Seabrights, \$5 per pair; Pekins, \$3 per pair. JOHN GRAY, Todmorden, Ont.

MEYER'S S. L. WYANDOTTES are acknowledged the best grand chicks for sale all bred from the following 2 to 4 year-old hens scored last winter by Mr. Smelt: 94; five 92½ each; 92 (first hen, Toronto, '90), 91½ and 1 pullet 92, mated with cock, 94, cockerel 93. If "like begets like," they must please you. J. E. MEYER, Kossuth. Mention this Journal.

APIARY FOR SALE.—54 Colonies of Bees, \$1 upper stories for extracted honey and combs, supers, honey boards, extractor, 2 store cans holding 400 pounds each, packing boxes for outside wintering. Everything for the working of it except Foundation Mill. Foundation and beeswax enough for another season \$250 for everything concerned with it. Bees in good condition. SAMUEL STAFFORD, Shelden, Ont.

1891. Don't you want to improve your stock Don't you want large, beautiful yellow Queens, producing bees that will please you fully; the best honey gatherers on earth. Seven years carefully breeding, 650 Queens sold and have heard of only one misdated. Queen, 75c.; 3 for \$2. A yellow to the tip, select breeder, by return mail, \$1.50. W. H. LAWS Lavaca, Ark.

A WHITE WYANDOTTE COCK and Cockerel; both good; for sale or exchange. For offers, \$3 each. JOHN GRAY, Todmorden, Ont.

FOR SALE.—A lot of Partridge Cochins at \$4 and \$3 each; also two pair of Light Brahmas, and a pair of Black Hamburgs. T. COCKBURN, 64 Canada Street, Hamilton, Ont.

A FEW PAIR of Dark Brahmas, young and old, for sale cheap. Also some Light Brahma Cocks etc at \$1 each. T. COCKBURN, Canada St. Hamilton, Ont.

A GRAND LOT of Silver Laced Wyandotte Chicks for sale. They are good and will be sold cheap as I want to make room. T. COCKBURN, Canada Street, Hamilton, Ont.

FOR SALE.—1 Partridge Cochins and 3 Cockerels; 6 Light Brahma Cockerels; also a few Pullets each variety which are all first-class; no culls shipped. R. H. Marshall, Sec'y Perfection Fanriers Club, Dunnville, Ont.

LOOK AT THIS.—To make room I will sell Golden and Silver laced Wyandotte and S. C. White Leghorn Cockerels at \$2 each. A few Pullets and Hens at same price; also 1 White Leghorn Cock at \$2. Money refunded if not satisfied. A. W. GRAHAM, St. Thomas, Ont.

I HAVE about 20 Cocks for disposal in Partridge, Black and White Cochins, Light and Dark Brahmas, Langshans, Minorcas and Hamburgs; Silver Wyandotte, Brahma Cochins, Langshan, Minorca and Hamburg Chicks for sale cheap, as I want the room. I will be pleased to answer all enquiries when stamp is enclosed. T. COCKBURN, Canada Street, Hamilton.

IT PAYS :: TO ADVERTISE IN THE JOURNAL

GOOD BOOKS

—FOR THE—

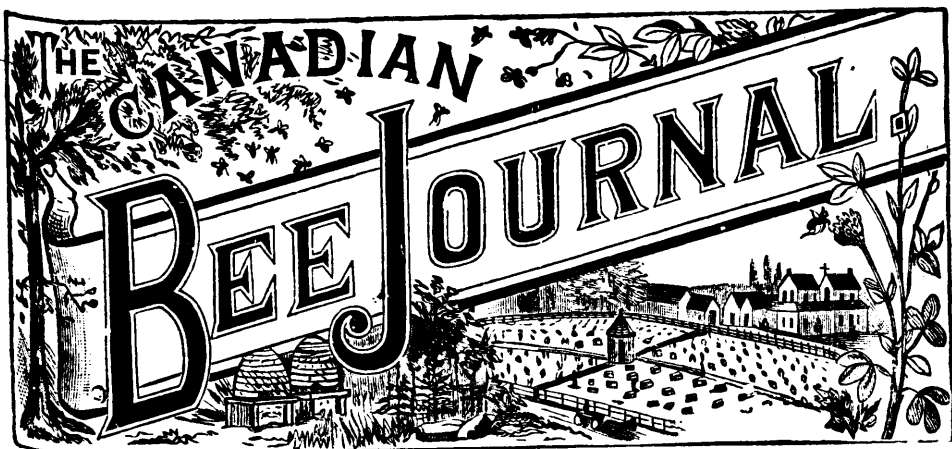
Beekeeper and Poultryman.

The following books we can supply direct from Beeton, at the price named opposite each, by mail postpaid.

- A Year Among the Bees, by Dr. C. C. Miller..... 75
- A.B.C. in Bee Culture by A. I. Root cloth..... 1 25
- A Bird's-Eye View of Bee-Keeping, by Rev. W.F. Clarke..... 25
- Success in Bee Culture, paper cover... 50
- Production of Comb Honey, by W. Z. Hutchinson. Paper..... 25
- Cook's Bee-Keepers' Guide in cloth... 1 50
- Foul Brood, its Management and Cure

THE DA. JONES CO., - BEETON

ONE COLONY Saved from Death the Coming Winter Would Repay the cost of a copy of "ADVANCED BEE CULTURE" ten Times Over. In 5 of its 32 Chapters may be Found the Best That is Known upon Wintering Bees. It costs 50 cents but its Perusal may Make you \$50 Richer next Spring. The "REVIEW" and this Book for \$1.25. If not Acquainted with the "REVIEW," send for Samples. W. Z. HUTCHINSON, Flint, Michigan.



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

VOL. VII, No. 14.

BEETON, ONT., OCT. 1, 1891.

WHOLE No. 295

## THE CANADIAN BEE JOURNAL.

ISSUED 1ST AND 15TH OF EACH MONTH.

D. A. JONES

EDITOR.

### EDITORIAL.

Do old bees ever secret wax and build comb.

WE are asked, which secretes the wax to build the comb old or young bees? Seemingly young, but sometimes old. We recollect having a colony of young bees that had lost their queen. We had changed them from several hives, and allowed them to build comb themselves in order to get rid of fertile workers which we failed to do in that way. After the bees were old enough to be considered old bees, as there were none in the hives less than perhaps two months old, after putting them on a few empty frames, we tested it to see if they were building comb again, we found some old bees with loaves of wax on their bodies, about half the size of a grain of wheat, and on examining them closely found there were a great many that had these loaves of wax on their bodies, which had the appearance of little warts. Some of them had apparently been there for weeks. Some one asks, how do you know how long they were there? Well those last secreted were clean and white while the other edge of the pellets of

wax on others was dark like soiled comb, showing that it had been so long on the bee that it had become dirty. Now, these soiled loaves of wax, when taken from the bee and examined carefully with a microscope showed clearly that it was dirt, and by taking a knife and cutting it at the darkest point, the beautiful white wax was clearly seen. We have sometimes noticed when feeding an old colony of bees in the fall slowly, that the bees would secret wax and carry it on their bodies, until it apparently became cumbersome for them to carry around. We frequently caught such bees and killed them and placed them in a case with their backs to the walls of the case. This enabled us to see the wax scales easily, and the different sizes on the various bees, some scarcely discernable, others very large; some snowy white, others quite dark.

#### How we punished the robbers.

THE other day we asked one of our students to feed a few late colonies of bees that had not gathered quite enough to carry them through the winter, and there was a danger of robbing. We thought he had better put the feeder on at night, so that they might have it taken down before morning. We think our instructions were carried out fairly well with one exception. When turning the syrup in the feeder, a little was allowed to drip down the side of the hive. This, of course, at-

tracted the bees early in the morning, and as three lives had been served in this way, it was astonishing to see how quickly the bees commenced robbing, in fact, the centre hive of the three was literally covered with bees, and we immediately set it in a tent covered with mosquito bar. The other two had perhaps three or four quarts of robber bees around each hive, and they had almost become masters of the situation, in spite of the determination of the colony to prevent the robbers from getting in. The force pump was then brought into requisition, and the thousands that were flying about the hive were soon sprinkled, as well as those that were trying to get in. After allowing a fine spray to rain on them for a few minutes, the entrance became somewhat cleared of the robber bees on the two hives that were not covered with the tent. We then placed a little brush over the entrance of each hive, and covered it quickly with wet grass, and put long wet grass on top of the hive, allowing it to hang down all around laying a weight in the centre to hold the grass from slipping off. A little cold water soon discouraged them from attempting to rob these two hives any more. The rush however that was made for the tent, when they could not get through the mosquito bar, was astonishing. They managed to gain an entrance by alighting on the ground and crawling under the netting. In this way nearly a bushel of bees got around the hive, while we were protecting the two other hives with grass and water. We then brought the spray to bear on these bees inside the tent, and in a short time we had them thoroughly drenched. There was an immense number of bees around trying to get in, so we just raised the cloth a little way from the ground, and allowed as many of the robbers as possible to rush in. In this way all the robbers in the yard were admitted under the tent, and as they flew up and alighted on the cloth inside, which was literally covered with them, we drenched them thoroughly with the cold water. This caused them to tumble down and crawl out on the ground, and as soon as the sun dried them sufficiently they flew back to their hives. In this way we caught all the robbers, and gave them a thoroughly

good soaking, and to our astonishment after the tent was once set over the hive and a little spraying done, few, if any more bees got into the hive, in fact, the inmates seemed to be quite able to protect the entrance, and did so, the result being that the robbers, instead of getting into the hive, were simply caught on the inside of the tent, where they were caught until we gave them a thorough soaking. Now, the point is this, do not leave the mosquito netting down on the ground, but keep it sufficiently raised so that the robbers will go under. Have your force pump and cold water ready, and everytime you get a fresh lot inside give them a spraying.

#### Are Bees ever a Village Nuisance

THIS is a question that has often been asked and answered, but we have usually taken the ground that they were not, but this fall we have come to the conclusion that sometimes they are. We must say that in all our experience we have never known such determination on the part of bees to gather from various sources aside from flowers. Every nook and corner of our village has been ransacked with a determination to find something. We do not recollect of ever having such a warm September as this has been, in fact, I do not think it was as warm in July and August. Frequently thunder showers, warm and sultry weather, and yet no honey in the flowers, or perhaps I should say, very few flowers in this section to yield honey. Several weeks ago you will notice the article we wrote, and to day we notice another instance of their cuteness. A little corner out of a pane of glass in a window in our kitchen enables them to slip through, fly across the kitchen, pass through a key hole into the cupboard where a little comb honey was stored, and to our astonishment some five or six pounds have been removed, almost unobserved.

A few days ago at a church social held in the Agricultural Hall, where the tables were liberally supplied with pastry, the bees became very troublesome as they swarmed into the building in such numbers that it became impossible to eat without exercising a great deal of care. Some thought that by the liberal

use of smoke they might drive the bees out, but it seemed to have about as much effect on them as whistling at a flock of birds. One party tried with a fan to keep them off a piece of pumpkin pie which she was eating, but as she was putting a piece in her mouth, a bee suddenly alighted on it and the result was she was stung on the tongue, which soon swelled very rapidly, and she was also in great pain for a short time. If the lid of a sugar bowl was lifted, almost immediately a dozen or more bees would dash into it, and while most people thought they could fan them away, it was with the greatest difficulty that they were kept at a distance, and we are credibly informed that many ate very little on account of the annoyance. We have never had as many complaints as we have had this fall, all owing to the exceedingly hot weather, an entire absence of honey or nectar in the flowers. Should we have another similar season, we think it would pay to move the bees out for a short time to a location where they might get fall pasture, or be less exposed to the sweet odors of fruit etc.

#### A late swarm.

ONE of our students found a small swarm of bees the other day on a low limb of a pear tree, although it was small, it certainly was a swarm, and there may not have been more than two pounds of bees on it. As there was no honey in the flowers we thought it surely could not be one of the ordinary kind which come in June, July and August, but it must be a colony that is either queenless, or else one of the nuclei had swarmed out for want of stores, and on walking by the rows of nuclei, we pointed to a hive and said, that is the one they came from. Taking the lid and cloth off, we found the combs but no honey, and on noticing the bodies of the bees as they hung on the limb, it was evident they left in a swarming condition. We soon had a frame partially filled with honey, and held it up against the cluster. It was amusing to see how quickly they took the hint and commenced running off the limb onto the comb, every bee sticking its head in a cell, and when there was no room for any more to get their heads in the

rest kept running about anxious to have those with their heads in fill up and back out, so that they might take their places. The queen was a very nice one, and as an order arrived that day we shipped her, doubling the bees up with a weak colony.

#### Another Great Sensation, or new Mode of Managing Bees.

HOW happy we all felt when Father Langstroth gave us the movable comb hive, or at Major Von Hreuska's (of Germany,) invention of the honey extractor system. Year after year new inventions and systems are cropping up, by which valuable aids are given to bee-keepers. Cumbersome and expensive hives, and much of the clap-trap nonsense which could be found in many apiaries years ago, are gradually being swept away for the more common sense and useful appliances now used by all our practical bee-keepers, largely due to the great aid and valuable assistance of our various bee journals, and our many valuable books on bees. No doubt it will be a surprise to many to hear that our present system of bee-keeping is to be revolutionized by a more simple and effective management, by which thousands can embark in the business who are now debarred from the fascinating pursuit, and instead of decreasing the number of stocks kept by each individual, they may be increased by the hundred. The price of comb and extracted honey may be reduced, and yet give larger profits to the bee-keeper. Comb honey may be produced at the price of extracted honey. This system of bee-keeping is supposed to enable the school teacher and those in offices to attend to their bees before and after their daily duties are performed. In short, to enable any person who chooses to do so to have his bees scattered all over the country in different apiaries, and in different localities—one person being able to attend to 400 or 500 colonies of bees in from five to ten apiaries without any swarming. The system is supposed to enable the bee-keeper to manage with about half the ordinary expense. In other words, it is to reduce the cost of supplies, such as hives, etc., one half—to take as much honey from 50 colonies as can be taken by any other means from 100—to take as much comb



honey per colony as is now taken of extracted honey. The system does away with three-fourths of the comb foundation used in the brood chamber, and only starters are necessary. It is very much after the style of friend Hutchinson's plan, and perhaps when we come to fish the thing all out, we will find a very large proportion of the system copied from others, but put into a new system by adopting a combination of systems. In order to carry out this new plan of management, where bees are wintered outdoors, they should be arranged in the fall, and it will be necessary to place two or three hives together in the apiary, but where bees are wintered indoors, this fall precaution will not be necessary—and while we say necessary, it is not absolutely necessary when wintered outdoors, but is perhaps better. We have experimented, and we believe others have nearly in the samelines, but there are just a few little points that apparently have been missed, to make it a success, which have been filled in by one to whom we believe most of the whole thing is due, Mr. Alpaugh—a most thoroughly practical, and one of our best bee-keepers, who manages about 400 colonies—has practised it this entire season, and while we are perfectly willing to take Mr. Alpaugh's statements and facts, knowing him, as we do, no doubt some will question the possibility of such results. We believe Mr. Alpaugh has not decided just when he will bring it before the public. We think he intends to charge \$5.00 for a full printed description, with the understanding that it is to be kept secret as far as possible for a certain length of time, until he is recouped for his expenditure in connection with the invention. Now we do not hesitate to say that it will pay any one to give \$5.00 for a full description, with the distinct understanding that if it is not what he recommends, he will refund the money. It is a system which would enable us to do away with swarming entirely—to scatter our yard promiscuously through the country, in order to take advantage of the best bee locations—to only visit them occasionally, and to leave no one in charge of the yard, it being quite unnecessary to do so. The system will also enable ladies to keep and manage large apiaries, without the least difficulty.

Entrances must not be left open too wide, or it will encourage robbers.

..

We see new hives being spoken of or advertised every little while. We would advise people to go slowly in reference to this matter.

We notice that an automatic smoker has been invented by a French apiarist, M. D. Layens, which is said to give good satisfaction. Cost 14 fr.

..

We never want smokers to smoke constantly. We prefer to let them stand when not in use, with as little loss of smoke as possible.

..

It would be unwise to leave combs or honey about the yard, or allow bees in any way to become excited from the odor of honey, at this season of the year.

..

When cold weather sets in, bees should be clustered compactly. Otherwise it has a very injurious effect on them, at the beginning of the winter season. Bees that are disturbed late in the season, will not be clustered so tightly, therefore every effort should be made tending to keep them quiet at the approach of the cold weather. Queenless colonies should be doubled up with others.

..

The Beekeepers Review for Sept. 10, has many articles in favor of handing hives, instead of frames. We tried that with some of our large hives, and found them so full of honey that we could scarcely move them. With the Heddon hive, or some similar device, when operated for comb honey, we are inclined to believe that the handling of hives will be more in favor, especially when the new principle of taking comb honey is thoroughly understood. We also find much in the Review about house apiaries, we think they are a good thing in winter, when made to house the bees as a repository, but in summer time we much prefer outdoors.

.. If you require catalogues, circulars, note heads, envelopes, or anything in the line of job printing give us an opportunity of estimating.

**GENERAL.**

**Haldimand Bee-Keepers in Session.**

HAGERSVILLE, Aug. 29, 1891.

The Haldimand Bee-Keepers' Association met in the new High School building.

Meeting called to order by the president.

The Secretary being absent, Mr. F. A. Rose was elected Secretary.

The attendance was not large, owing no doubt, to the poor season.

REPORT OF THE SEASON.

	Spring	Fall	Ext'd	Comb
I. Overholt,	30	30	1650	100
F. A. Rose,	83	83	700	150
W. Kindree,	50	51	400	...
Levi Shoup,	10	10	100	50
R. Coverdale,	45	43	459	...
James Caldwell,	32	35	300	100
John H. Best,	32	33	700	80
D. H. High,	10	10	450	...
S. Bush,	1	1	35	...
J. Armstrong,	110	115	900	300
G. H. Renner,	3	4	...	100
T. W. Lundy,	30	37	700	...
Alex. Stewart,	3	4	100	...
Warner Evans,	2	2	50	...
I. Wismer,	20	21	800	...
M. Schieler,	5	5	200	...
			7530	800

HOW TO PREPARE BEES FOR WINTER

was the first subject. Out door wintering was preferred by all present.

Mr. Kindree. Plenty of bees, a good prolific young Queen, and plenty of good stores was the main thing.

Mr. Armstrong concurred in what the others said, and said any box that would keep out water large enough to admit of six inches of packing all round was necessary.

Mr. High—Yes, as it keeps the bottom dry and of course warmer.

SPRAYING FRUIT TREES

was discussed at some length. It was thought best to try to convince fruit-growers that they were injuring themselves and not injuring the codling moth in the least if they sprayed in full bloom. Some members said it was yet an open question whether bees were ever injured by spraying fruit trees in full bloom. In support of this Mr. Armstrong read an extract from a letter published in Gleanings by Mr. Ashley, of N. Y. State.

QUESTION BOX.

Has any one succeeded in getting a strain of

bees better workers on red clover than the black bee?

Mr. Armstrong thought not, as bees would gather honey where they could get it the easiest, and none of them would work on it when there was plenty of alsike or white clover, and all worked alike on red clover sometimes when there was little or no nectar to be got anywhere else.

Those appointed to attend the meeting of the agricultural societies in the county report favorably, and good prizes will be offered at Jarvis, Cayuga, Dunnville, and Rainham Centre.

A vote of thanks was tendered the trustees of the school.

The next meeting to be held at Cayuga on the last Saturday in January, at 10 o'clock a. m.

F. A. Rose.

Are Bees Natives of a Warm Climate?

ONE of the mistakes of modern bee-keepers is the saying that bees are natives of a warm climate. Who was the first one to say so, I do not know, but nearly every day we can hear or read this fable here in the United States, as well as in the old country, but I have never seen any proof for it. This question is important because a number of winter theories are based on this, so it will be of interest to look the matter over.

If we take into consideration the present geographical extension of the honey-bee (*Apis mellifica*), we see that this bee nowhere in a tropic climate is native; where we find it, we know it is imported by man. In tropic climates we find some other species of bees. This may prove very little but it is striking if we see that in such countries the honey-bee now is not native at all.

We know that Germany was a cold and rough country before she got in communication with Greece and Roman civilization. The oldest notice from Germany about bees we receive from Pythias, living at the time of Alexander the Great (about 330 B.C.).

He says that amber merchants found honey on the northern coast of Germany. Later we read in Plinius (*Hist. Nat.*, ix 18), that after the battle of Arballo, in North-western Germany (about 12 B.C.), a bee-swarm alighted in the camp of the Romans. Herodotus (at 440 B.C.) says that North of the Danube river no invasion into that country was possible on account of the great number of honey-bees. It may be said, nevertheless, that the bees may have emigrated there from a warmer climate. But we see that the honey-bees of that time must be especially

fitted for this rough climate, if we take into consideration that the old Germans hardly knew anything of scientific wintering, of a pollen theory or any other theory. I am sure those old forefathers of ours were bee-hunters, and understood not much more than to cut a bee-tree, to eat the Honey, to make mead out of it, and were masters in drinking it.

But we can prove that the honey-bee was in this country many thousands of years before men were there. Near Penningen, a small village in Baden, Germany, is found a petrified honey-bee. The rock in which it was found belongs to the Miocene, the youngest part of the Tertiary formation. No trace of a human being is found before the Diluvian, so it is sure and sufficient proof that bees were natives of Germany long before man. This petrified bee was found about thirty years ago.

Besides this we have some other proofs in the habits and anatomy of the bee that hardly any other animal is more specially fitted to stand a severe winter. While a single bee is hardly able to raise the temperature of its body about one degree over that of the surrounding air, we see that a colony of bees, by a temperature of 20° or 10° F. outside, can keep up 60° or 70° F. or more inside of the cluster. To make this possible, the main winter food (honey) is already prepared in summer-time; it is digested and stored for further use, so it can be assimilated at once and changed to heat. We do not know any other animal with a similar power. If we add to this that the honey is capped to keep out the moisture, that the surface of pollen likewise is polished to keep it for use in winter and early spring, we shall hardly find another animal which instinctively makes so much preparation for a long winter.

Further, the anatomy of the bee shows that the animal is especially created for a long winter. We know that bees are confined for five or six months (in Siberia even seven months) to the hive. This is possible only because the bees can accumulate their excrements for so long a time in the large intestine. Practice teaches that they can stand this long confinement as long as they remain healthy. All who have examined the alimentary canal of bees will never doubt that this part of the intestine is expressly fitted, created, or developed for this purpose.

If we, by our scientific and rational methods of bee-keeping, cannot winter our bees without more or less loss, it is a proof that our management or our theories are not correct. So much is sure: that many thousands of years bees lived and prospered, wintered, swarmed, and gathered

honey in a cold climate, and without any help (?) of a scientific bee-keeper.

Another proof that bees are natives of a climate with cold winters is the fact that a colony of bees breed in winter-time, and do this the more the colder the temperature. If a severe temperature in January and February causes a great consumption of honey we shall find more capped healthy brood than later, after the bees have had a cleansing flight. Whoever examined a colony in such circumstances will never doubt this fact. An insect which in severe weather can breed and can nurse healthy young ones, and for this purpose can raise the temperature fifty or sixty degrees, will remain healthy, using no other food than that stored, disdaining even water, without discharging feces, is surely created for a cold climate.

We again come to this conclusion if we observe the habits of a colony of bees. A single

#### Asthma Can be Cured by Honey.

The American Bee Journal for September, under the heading "Asthma can be Cured by Honey," quotes an article from the London Encyclopedia written by Dr. Monroe, for his "Medical and Pharmaceutical Chemistry," we give it in full below and leave it with our readers:

"The late Dr. John Hume, of the commissioners of the sick and hurt of the royal navy, was for many years violently affected with asthma. Having taken many medicines without receiving benefit, he at last resolved to try the effect of honey, having had a great opinion of its virtue as a pectoral.

"For two or three years he ate some ounces of it daily and got entirely free from his asthma, and also of a gravel complaint with which he had long been afflicted. About two years after he had recovered his health, when he was sitting one day in the office of the sick and hurt, a person laboring under great difficulty of breathing, who looked as if he could not live many days, came to him and asked him by what means he had been cured of his asthma. Dr. Hume told him all the particulars of his own case and mentioned to him the means by which he had found relief. For two years after he heard nothing of this person, who was a stranger to him and had seemed so bad that he did not imagine that he could have lived many days, and therefore had not even asked him who he was; but at the end of that period a man, seemingly in good health and well dressed, came to the sick and hurt office and returned his thanks for his cure, which he assured him had been brought about by the free use of honey."

## New Uses of Perforated Zinc Queen-Excluding Boards.

ADDRESS BY F. H. CYRENIUS.

*Fellow Bee-Keepers of the New York State Bee-Keepers' Association:*

Presenting this subject for your consideration it is principally with a view of your careful criticism more than to lay down rules for you to follow.

For excluding the queen from the boxes is of no account to me, which was, if I am correct, its first cause of invention.

Having already described its use for finding or separating the queen from the colony by shaking the bees upon a sheet between two hives, or arranged in a hollow box for the purpose of allowing the workers to pass through, leaving the queen behind, is a satisfactory mode of fighting shy queens.

To arrange for non-swarmer extracting, just before swarming divide the bees and brood just as you would to make a new swarm, placing one-half the bees and brood in a new chamber, filling vacancies in both hives with empty comb or foundation and place one above the other with a sheet of zinc between. The queen must remain in the lower hive. This operation will prevent all swarming if done at the proper time, until the lower hive is again filled with brood.

We have taken nothing away from them, they have room for eggs below and honey above in the empty combs or foundation, and as the brood hatches in the upper chamber they will have more room for honey. At time of extracting again take about one-half of brood from brood-nest, place in chamber and change from the chamber of the brood-nest empty combs. This principle of drawing part of brood from brood-nest and replacing with empty comb or foundation at proper intervals, with me entirely prevents swarming, and by placing the removed brood in the upper chamber keeps the stock very strong and in good working order. In heavy flow of honey add an extra chamber if necessary.

I heartily recommend Mr. Doolittle's plan of rearing queens in upper chamber, and to this end place the chamber with entrance opposite to lower entrance, and nearly all the queens hatched will be fertilized and begin laying in the brood-chamber, at which time it may be placed on a new stand and you have a fine swarm with a young laying queen. Repeat the operation again if more increase is desired.

Cannot this principle be carried out for box

honey, viz.:? Draw part of brood from brood-rest, fill out with comb or foundation as before, put on boxes, place brood on top of boxes or at side of old hive, and occasionally shake them in old hive or allow them to enter as they hatch and are old enough, through a bee-escape, carrying out same principle of removing brood from brood-nest to prevent swarming, and returning the hatching bees to keep up the full strength of colony.

The above methods are for out-apiaries. I can only speak for the extractor method with experience, which is perfectly satisfactory to me.

My next progressive step with the aid of zinc is to assist in queen rearing.

How annoying to find one queen, just hatched, out with a swarm, or all other cells torn down.

I made a number of zinc cages, the object of which was to allow the bees to pass out and in to give the enclosed cell all necessary care and to have the queens hatched all caged.

A cell of any age may be placed in the cage upon wire arranged for the purpose, and by dividing an L frame into three sections by two strips horizontally nailed in frame. We can place six cages upon each section, making eighteen in each frame. So you see a great many queens can be reared in one hive at a time, and you may get them as desired. Last season was my first experience with them and the result was very satisfactory. Any cells I wished to preserve were placed in cage and as they were hatched I could select or reject them, which is an advantage I did not appreciate until I used the cage.

My next plan was to make a section honey box with movable tin slides with zinc bottom, with a fly-hole out of section case, and by the use of one box we can rear queens and have them fertilized and begin and to lay caged in single honey box.

Next came to my mind the idea of a zinc division board, thinking that it would be more effective for many purposes than for solid wood. For fertilizing queens we have only to insert the zinc board between the outside comb provided with cell or virgin queen with entrance provided and we soon have a laying queen. Thus we can, with a few hives arranged in this way, secure the fertilization of a large number of queens in a short space of time without interfering with the full hive any more than to rear a queen in an upper chamber.

Two or more queens may be kept in one hive by the use of zinc division boards. The boards may be made of very thin lumber with narrow strips of zinc to save expense.

In the foregoing I have avoided as much as possible entering into any discussion of management only as it came in contact with the new uses of perforated zinc.

FOR THE CANADIAN BEE JOURNAL.

### An Australian Experiments with Thick Foundation.

**D**EAR SIR:—In the July 1st number of the C. B. J., I notice a letter from Mr. R. F. Holterman of the differences in thickness of comb foundation used in sections. As I conducted some experiments in this line last season I thought a report of them would be of use to you, as it comes right in line with the matter under discussion. I will remark that the season was very good, the flow of nectar from Eucalyptus Meliodora being very fine. From thirty hives I extracted three and a half tons of amber colored honey. From ten others I took one-half ton of one-pound sections.

It was one of these latter hives that I experimented in foundation with. The usual maker of foundation I buy from had unfortunately ran out of the kind I wanted just at the time, and as I had heard a good deal about "flat bottom" foundation I wrote to a house in Sydney for samples. In the course of a week up came samples of three thicknesses, all flat-bottomed, and what struck me as somewhat peculiar, all intensely yellow in color. One was heavy, I should say about four or five Langstroth frame size to the pound avoird., the next medium, about six or seven to the pound, perhaps eight, and the last very thin. I should certainly think twelve to fourteen sheets L size would have to go to the pound. As these pieces were about three and a half inches square I thought I would try these in sections and see how the bees would like them, and compare results. As I use the T super on a "simplicity" body, when I had my sections with these pieces of foundation fixed and was placing them in the T super, I thought what a pity this firm did not send me four samples, for then the sections would go right across the centre of the super, so to make the experiment more conclusive to my mind I filled another empty section with a piece of ordinary foundation the same size as in the other sections (this foundation goes six to the pound, and I use it in the brood chamber). Please remember that the T. super I put these four empty sections in was already on the hive. The bees had filled nearly all the sections in it and had the centre ones capped. I withdrew four capped ones from the centre to make room

for the four empty ones I was experimenting with.

I go to my notebook for results.

Sections all put in on Dec. 15th. On 16th, (next day), I looked at 4 p.m., and found bees had pulled out the ordinary foundation section and there were signs of honey in the top centre cells. The heavy flat bottomed foundation was nearly pulled out; no honey. The medium flat was half pulled out.

The flat thin foundation was not long started on by the bees.

Now, as this hive literally boomed with bees and I had put all these sections in the same part of the hive I could not understand why so much difference should exist in the way the bees took to the foundation.

Continuing to watch daily, my notebook gives the following remarks:

On the 18th, at 4 p.m., took off the section that had the ordinary foundation in. Completed; capping very regular; weight, 15½ oz.

On the 20th, at 3 p.m., took off the sections that had the heavy flat and medium flat foundation in. Completed; capping like drone comb in sections; weight, 15½ oz. and 15½ oz.

On the 24th, at noon, took off the section that had the very thin flat-bottomed foundation in. Completed; capping fine and regular; weight, 15½ oz.

Well, I thought at the time the flat-bottomed foundation is not in the race with the ordinary bottomer, especially the thin flat, so no more of that for me. I then thought perhaps, on testing these sections for flavor, and especially "fishbone," I shall find something that compensates the thin flat for the terrible long time the bees were finishing it.

Several of my friends were with me when we cut the section carefully, but although we looked and tested and looked again, we could see no difference in the mid-rib of either sections with this exception that the sections that had the flat-bottomed foundations in them showed some signs of their mid-rib being nearer the ordinary bottom than flat in shape.

It is quite possible that the bees not being satisfied with the flat shape, "fussed with it" and thus caused the sections to be longer in completion. However, the conclusion I came to and what I intend acting upon in future is simply this, that only one class of foundation enters my yard, viz: the ordinary bottom at six sheets L size to the pound, and that the same foundation goes in the section as in the brood-nest.

Faithfully yours,

ROBERT PATTEN.

Binni Apiary, Cowra, N.S.W., Aug. 28th.

### Enemies of the Honey-Bee.

READ IN WASHINGTON BEFORE THE A. A. A. S.

THE foes of the honey-bee are more numerous than would be supposed. We find them among the highest class of animals, and also among the lowest of all organisms. Three classes of vertebrates contribute to the group; many insects are included, while one of the most deadly of the microbes finds a rich pabulum in the brood of the honey-bee.

Among mammalia, bears, except that man has so nearly exterminated the species, would be counted among the honey-bee's worst foes. Bruin braves the anger and attack of the bees, impelled by an exceeding fondness for honey. The dense hair and thick epidermis serve well to fortify for the most part against the stings. In some experiments with a tame bear it was found that she would never hesitate to satisfy her taste for honey though the latter were guarded by scores of bees. The bear would close her eyes and rush to the feast. The shutting of the eyes was not simply an expression of satisfaction, but, rather to protect them, as she never closed her eyes when given a bottle of honey to suck. In taking the honey from the hive, the frequent head shakes proved that she had to take the bitter with the sweet.

The shrews and mice are serious enemies. These, however, make their attack in winter, when the semi-stupor of the bees prevents any considerable resistance. Owing to their minute size these little mammals, especially the shrews, are able almost in every case to gain access to the hive. Whether or not these animals eat the live bees, I am unable to say; but they certainly eat the dead ones, and so gnaw away at the combs, in their search for the pollen at the base of the cells, that they often fall in one shapeless mass at the bottom of the hive. Very likely the irritation consequent upon such disturbance kills the bees, which are afterward devoured.

The king-bird, one of our most rapacious fly-catchers, is a very serious enemy of the honey-bee. This bird, I dare say, would not refuse a large sleek drone; but that it confines its attack to these is certainly not true. I have taken on worker bees from the stomachs of these birds several times, after watching it capture the bees. The bird flies from some convenient perch near the apiary, snaps up a bee, returns to its perch, works a moment with the bee, when the latter is swallowed, and the whole operation repeated. I have wondered whether

the manipulation to which the bird subjects the bee just prior to swallowing it renders the latter unable to sting, or whether, as in the case with the toad, the bird receives a sting for every bee swallowed. The fact that a bee will sting, with opportunity, for hours after the head is removed, or even the abdomen cut in two at the middle, makes it seem impossible that the king-bird could handle the bee so dextrously, except that it were wise enough to extract the sting, so that the bee could not sting; and yet the motions always observed just before the swallowing act are significant. Why is not the bee swallowed at once? Of course, this interesting question could be easily settled by a careful examination of bird and victimized bees—a thing which I shall surely do upon the first opportunity.

The toad is no mean enemy of the bee. As evening approaches, or even on dark, cloudy days, this rough-skinned batrachian sets himself near the entrance of the hive, and, by aid of its long viscid tongue, will catch and swallow a dozen bees in a very brief time. I have often seen this interesting performance. Once, after a toad had taken five bees in succession, I took the toad, examined its stomach, and found therein five stingless worker bees. I then examined the toad's throat, and found all the five stings sticking in this vital cushion. Is the toad callous to these envenomed pricks, or is he a sort of martyr to his love for the bee and its load of sweet? As I could never see any scowl or wince, I have imagined that the toad, unlike the bear, was not very sensitive to such venom-ed stabs.

The insect enemies of bees are quite numerous. Among the bees, a species of *andrenae* often enter the hives in the spring as pilferers. Often the bees pay no attention to them, though a honey-bee from another hive enters at its peril. I have wondered whether these *andrenae* could have a protective scent, or whether they are regarded by the bees as too insignificant to excite either alarm or apprehension. Species of *bombus* also enter the hives—usually, however, only when the hive is opened, as the entrance is commonly too small to permit ingress. Once in, and the hive closed, the bumble-bee receives rough treatment. The bees attack it and soon rob it of life and its hairy covering. They attempt to drag its great carcass from the hive, but, unable to do this, they show their respect for size by proceeding at once to give it decent burial. This is effected by covering it with propolis, or bee glue. Often I have seen the dead body of a mouse similarly

sealed within the hive. Is not this a kind of sanitation?

A species of *apathus*, which also enters the hive of the honey-bee without any resistance, is, as I have reason to believe, a worse foe than is *andrenae*, as there is considerable evidence that these bees breed in the hive. I have received specimens of these bees from a very intelligent bee-keeper of Indiana, who reports that this cuckoo-bee certainly breeds in the hive. If this is correct, it is a very interesting case. I hope soon to have positive evidence on this point. The fact that many of the cuckoo-bees were seen in the hive, and acted entirely at home, seemed to confirm this theory as the correct one.

In America wasps are not serious enemies of the honey-bee. I have received from the South the large handsome *Stizus speciosus*, Drury, with the report that it had caught and killed a honey bee. I think such depredations, even in the south of the United States, are much less frequent than in Europe and Asia. Of the family *Mutillidae*—the cow-killer of the South, *Sphaero-aphthalmus occidentalis*, Linn., is no mean enemy of the bee. This beautiful insect has no apparent fear of bees, and is very free to attack them. Probably its densely chitinous body and very powerful sting make it an overmatch for the honey-bee. I have this very hairy ant-like insect from Kansas, Mississippi, and Florida, in all of which States it has been seen to kill and attack bees. It is a very predaceous insect, and doubtless is more our friend than enemy.

Various species of the family *Formicidae* attack bees. In the North ants do no harm, except to gather on the top of the inner cover of the bees, seemingly for warmth. Occasionally they annoy or irritate the bees to some slight extent. In the South, ants often kill the worker bees, and occasionally the queens; at least, it is so reported.

Ants are easily poisoned, and may be killed at wholesale by applying bisulphide of carbon to their ant-hills.

Among dipterous insects we find bee-enemies in three families. Without doubt the robber-flies, *Asilidae*, are the chiefest offenders. These terribly predaceous insects are well denominated bee-killers. They are most destructive in the South. There are several species that are known to kill bees. These belong chiefly to the following genera: *Erax*, *Promachus*, *Asilus*, and *Mallophora*. These often do serious damage—so much so, that in some parts of the South, boys are employed to kill them, which they do by the dextrous use of the whip. The

habit of these flies reminds us of the king-bird. They pounce upon the bee, grasp it while on the wing, by use of their feet, and repair to some resting place, where they deliberately suck their victim's blood. Scores of bees may be destroyed in a day by one of these rapacious flies.

The bee-louse, *Braula coeca*, of the family *Brauliniidae*, has been frequently introduced into this country from Italy and Cyprus, on queen-bees; but from the fact that it has given no trouble—indeed, is rarely seen in the United States—it would seem that our climate must be inimical to its well-being. It can hardly be called an enemy of bees on this side of the water.

Among lepidopterous insects, the well-known bee-moth, *Galleria cereana*, Fabr., is a generally recognized enemy of the honey-bee; yet it is usually powerless to injure any but weak colonies, especially of the yellow races of bees. Though called the wax-moth, it really feeds mostly on pollen, though it cuts the comb in a ruinous fashion, as it tunnels through and through it in search of its real food. It is not considered a serious enemy by any well-informed bee-keeper, but will often do serious mischief to weak colonies of bees by matting, soiling, and tunneling the combs, and in this way exciting and dispiriting the bees. It is also ruinous to exposed combs, and thus makes caution on the part of the bee-keeper an imperative necessity to success.—*Gleanings*.

A. J. COOK.

Ag'l. College, Mich.

(To be continued.)

FOR THE CANADIAN BEE JOURNAL.

A report from Lancaster.

I began the season with twenty-nine colonies and increased to seventy-two. I went in mostly for comb honey, as I, a farmer, could not give the bees the care I should. I got about 450 lbs. comb honey, and 750 lbs. extracted. My first swarm came off June 11th., the earliest swarm I had for the last ten years. Bees did extra well on white clover with us in this section, this year, but as far as I know, bees did nothing on basswood here. On the whole, it has been the best season for honey we have had for a number of years, and I find beekeepers are in good spirits, and all say their bees are in fine order to go into winter quarters. Hoping this is the first good year of many to follow, which would help bee-keepers to forget past troubles.

JOHN W. CALDER,  
Lancaster, Sept. 30th., 1891.

**Bees Necessary for Fertilizing Plants.**

IN Gleanings you say something about not succeeding with cucumbers. If you should ever come west of Chicago it would pay you to come to Minneapolis, just to see a greenhouse belonging to a German gardener. I do not know the exact size, but I think it covers nearly two acres, besides acres of hotbeds. He devotes the fall and early winter to lettuce, and then fills them up with cucumbers, and they are still selling from them, although outdoor cucumbers are now in the market. His sales from cucumbers alone would amount to several thousand dollars. During the winter and spring he is obliged to keep a hive of bees in each house to fertilize the blossoms, or else very little fruit sets. Last April his bees all swarmed out, and he lost all the queens but one, and a few weeks after he came to me for more bees. He told me in that time he had lost more for not having them than the amount he paid me—\$27.00. His cucumbers in the greenhouses do not run on the ground, but on trellises of cord and wire slanting up about the angle of the roof of the house. Any one, by stooping a little, can see the whole length of the greenhouse under the vines, and see cucumbers hanging down all around. I have a small farm, and, in addition to my bees. I keep eight or ten cows, and raise some small fruit, chiefly currants and raspberries. The honey crop last year was nearly a failure, and this year does not promise more than half a crop. I hope when you come west again you will come this way, and I will meet you and take you around.—

E. R. POND.

Bloomington, Minn., Aug. 6.—Gleanings.

**FOR THE CANADIAN BEE JOURNAL.****Money Section Press and Foundation Fastener.**

I have sent you the out of my "Autonmatic Combined Self-folding Honey Section Press and Foundation Fastener, with a brief description of its construction and working, so that those of your readers, who had not the opportunity of seeing it in operation at the Toronto Exhibition may better understand its working. Though as one Apiarist said after seeing it in use: It has to be seen in use to fully appreciate its practicibility for comb honey.

As well be seen from the cut it is combined, thus folding the section, and fastening the foundation in at the same time, and the one operation. It being foot power, both hands are at liberty, to handle the section in one hand, and the starter in the other. The sections are plac-

ed to the right so as to be convenient to pick up with the right hand in the centre, and the starters placed at the left to pick up with the left hand, which are both done at one. The section is drawn back in the back stop, which folds the section square in the centre, where it drops down even with the table, when a slight pressure of the foot draws the two ends together by the upright pins, at the same time the heater plate rises up above the wax block. The pressure is staid long enough to touch the wax against the hot plate, and on further pressure, the plate is so constructed as to immediately drop down out of the way, and the head block presses the ends of the section together when wax adheres to the section even, and in the centre every time, with no breaking of the sections as they are folded even and square.

The machine is made of hard wood form of a small table 14 x 15 inches square, with a 3 inch rim, and can be used on a table, or any ordinary bench with a lever 3 x 2 feet long hinged to the floor. The working parts are all made of cast iron fitted to work the same as any machinery, secured by screws to the wood. It is automatic being drawn back by a coil spring of piano steel wire, so that it is always ready for operation.

W. O. LEACH.

We saw this machine working at Toronto Exhibition, and it appeared to us a very simple convenient device, and we think it will work admirably. We believe the price is to be about \$5.00 for each machine.

FOR THE CANADIAN BEE JOURNAL.

A Report from Blythe.

THE readers of the C. B. J. will please listen to what I have to say about my bees this year. I started in the spring of 1891 with eleven colonies, one of which was so weak that it would not cover two frames. I kept adding brood to it until July, when it was able to take care of itself. The rest cast one swarm, except one which I kept at bay, by giving more room.

On July 24th, I had five hundred weight of honey from my twenty colonies, and intended them to gather enough for winter, but on looking in on Sept. 1st, I found that they had increased nothing since the time I extracted, so I thought I could get enough honey from them to pay for sufficient sugar to winter them on as the grade A sugar could be bought by the barrel for 5½ cents a pound. I bought one barrel of sugar which cost \$14.74, and as I had only four



feeders, I extracted four hives and fed four, every night, until I was over them all once, giving each fifteen pounds of sugar, made into syrup in the proportion of "one of water to three of sugar" which made twenty pounds of syrup. From my twenty colonies, I had only received one hundred weight of honey, so then I bought another barrel of sugar which cost me \$14.08, I fed it giving each the same quantity as before. I use the Gallup frame and my colonies are all strong enough to cover eleven frames thickly with the exception of one, which will cover eight frames, and has 36 lbs of well sealed syrup, but (I find it is queenless, what do you think I should do with it.) I have my bees in good chaff hives with zinc roofs, of my own make. I intend chaffing about the 1st of Oct., and wintering them out side.

What do you think of my method of feeding and wintering. I may add, honey is ten cts. a pound, crop very poor in this locality.

MARTIN RICHMOND.

Blyth, Sept. 22, 91.

Give them a queen by all means if they are strong enough, if not double them up with the next weakest colony. Your method of feeding is all right enough, but we do not think it will pay to extract and feed sugar syrup late in the season.

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#### Pleased With the Queen.

**D**EAR SIR:—I received the valuable queen I ordered of you in January, in due season, and in most excellent shape. She is a beauty without a mistake.

I thought I would also write of my experiences in introducing her to the colony intended for her. I put the cage containing the queen in the hive, so that the bees might become acquainted with her. After a few days I opened the cage, and instead of succeeding in getting her in the frame, she was off in the air like a streak of lightning. My belief was that the queen was lost, but, I was mistaken, for about three weeks later I noticed brood in the frame, and did not know what to make of it, I knew that the colony was queenless. It was only a short time before I noticed little yellow bees on the fly board. I was confident then, that the queen was with the colony. Yours truly.

KARL KIMM.

189 York St., Buffalo, N. Y., Sept. 28, 91.

Of course the queen returned and went into the hive, where she was accepted, as that was the only location

she had ever marked in the apiary, she would return to it again. We thank you for the praise of the queen, but we have no doubt she merits it. We have sent out some very fine queens this year, and later in the season, we were forced to send laying and tested queens, to fill orders for unfertile ones, and we presume the good results from their introduction will be fully appreciated next season.

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FOR THE CANADIAN BEE JOURNAL.

Lambton Bee-Keepers Association.

**O**N account of the busy season caused by the late rains delaying harvest, the meeting of the above association, in Alvinston, was poorly attended.

Those present, discussed various matters of interest, and after some deliberation it was decided to hold another meeting on November the 2nd, in Alvinston, when a better attendance is looked for.

W. E. MORRISON, Sec.-Treas.

Alvinston, Ont.

We hope the next meeting will have a good attendance, and we should be pleased to have a full report of the proceedings.

---

Methelln.

A correspondent to the British B. J. describes how to make the above.

Save all scraps from the extractor, and spare pieces. At the end of season collect all broken combs which are clean and free from mould. Put them into a copper with sufficient water to cover them, boil till combs are dissolved. Get a large shallow pan and strainer with a cloth in, bail out into the cloth and wring the liquor well out from cloth, and empty wax back into the copper; repeat this until all is used from the copper. Let this stand all night; when cold take off the wax. Now put all the liquor back into the copper again, and boil for one hour. Add some ginger and a little nutmeg according to the quantity of liquor made. Put in about half or three-quarters of a 'yeast'; stir up well; when cold put in small cask or stone bottles. Save sufficient liquor to fill up the cask, as it wastes in fermenting. When fermentation is over bung up; it will then keep for years.

WILLIAM PREECE.

Ticehurst, Sussex.

## War Among the Workers.

**F**RIEND Bennet, I have just read your letter in the C. B. J., telling us all about how the bees in some of your colonies kill each other. I have had colonies act just the same as yours, and have felt very much annoyed to see the bees of the same hive nibbling, gnawing and killing each other, day after day. Some times I gave them a great smoking, but it was of no use. In time past I have had some of my best colonies act that way, and when the colonies became weak in bees by that murdering work, I gave the queen's to other colonies, so as to save what I considered choice queens. Then at the close of the next season, when the honey got scarce in the fields, I saw the bees from the same queens killing each other. I then learned that it was in the nature of some bees in the time of scarcity, to kill each other, and in all such cases since, as soon as I see the bees of the same colony killing each other I kill the queen at once and give them another. Where the killing has been going on for some time, you will find a good deal of starved brood in the same hive because the bees took more interest in killing each other, than they did in feeding the brood, and the result is a good deal of starved brood in a hive with plenty of honey. If I had any colonies killing their own bees and found starved brood in the same hives, I would kill the queens, put the bees of two or more colonies into one, and give them a young queen at the same time. Then the next evening I would cage the queen, remove the combs, shake them into the same hive, give them full sheets of comb foundation with the queen kept caged for three or four days so that the bees would not, warm out. As soon as I gave the comb foundation, I would feed the bees abundance of sugar syrup, and three days after I gave the foundation, would let the queen in with the bees, then by that time the bees would have the foundation partly worked out, and then the bees would swarm out. I would then feed the bees plenty of the sugar syrup to put them in good order for winter. All the combs that had starved brood in, I would make into wax at once, I would do all such work in the evenings. I see that you have tried the acid, and I believe you will join Mr. D. A. Jones and myself, and go dead against all acids in trying to cure any disease, because foul brood cannot be cured by any acid.

Very truly yours,

MR McEvoy.

Woodburn, Sept. 24, 91.

Thanks for your letter. It seems that bees are sometimes like ancient kings and queens, who ordered their subjects to be killed, without any reasonable cause. If we had a queen that would order the bees to kill each other, and put them fighting in that way, we think we would like to dispatch her at once.

## A Mine of Honey.

**D**own at Temescal, San Bernardino county, near the famous San Jacinto tin mine, there is veritable mine of honey. There is large force of men employed at the tin mine, and they put in their idle time prospecting in the hills of the vicinity. One Sunday half a dozen of the miners applied to Colonel Robinson, the superintendent, for the privilege of using some giant powder and a few tools. He asked them what they wanted to do, and they replied that they proposed to tap it. Laughing, he gave his consent and an order on the store keeper for the desired articles, and, with a supply of pails and tubs, the men set out on their expedition.

They were gone all day, and along towards sundown a sorry looking procession came over the hill and made its way to the employes' headquarters. They had tapped the mine there could be no question about that. They were sticky with honey from head to foot. Hair and beard dripped with it, like unto the appearance of Aaron when he was anointed, even so that the oil ran all over him and down to his feet.

Their clothes were liberally plastered with a mixture of honey and mud, there was honey everywhere. But the tubs and buckets were full of honey as well, for a rich lead had indeed been struck.

The men, it appeared, had found a crevice in the rocks whence issued a constant stream of bees and from this they judged that there must be a large quantity of honey in the recesses of the cliff. The opening used by the bees was too small to admit of the passage of a human being and after carefully examining the place a tunnel was commenced a little way from the entrance and after this had been run the right distance an uprise was put in which by good luck struck the ledge of honey in its center. After a hot contest with the bees several hundred pounds of comb honey were taken out and the tunnel was closed up. Several times since additional supplies of the sweet material have been taken from the cave.—San Francisco Chronicle.

## Queries and Replies

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

### Will it Pay to Feed Sugar and Extract Honey.

QUERY No. 313.—With granulated sugar at present price, will it pay to make it a point to extract honey, and feed sugar syrup for winter use?—B. D.

J. F. DUNN, RIDGEWAY, ONT.—It might pay, but I wouldn't do it.

J. E. POND, NORTH ATTLEBORO, MASS.—No! that is not in my opinion.

J. K. DARLING, ALMONT, —I can't say, think I will try some this fall.

G. M. DOOLITTLE, BORODINO, N. Y.—It would not me, but you can try it and see if it pays you.

EUGENE SECOR, FOREST CITY, IOWA.—It will probably pay just as well now as it ever has, even if honey is cheaper. But whether or not it ever pays in the long run, I doubt. Too much work.

PROF. A. J. COOK, LANSING, MICH.—Most assuredly if you can get ten or even eight cents per pound for your honey.

JAS. HEDDON, DOWAGIAC, MICH.—Much depends upon your knowledge of feeding, the kind of feeders and other implements you have, and what price you can get for the honey. Maybe yes, maybe no.

R. F. HOLTERMANN.—No, I think not, have no faith in feeding liquid at any season of the year. It is an expense, considering waste in storing, should only be resorted to when bees will gather no honey from the natural sources.

ALLEN PRINGLE, SELBY.—No, it will not pay if you take ultimate as well as present results into consideration. Do nothing of the kind, and never feed syrup except in emergencies and contingencies, and these you had better always try to avoid.

G. A. DEADMAN, BRUSSELS.—Whether it will pay or not depends upon the value of your time and the saleability of your honey. I think however your time can be better employed than to increase the honey supply in this way. Better to buy honey to supply your market than do this. I would never recommend feeding honey where colonies are necessarily short, but to extract and then feed, helps to bring the industry into disrepute.

G. W. DEMAREE, CHRISTIANBURG,—I think

not. A customer just now was speaking to me of the popularity of my honey because I used no sugar in my apiary. I would only use sugar to feed bees when necessity forced me to do it to save the lives of the bees. The fact is *cheap sugar* has damaged my honey market this season, and it is not to our interest, as honey producers, to crowd the honey market by artificial means. The past season has been very good in Kentucky and the market is glutted with honey, without resorting to artificial means to throw more honey on the market at a very slim margin of profit. Besides the suspicion that such a course is likely to excite as to the purity of honey.

D. A. JONES, BEETON, ONT.—We do not think it will.

### Sugar and Honey.

QUERY No. 314.—Will the present change in the price of sugar have any effect upon the honey market?—W. F.

J. F. DUNN, RIDGEWAY, ONT.—I doubt it.

JAS. HEDDON, DOWAGIAC, MICH.—No, I think not.

G. M. DOOLITTLE, BORODINO, N. Y.—Perhaps a little but not materially.

PROF. A. J. COOK, LANSING, MICH.—Time will tell. I do not expect it.

J. K. DARLING, ALMONT.—Can't say positively, but think it will make prices rule lower than ever before in Canada.

J. E. POND, NORTH ATTLEBORO, MASS.—Not to any appreciable extent, in my opinion.

EUGENE SECOR, FOREST CITY, IOWA.—I think it may a little, but not as much as one would suppose. Sugar is a staple. Honey is a luxury. People who want honey usually buy it whether the price is 12 $\frac{1}{2}$ c. or 20.

R. F. HOLTERMANN.—Honey and sugar enter very slightly into competition especially first class honey. The price of the latter will be effected none at all or but little by price of sugar. The lower grades of honey may have their demand lessened.

G. A. DEADMAN, BRUSSELS.—I certainly think it will lessen the demand for honey, and in localities where honey is plentiful and the retail price more than ten to twelve and a half cents per pound that there will be either less sold or the price will come down.

ALLEN PRINGLE, SELBY, ONT.—The consumers say yes, while the producers say no, and in each case the opinion or wish is no doubt "father to the thought." The lapse of a little time will tell. I have a private opinion on the subject which will do the most good or the least harm where it is.

G. W. DEMAREE, CHRISTIANBURG.—Yes. The working people of the land buy more of the

honey production, in the extracted state, and they are sharp enough to substitute *cheap* sugar for *high price* honey. Our markets in Kentucky were never so glutted with honey as they are this season. I have at present withdrawn all honey from the market outside of my home trade, and am afraid that my honey house will break down. I shall wait till the rush is over. Cheap sugar and suspicion of adulteration on that account, is the stalking and menacing danger to our business just now.

D. A. JONES, BEETON, ONT.—Very slight if any.

## THE CANADIAN BEE JOURNAL.

ISSUED 1ST AND 15TH OF EACH MONTH

D. A. JONES

EDITOR

Present indications are in favor of much larger apiaries being established.

Feeding back honey should not be practised. A little sugar syrup say half and half will prevent granulation.

We have a lot of screw top glass jars, suitable for honey, jam, jelly etc., which we will sell at much reduced prices.

Weigh all your colonies, make no guess work, and do not delay a moment longer in preparing your bees for winter.

We have a large number of smokers and force pumps on hand, on which we will give special rates to agents and others.

How many have got their bees prepared for winter. Don't all hold up your hand and say, yes, until you go and examine them, and find out how many are short of stores.

Do not spare the honey labels on all your packages. Have them all handsomely labelled, and see the wonderful difference it will make in the sale. Money spent in this way will return 100 fold.

We have a large stock of goods on hand that we should be pleased to exchange for good clover or basswood honey. This is an easy way to get your next seasons' supplies. Everybody should take advantage of it.

We think by next spring that our bee-keepers will be better posted on the qualities of some

of our so-called new races, and will in all probability be less inclined by that time to throw away money in that direction.

We think the British Beekeepers should feel proud of the British Bee Journal as it is continually improving.

Feeding bees on honey dew for winter stores should not be tolerated for a moment. It has been digested once, or much of it has, and lacks nourishment. Always extract and save for spring food, and only feed when the bees can fly.

Mr. Alpaugh says he would not feed poor honey, under any circumstances, to bees wintering, because it granulates so quickly in the combs that the bees might starve with plenty of food around them. He says by mixing it with one-half syrup it remains in the liquid state. He winters without loss in that way.

It seems strange that some writers will continue to say *yellow* Carinolans. It would be just as sensible in our opinion to say *yellow* black bees. Black bees when crossed and re-crossed will have their black blood bred out, and become Italian, Egyptian, Syrian, or a yellow race. Is that any sign why they should be called black bees when there is nothing to indicate black blood in them?

bee is a feeble thing, but a single bee does not winter. A single bee is, in fact, only a part of an organism, and the colony of bees is the animal proper. In this respect alone we could write many articles. If you want to know how insect colonies act which are created for a tropical climate, let me tell you how the so-called stingless bees do, the melliponæ or trichoptera, and you will find out the difference.—L. STACHELHAUSEN, *Selma, Texas, in B. B. J.*

The large quantity of labels ordered now, indicate that people are alive to their interests. If we wish to realize a good price for honey, we must have it put up in an attractive form, and in order to encourage people to practice something largely in their own interest, we will make a discount of 15 per cent. on all orders of lithographic labels up to \$10, 25 per cent. on all orders amounting to \$25 to \$50; all orders over \$50, 30 per cent. off, when cash accompanies the order. This is a rare chance and one that we have never offered our customers before, and which, we presume, they will take advantage of.

Clubs of five, at one time, to any address for \$3.25; ten at one time, \$6; 20 at one time, \$11; 50 at one time, \$25. This a good opportunity for associations.

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MENTION THIS JOURNAL

**W. COLE'S** Black Minorcas. I have bred those birds for 5 years and they are as good as any in Canada, United States or England. 1889 pullets 94 94 94 94, 94, 94, 96, 96, 96, cockerel 95, J Y Bicknell, judge Eggs for hatching \$1.2 per 13. WM. COLE, Brampton

**SEND** your address on a postal card for samples of Dadant's foundation and specimen pages of "The Hive and Honey-bee," revised by Dadant & Son edition of '89. Dadant's foundation is kept for sale in Canada by E. L. Gould & Co., Brantford Ontario CHAS. DADANT & SON, Hamilton. Hancock Co. Ill.

**A FEW** Trios, Buff and Partridge Cochins, \$5 to \$10 a trio, also three breeding pens of Br. Leghorns, \$6 a pen. Eggs from Cochins and B. P. Rocks, \$2. Br. Leghorns, \$1.50. BARTLETT & GEORGE, Clarence St., London.

**A RARE CHANCE**—If you desire a good home within stone's throw of railway, express and post office in one of the very best honey locations in the United States. Write me for particulars. Excellent neighborhood. An apiary of 90 colonies, with fixtures, will be sold or leased with the place. Terms easy. Address JAMES HEDDON, Dowagiac, Mich.

**GET** new blood in your bees by getting our large beautiful yellow Queens, 75 cents each. Honey extractors, knives, smokers, frames sections, &c., &c. We are selling our nice foundations for 45 and 55 cents per lb W. CHRYSLEK, Box 450, Chatham, Ont.

**HAZELTON FRUIT AND POULTRY FARM.**—"Headquarters" for Banded Plymouth Rocks. If you require breeding or exhibition birds of this great variety and want "the best," order from headquarters. Send for eight page illustrated catalogue containing all particulars. Address C. W. ECKARDT, Ridgeville, Ont.

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In these pens are females scoring 95 and 97 points, and more just as good. Eggs, \$1.50 per 13. I can ship from Buffalo, N.Y., to American customers. Stock for sale after Oct. 1st.

**J. F. DUNN,**  
RIDGWAY, ONT.

### BEEES

**MENTION** this Journal if you are writing about anything advertised in its columns.

**WE** have about 75,000 more sections on hand of the 2nd quality, which we will sell for \$1.25 retail. Large discounts for wholesale agents. D.A. JONES Co. Beeton.

**LARGE BEES** are a consideration. Our No. 1 colony from which we purpose breeding next season produces a large Italian Bee as I have seen. I will not guarantee delivery of any queens not booked in advance. G. A. DEADMAN, druggist, etc., Brussels, Ont.

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**HAVING** nearly completed our new factory, in order to keep it running, we offer 5 per cent. discount off our list prices on all orders for goods to be used next season. This does not apply to Honey Cans, Sections, Crates, or Chaff hives. Only on goods for next season's use. We pay 30 cents cash or 35 cents trade for good average beeswax.

**MYERS BROS.,**

MENTION THIS JOURNAL Box 94, Stratford, Ont

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Cheap. A large number of Chicks of both varieties for sale now.

**EGGS IN SEASON, \$2 PER 13.**

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**Dunville P. P. Stock**

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1st and 2nd on S. C. B. Cock. These birds are for sale. 2nd on S. C. B. Hen, 96; 1st on Blk Minorca Pullet, 94. 1st on S. C. B. Leghorn, B. P.; 1st on Blk Minorca B. P.; 1st on Pekin Duck, 1st on Pekin Drake, drake for sale. A 1 birds for sale now.

**C. H. McRae**  
Park Poultry Yards, Dunville.

**NOTICE.**

I have a few White Leghorn Cockerels and Pullets from my best breeding pens. These are fine birds. Will sell singly in pairs or in trios.

**J. L. MYERS.**

P. O. Box 94. **STRATFORD. ONT.**

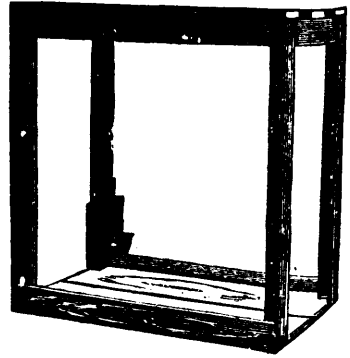
**EGGS, \$1.00 for 13.**

- Light Brahmas**—Six yards. Fletcher, Duke of York, Williams and Bucknam strains
- Dark Brahmas**—Three yards. Mansfield and Bucknam strains
- White Cochins**—Two yards. Lovell strain
- Partridge Cochins**—Three Yards. Williams, Booth and Washington strains.
- Buff Cochins**—Three yards. Gold Dust strain
- Black Cochins**—Two Yards. Williams strain
- Langshans**—Three yards. Croad strain
- White Plymouth Rocks**—Four yards
- White Wyandottes**—Two yards
- Silver Wyandottes**...Two yards
- Barred Plymouth Rocks**...Twelve yards. Drake Upham and Corbin strains
- Houdans**—Two yards. Pinckney strain
- White-Faced Black Spanish**—Two yards. McMillan and McKinstry strains
- Rose-Comb Brown Leghorns**...Two yards. Forbes strain
- Rose-Comb White Leghorns**...Two yards. Forbes strain
- Single Comb White Leghorns**...One yard
- Single Comb Brown Leghorns**...Two yards. Bonney strain

I make a specialty of furnishing eggs in large quantities for incubators at reduced rates. Send for 1890 catalogue.

**E. H. MOORE,** Melrose, Mass.

MENTION THIS JOURNAL.



**SHIPPING - COOPS**

For Exhibition and Sale Purposes.

Save money in express charges by buying light, well made coops—weigh only 5 1/2 lbs.  
We keep in stock one size only, 30 in. x 13 in. x 30 in. for pairs or light trios.

PRICES MADE UP.

Each	10	25	100
Skeletons, only,	30c.	\$2.75	\$6.25
With Canvas,	40c.	3.75	8.50

PRICE IN FLAT.

Each	2.50	5.00	18.00
Skeletons, only,	50c.	2.50	8.00
Name and address printed on canvas	5c.	each extra.	
	\$3.00 per 100.		

For Exhibition purposes, where coops are not furnished by the Fair Associations, strips are supplied which are tacked on one side of coop, at 4c. per coop.

OTHER SIZES.

We make coops in any size desired, and shall, at all times, be prepared to quote prices. In asking for estimates please give size and number wanted.

DRINKING FOUNTAINS.

For shipping and exhibition coops, to hold one pint water.	Each	10	25	100
		15c.	\$1.40	\$5.25

The water cannot slop out or become dirty. Larger sizes made to order. Ask for Prices.

**The D. A. JONES CO. LD.**  
**BEETON ONT.**

**DOGS AND COMB FOUNDATION.**

Brood Foundation, 50 cts. per lb.  
Section Foundation, 60cts. per lb.

**L. JONES,**  
**DEXTER P. O., ELGIN COUNTY, ONT.**

# LOOK HERE!! SMOKERS.

We have about 500 Smokers, No. 2 and 3, ready for immediate shipment, by mail or express. Special rates for large orders. See our Catalogue for regular rates. We have also

## 1000 Honey Knives

of various kinds. Extra discount to dealers Write for particulars.

**HE D. A. JONES CO., LTD.,**  
Beeton, Ont.

# TO BEE - KEEPERS

## AND FARMERS.

We have on hand a large quantity of 5 gallon (oak) kegs, just the thing for cider or vinegar, at only 70 cents each; also a quantity of second hand hives and honey tins at half price.

Foundation and General Bee Supplies always on hand.

**THE D. A. JONES CO., Ltd.**

Beeswax Wanted

# PRICES CURRENT.

## BEESWAX

We pay 35c in trade for good pure Beeswax, delivered at Beeton, at this date, sediment, (if any), deduct 10c. American customers must remember that there is a duty of 20 per cent. on Wax coming into Canada.

## FOUNDATION

Brood Foundation, cut to any size per pound.....50c  
over 50 lbs. Write for price.  
Section " in sheets per pound..... 55c  
Section Foundation out to fit  $3\frac{1}{2} \times 4\frac{1}{2}$  and  $4\frac{1}{2} \times 4\frac{1}{2}$  per lb. 6c  
Brood Foundation, starters, being wide enough for 48c  
Frames but only three to ten inches deep.

**THE D. A. JONES CO., BEETON**

# THIS SIZE AD.



3 months..... \$3 00  
6 " ..... 5 00  
1 year. .... 8 00

Payable in Advance.

# BE SURE AND GET GOULD & CO'S

—PRICE LIST OF—

**HIVES, EXTRACTORS, FOUNDATION, &c.,**

before ordering elsewhere. Address E. L. GOULD & Co., Brantford, Ont.

# Poultry Netting & Fencing.

We can now furnish the best Poultry Netting at the following low prices for 2 in. mesh No. 19 wire, in the various widths, in full roll lots (150 feet to roll):

24 in.	30 in.	36 in.	48 in.	72 in.
\$3 10	4 00	4 85	00	9 50

19 GAUGE.		18 GAUGE.	
\$3 25	4 00	00	9 90

Less than full roll lots the price will be 1 1/2 c sq ft

**D. A. JONES, CO., BEETON,**

All subscribers in arrears to  
**THE JOURNAL**  
 will please settle at once.



**\* P. H. HAMILTON, \***  
**HAMILTON, - ONT.,**  
 Breeder of  
**White and Black Leghorns,**  
 —AND—  
**IMPERIAL - PEKIN - DUCKS.**

Chicks and Ducklings for sale in September. No more Duck Eggs for sale. Leghorn Eggs for balance of season, \$2.00 per setting of 13; or two settings for \$3.00, one of each if desired.

**Prices to suit the Times**

A FEW pairs of Silver Laced Wyandottes and a few Plymouth Rock cockerels for sale cheap. Brown White and Black Leghorns, White and Barred Plymouth Rock, White and Silver Laced Wyandottes Eggs of any of the above varieties, or mixed, at \$1.50 per setting, or two settings of \$.

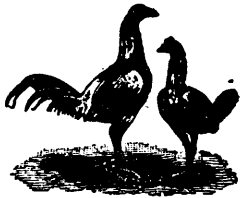
**WM. MOORE**

MENTION THIS JOURNAL Box 462 LONDON, ONT

**GAME**

**Bantam Fanciers**

**NEW FANCIERS.**



Eight Black Red Cockerels—grand ones, guaranteed Bred from a Crystal Palace cup winner. Sure to please you; from \$2 to \$5 each. Some Fine

Brown-Reds at \$4 to \$5 per pair; also a good Pile Bantam Cockerel (yellow legged), bred from a great English winner, fine station, color, etc. Price only \$3, these are sold on account of having too many birds; also large Game fowls. All are in fine health and condition. First money gets the best. E. F. DOTY, 47 Wellington Place, Toronto

**COCKERELS AND PULLETS**

**S. C. BROWN AND WHITE LEGHORNS**

<b>COCKERELS,</b>	<b>PULLETS,</b>	<b>HENS,</b>
\$1.50 to \$3.50	\$1.00 to \$2.00	\$1.25.

Barred Plymouth Rock Cockerels, \$1.50.

Setting of Eggs.

BROWN AND WHITE LEGHORN	.....\$1.50.
BLACK MINORCAS	..... 2.00.
BARRED PLYMOUTH ROCKS	..... 2.00.

I have not spared money in procuring best strains in the country, and you can rest assured you will get

**GOOD VALUE FOR YOUR MONEY.**

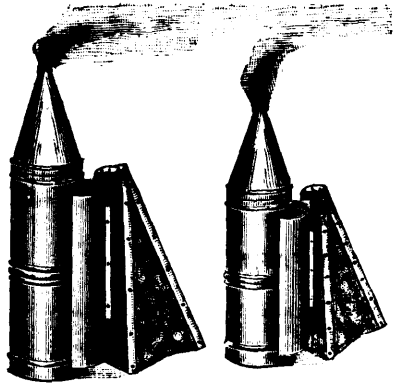
Bay of Quinte Poultry Yards with 40 acres of a run.

**GEO. H GRILLS,**

Box 339.

BELLEVILLE.

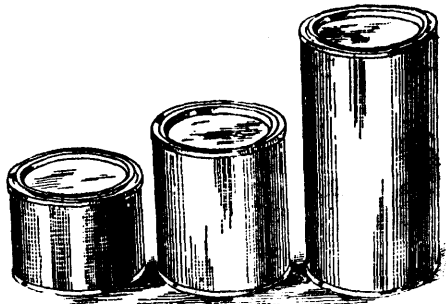
**SMOKERS !**  
**CUT IN PRICE**



Since our Catalogue was issued, we have made a contract for a large number of smokers by piece work, at such figures as will enable us to reduce the prices. Here after the price of the No. 25, smoker will be \$1, (formerly \$1.25,) with goods; \$1.25 by mail.

**HONEY TINS.**

We now offer the "Penny Lever" Tin in three sizes. These are probably the handiest tin to handle and the price is a shave lower than the "Screw top."



2 LB.                      3 LB                      5 LB.

**PRICES.**

NO. LBS	PER 100	PER 500.	PER 100	EACH
5	\$60.00	\$32.00	\$6.75	8
3	47.50	25.00	5.25	6
2	40.00	21.00	4.25	5

**THE D. A. JONES CO.**

**BETON ONT.**