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THE CANADIAN BEE JOURNAL

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

Vol. VII, No. 3. BEETON, ONT., MAY, 1, 1891 WHOLE No. 287

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	\$3.50	\$4.50	\$6.50
3 months.....	3 00	4 50	5 50	6 50	11 00
6 months.....	4 00	5 50	7 00	9 00	15 00
12 months.....	6 00	9 00	12 00	15 00	27 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.

to 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 ...elve 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., Beeton, 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.

ADVERTISEMENTS.

The Wide Awake Bee-Keeper

Who reads the BEE-KEEPERS' REVIEW one year, or even a few months, is almost certain to become a regular subscriber. As an inducement to non-subscribers to thus become acquainted with the REVIEW, I will send 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. E. HUTCHISON, Flint, Michigan.

Muth's Honey Extractor.

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

CHAS. F. MUTH & SON,
or, Freeman & Central Avenues, Cincinnati



BEEES AND HONEY

The Dorettailed 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 **Illustrations 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 cyclopedia of 400 pages, 240 and 400 cuts. Price in cloth, \$1.75. *By Mail*. This paper, A. I. ROOT, 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

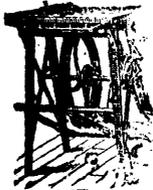
H. ALLEY, Wenham, Mass.

Michigan Lands For Sale ! 12,000 ACRES GOOD FARMING LAND

—TITLE PERFECT—

On Michigan Central and Detroit & Alpena and Loon 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 hives with 7 inc cap. 100 honey racks, 500 broad frames, 2000 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.

BEE MEN Should send five cents for Samples of our lithographed honey Labels. The D A Jones Co., Beeton

FOR TRUE BLUE

CARNIOLANS, GOLDEN ITALIANS
CARNO-ITALIANS SEND TO

WALKER & HORTON FARGO, ONT.

	Untested	Tested	Select Tested	Bees by lb. from Virgin	May	June	July	August	Sept.
May	\$1 50	\$2 50	\$3 00	\$	15	25			
June	1 00	2 00	3 00	60	1 00	75			
July	75	2 00	2 50	50		75			
August	75	1 50	2 00	50					
Sept.	1 50	2 00	2 50						

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.

BE SURE AND GET GOOLD & CO'S

—PRICE LIST OF—

HIVES, EXTRACTORS, FOUNDATION, &c., before ordering elsewhere. Address E. L. GOOLD & Co., Brantford, Ont.

BEEES AND DOGS

25 COLONIES OF BEEES CHEAP !

Will sell 25 colonies of bees of that choice honey gathering strain that are so near perfection in all their qualities. 1 colony \$5. 2 colonies, \$9, 3 or more \$4 each. Look out for them, they are second to none. I also bred a very fine class of Cocker Spaniel dogs the finest I have ever seen. Price of puppies \$5 each, L. Jones Dexter P. O. Ont.

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., 186 West Adelaide St., Toronto, Ont.

OVER * TWENTY * PENS

—OF—

SPLENDID BREEDING STOCK of the following varieties:

Wyandottes, Minorcas, Leghorns. Plymouth Rocks, Hamburgs and Brahmas

Eggs, \$2 per 13. - \$5 per 39.

—SEND FOR CIRCULAR.—

W. T. TAPSCOTT, Brampton, Ont.

IMPORTED

Cornish · Indian · Games

—AND—

MOTTLED LEGHORNS.

Grand Exhibition Birds, a limited number of eggs, \$5.00 per 13. Silver and Golden, Black and White Wyandottes, Derbyshire Red Caps, Light Brahmas, B. Javas, Partridge Coochir, Black Leghorn and Pekin Duck Eggs, \$2.00 per 13. White and Red Malay Bantams (just imported), Silver and Golden Sebrights, Pekin and Japanese Bantam Eggs, \$3.00 per 13.

No expense has been spared to mate the above for best results, many of them having won the highest honors at recent shows. Full particulars given on application and satisfaction guaranteed.

CHAS. R. BACHE

472 Parliament St., Toronto.

COMB FOUNDATION

BEEKEEPERS, I am making a specialty of the manufacture of comb foundation, and solicit your orders for the same. I warrant it a No. 1 article made from pure, selected beeswax, perfectly clarified and easily worked out, free from any taint of foul brood. None but the softest yellow wax used in the thin foundation. Give me a trial order and I will give you satisfaction. Prices from 48 cts to 58 cts. per lb. Write me for samples, stating kind (thick or thin), size and quantity wanted, and I will quote you prices. Foundation made up: 10 cts. for thick and 18 cents for thin, in quantities over 40 lbs.

BEE HIVES.

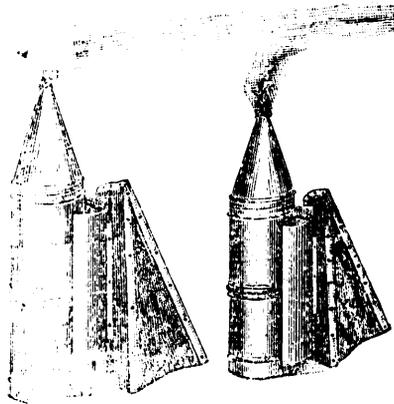
I also manufacture the Modern Bee Hive, a good serviceable hive, well made from pine lumber, rabbitted joints, 9 frames, (size of L.), movable bottom with slanting alighting board, division board, and quilt flat cover 1 1/2 inc. deep. Sample painted \$1, with super also painted, containing 304 sections, 1.10. Foundation Starters in frames and sections 20 cts more. Complete hive for comb honey, same as above in flat, in luting metal rabbits super, tins for same, quilt, 30 sections and sheet of tin for covering corners, \$1.10. In quantities slightly less. This is a good hive and very cheap at this price. Sections \$4.50, Smokers \$1 by mail. Bees from 6 to \$8.50 per colony. Honey knives, Jones', 85c. and \$1.35. Bedford is situated a little distance from Montreal and can ship goods over C. P. R. and G. T. R. Editor of express. References,—Local Bank, Montreal and Bedford Times or W. M. No circulars. Write me what you want and I will quote lowest prices and give you satisfaction.

FRANK W. JONES

BEDFORD, Que.

SMOKERS !

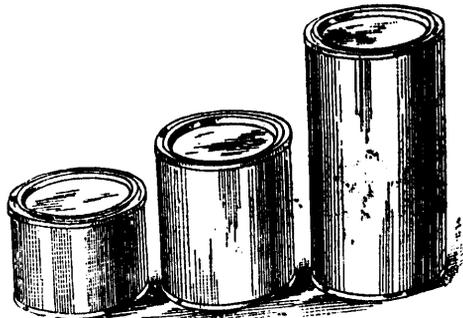
CUT IN PRICE



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. 2 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.		LB.	
NO. LBS.	PER 1000	PER 500.	PER 100	EACH	
5	\$60.00	\$32.00	\$6.75	6	
3	47.50	25.00	5.25	5	
2	40.00	21.00	4.25		

THE D. A. JONES CO.,
BETON, ONT.

ADVERTISEMENTS.

Special Offer for May!

I WILL SELL EGGS FROM MY BEST Breeding Pen of White Leghorns or Langshans for the month of May at the following prices:—

- 1 Setting (13) - - \$1.50.
- 2 Settings (26) - \$2.00.

This is a grand offer as my birds are good.

J. L. MYERS,

Box 94, Stratford, Ont.

APIARY FOR SALE!

IN ONE OF THE BEST LOCALITIES IN CANADA, havin wild and cultivated land, alsike clover, white in abundance, fully 50,000 basswood trees, within three miles, fall pasture gave over 100 pounds from some colonies fall of '89. Distance from the lake prolongs the honey season of each flower several days. Almost no bees in the locality. Will sell 60 colonies bees wintered outdoors in splendid condition; 24 Langstroth hives in flat, half for comb and half for extracted 4 frame Stanley Extractor, Langstroth frame; 500 surplus combs, Langstroth; 2000 sections, 4 1/2 x 4 1/2 Dадant brood and section foundation, about 100 pounds; 15 hives made up with supers.

Will sell the above in bulk or separately, at low prices. A rare chance to locate an apiary. Apply to

R. F. HOLTERMANN
ROMNEY, ONT.

CLAMPS FOR SPRING PACKING.

All practical Beekeepers concur in the opinion that bees wintered in the cellar, should be packed on their own stands in spring, to keep them in the best condition. We are making a light clamp specially designed for this purpose.

This clamp consists of a bottom board of 3/8 in. lumber to cross pieces 7/8 x 3 in. to set hive on to allow of packing under; the four wall and a bevelled rim to cover the packing above, arranged so as to allow of using the ordinary lid of hive for cover. To be used with 4 inches of sawdust or chaff, and will be in sizes to suit the Jones Combination or Langstroth hives, at the following figures:—

Each	5	10	25	100
	75	70	67	63
			63	60

They will be shipped in panels, ready to nail together.

D. A. JONES CO. LD.

BEETON, ONT.

CONDENSED DIRECTORY.

Advertisements under this heading, occupying one half inch space, three dollars a year

MICHIGAN LANDS, best in the State for \$5 per acre; some at \$2, \$3 and \$4. Write R. M. Pierce, West Bay City, Michigan

O. J. PUTNAM, Leominster, Mass. has for sale several fine cockerels and pullets, B P Rocks won 1st 2nd and 3rd on pullets, and 2nd on pen at A.S. Jan. 14 to 16 1890. Eggs \$2 per setting.

MENTION THIS JOURNAL

W. COLE'S Black Minorcas. I have bred them several birds for 5 years and they are as good as any in Canada, United States or England. 1889 pullets 94, 94 1/2, 94 1/2, 96, 96, 96 1/2, cockerel 95 1/2, J Y Bicknell, judge. Eggs for hatching \$1.25 per 13. WM. COLE, Brampton

TESTED ITALIAN QUEENS bred from selected mothers, principally of Doolittle stock. Prices follows:—for those under 1 year \$2.50 each, shipped the 20th of April, or 2c. less each day until June 10th. Queens under 2 years old one-fifth less. G. A. DEADMAN Druggist & Apiarist Brussels, Ontario.

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.

1891 Early Italians for Business. Read this "The Queen I got from you can't be beat. I want to re-queen all my bees from your stock." J. D. Lower Mound, O. Order now and pay when your queens arrive. Each \$1, 6 \$4.00. W. H. LAWS, Lavaca, Sebastian Co. Ark.

A FEW Trios, Buff and Partridge Cochins, \$5 to \$20 a trio, also three breeding pens of Br. Leghorns \$6 a pen. Eggs from Cochins and B. P. Rocks, \$3 Br. Leghorns. \$1.50. BARTLETT & GEORGE, Clarence St., London.

POULTRY Netting.—See our advt. in another col with prices. Also for shipping and exhibition Coops, with owner's name printed on the canvas. Drinking fountains and poultry supplies generally. THE D. A. JONES CO. LD. BEETON

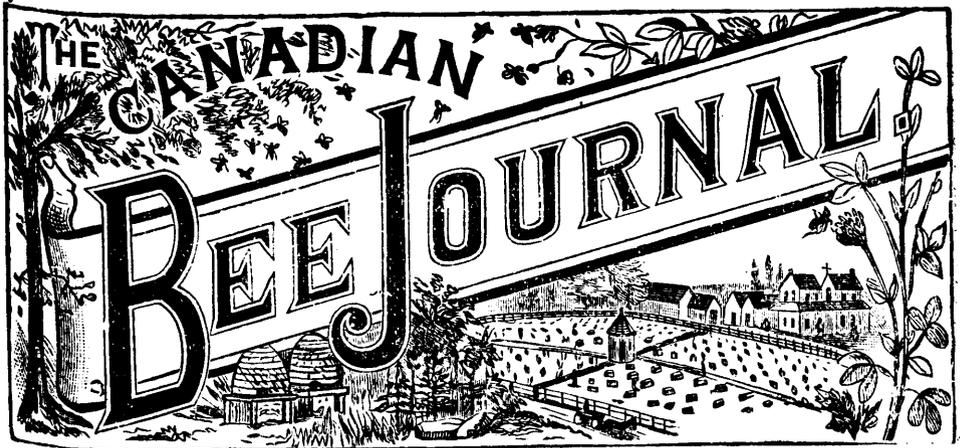
BASSWOOD TREES—A limited number, 12 to 18 inches, 75 cents per 25, \$1.25 per 50, \$2.00 per 100. Speak quick. Order your bees, queens, foundations, hives, frames, sections, smokers, feeders, etc., etc., from the leading bee-hive factory in Western Ontario. Wax wanted for cash. Send to W. A. CHRYSLEER, Box 450, Chatham, Ont.

BEE'S WAX FOR SALE—Crude and Refined. We have constantly in stock large quantities of Beeswax, and supply the prominent manufacturers of comb foundation throughout the country. We guarantee every pound of Beeswax purchased from us absolutely pure. Write for our prices, stating quantity wanted.

ECKERMANN & WILL,
Bleachers, refiners and importers of Beeswax, Syracuse, N. Y.

LOOK HERE!

If you want Hybrid or Black Bees from March 15th to May 15th at \$1 Per lb or Hybrid Queens at 50 cents and Blacks 25 cents. I have untested Italian Queens in April, \$1.00, May and after, 75c. My breeding yards are out on the prairie at some distance. Send me your orders and see how promptly I will fill them. Have shipped bees successfully for 10 years to Northern States and Canada. Safe arrival and satisfaction guaranteed. Mrs. JENNY ATCHLEY, Farmersville, Tex.



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

VOL. VII, No. 3.

BEETON, ONT., MAY, 1, 1891

WHOLE No. 287

THE CANADIAN BEE JOURNAL

ISSUED 1ST AND 15TH OF EACH MONTH.

D. A. JONES, EDITOR-IN-CHIEF.
 F. H. MACHERSON, ASSOCIATE EDITOR.

GENERAL.

For THE CANADIAN BEE JOURNAL.
 Hives.

THIS much talked of subject is not yet exhausted. There are at the present day a great variety of hives, each possessing its own special merits and advantages, and in as many cases all merits of possible possession claimed for it by those interested in it. Yet there is room for a disinterested party to stand up and give, in his opinion, the name of the hive possessing the maximum of merits and the minimum of defects.

Now we base our decision on the following points:

- 1st. Suitability to the general user.
- 2nd. Adaptability to the wants of the honey bee.
- 3rd. Simplicity of construction.
- 4th. Ease of manipulation.

1st. This point is the prime requisite of a hive. Should you wish to extract, the frame should be of such a shape and size as to be easily handled, readily removable from the hive, and the hive of such dimensions as to be easily moved by persons of ordinary strength. Should you wish to take comb honey, the hive should be so constructed as to size and depth

that the sections can be set on in supers and in such numbers that there will be a minimum of partly filled sections. In the fall, should the flow of honey unexpectedly cease the super should be of such construction as to make the sections readily removeable and at the same time hold them firm and close in the hive. They must also be capable of being tiered up to any height. They must be compact in shape so that little room is required when put into winter quarters.

2nd. Adaptability to the wants of the honey bee. Nature points out to us that the hive must not be too shallow. The limitations in the other directions, is only made by the convenience of the bee-keeper. Nature says a hive should be at least as deep as it is wide, and it is generally conceded that for most purposes the hive should contain at least a cubic foot. Now, a hive should conform as nearly as possible to the dimensions of a cube, of one cubic foot capacity, restricted somewhat to the use of the ordinary $4\frac{1}{2} \times 4\frac{1}{2}$ section, thus compelling us to have the hive at least $12\frac{1}{2}$ inches in one direction inside. This size of hive admits of being tiered up, and at the same time allows the bees to cluster in their natural shape in winter and also allows the stores to be most convenient.

3rd. Simplicity of construction. Observation has proven to me that a great many of the "chicken fixings" now in use are worse than useless. It puzzles the novice and the veteran has no use for them.

4th. Ease of manipulation. The frames should be readily removable, so the ordinary hanging frame is just the thing. They should be constructed in such a manner that there are

few places that the bees can annoy the apiarist by their free use of propolis. The T rest section crate as well as the closed end frame must go.

Now, the hive that comes the nearest filling the bill is the Combination, manufactured by the D. A. Jones Co. Some of the details could be changed to improve the hive, but for a cheap, simple, serviceable, handy and complete hive it has no superior.

There are some other good hives but I know of none that come nearer the requisites of a general purpose hive. When well made the section supporting honey board is just the thing, while the portable super is excelsior. With it, all the manipulation practicable and necessary in the production of comb honey, is possible. There is just one thing more to be added to make the hive complete and that is a convenient case to pack the hive in spring and fall. Something cheap and yet servicable, and having a neat appearance, for nothing can appear more untidy than many of the devices used for packing hives in.

EXPERT.

Method of Making Honey Vinegar.

IN the American Bee Journal of August 8, 1888, I had an article on "Bee work," and in the same I gave a method of making honey vinegar. Even to this date I receive letters, asking further particulars for making the vinegar. Instead of answering these communications individually, I will write an article for the bee journal on the subject, and refer my correspondents to the same.

When I wrote the former article, I made a honey vinegar only for our home market, and had it put up in barrels, and some in bottles. It was retailed at 50 cents per gallon, and 25 cents per bottle. The grocer paid me 30 cents per gallon and supplied his own vessels. The bottles had a neat label, printed in your establishment. I was not able to meet the demand for the article a year after its introduction, and of late have ceased making it, except for my family use, in consequence of ill health.

The vinegar is made as follows: Take 15 pounds of honey, 8 gallons of warm soft water, 1 pint of yeast. Mix well, and let it ferment in an open vessel, covered with cheese cloth. After it has fermented for about a week, make a mixture of 6 ounces of alcohol, 6 ounces of chemically pure acetic acid, one-half ounce of tincture of cardamom, in 2 gallons of soft water, and add it to the vinegar that is in a state of fermentation. The tincture is to go into the

alcohol before the water is added. If the vinegar is kept in a dry, warm place, it will be fit for use in about a month.

Only enough cardamom is required to give it the slightest taste, without revealing its character. The crude, commercial acetic acid will spoil the preparation, and will not be healthy, whereas the pure acetic acid is not only very pleasant to the taste, but makes a healthy vinegar.

This vinegar has been pronounced superior to any of the expensive foreign vinegars introduced in this city.

In making honey vinegar, I used the extracted-honey less than the washings of the cappings, honey vessels, etc. But whatever kind of honey you use, let it be free from all impurities. Do not depend on the process of fermentation for purification.

In using the washings there is only one way to determine when the honey solution is strong enough for making vinegar, and that is to ascertain its specific gravity. First, take the specific gravity of the standard solution given above—that is, 15 pounds to 8 gallons—and mark the meter at that point. Afterwards, you regulate your washings until you have reached the standard mark. It must be remembered when the solution of honey, (alone) is too strong, honey itself being a powerful antiseptic, it will not assume an acetic fermentation, but only the vinous.

In making honey vinegar, I have a secret worth keeping; and that is, if you once have good vinegar in a barrel, it will take the washings for a long time, leaving always good vinegar to draw from—that is, for family use.

Since I make honey vinegar only for my own family use, I resort only to the washings, and throw the fluid into an open vessel. In place of acetic acid and yeast, I effected the primary fermentation by dropping into the solution a part of a Mexican vinegar plant, that was sent to me for experimental purposes. Afterwards, I added the alcohol and cardamom as before. It made a very strong, superior vinegar, and I have kept up the supply for over a year by adding washings, as they happened to be on hand. The only objection the family had to it, was that it was too strong, and contained too much acetic acid. The fact is, there was not a drop of acetic acid put into it, and simply by adding water we find all objections removed.

I know nothing of the botanical name and nature of this Mexican vinegar plant. I was told that in Mexico and Southern Texas it was very much used for making vinegar.—S. P. HACHENBERG, M. D., in A. B. J.

Austin, Texas.

FOR THE CANADIAN BEE JOURNAL.

How To Transfer a Colony.

MR. D. A. JONES.—Sir,—Would you kindly advise me through your interesting journal as to the management of a hive of bees I bought three years ago. I may say that it is an exceedingly large hive and took two men to carry it and it had an old colony in when I bought it. I managed to get the top off last year; it is about 24 inches square, and was packed full of honey last fall. I put a super on and the bees went freely into the sections but did not build any comb. They were flying out at Christmas and are quite busy now. Spring flowers are booming. I have had a swarm from it every year—and such swarms. It has become a nuisance now, it is too heavy to move and I can't get the comb out. I sometimes think I will build a fire around the whole thing.

The question is:—

How can I get the bees out?

When would be the best time?

Would it be well to leave them till fall,

smother them and take out the honey?

How could I kill them without injuring the honey?

And finally, what causes some honey I took out of another hive to create a tingling sensation in my throat and behind the ears, and after a few minutes the throat swells and I feel like some one partly intoxicated?

I have some of it yet and that beats me.

Kindly enlighten me and oblige

Yours respectfully,

ERNEST L. ETHINDGE.

25 First St., Vic. B. C., Mar. 27, '91.

It is not a bad investment to simply leave it stand from year to year if it gives you a large colony; it will certainly pay you good interest on the money. Your talk of burning it up or building a fire around to get the bees out seems strange in this age of bee journals. It makes me think that we have neglected some of our duties. Why not transfer it which is easily done. You will see full explanations for transferring in back numbers of CANADIAN BEE JOURNAL, Cook's Manual of the Apiary, or Root's A. B. C. in Bee Culture. We think it would pay you to have these works in your library. You might take the hive in spring—about the beginning of fruit bloom—blow a little smoke in the entrance two or three times, then carry it off about fifty feet from the

stand, and in its place put a hive to catch the stray bees. Set another hive on top of the colony and rap on the sides of the old hive for a few minutes which will cause the bees to run up into the hiving box above. They may then be taken and put on the old stand. Now, with a hammer, hatchet, smoker, knives, etc., split the hive, first cutting the combs loose all around the edge on three sides, leaving them attached to one side and top of hive. Have some shingles or boards set up against the comb to keep it from falling, then cut the comb loose at the side and bottom and allow it to tip over on the board, when with a feather you may brush off the adhering bees. Place another board on the top side of the comb and by a quick motion of the hands the combs may be turned over, lifting the board off the top of combs which allows you to brush bees from the opposite side. In this way you may cut out all the combs, selecting those that are straightest and most suitable for transferring. After removing all the drone combs, and especially all that have eggs, brood or larvae, take your frames and lay on these combs; mark around the inside of the frame and cut your combs just to fit the frames tightly. You can spring the bottom bar and side bars slightly to tighten it. Some combs may need no protection to hold them in place, others will require sticks put on each side and wired at end, or wire nails shoved through the side bars to steady them till the bees fasten them. In transferring from box to movable frame hive, it is better in setting combs in to keep the brood nest as near its natural shape as possible and not give the colony any more combs to mend than is necessary. The hive should be kept warm so that they may have the benefit of all the heat they generate to assist them in moulding wax for repairs. If this is done properly in two or three days of warm weather the combs will be all attached nicely and the sticks or nails may be removed and wire put around the frames to hold the combs in place. Light, No. 30 wire answers very well, but string should never be used as the bees keep nibbling at it thinking it is moth webs. We once recollect a party transferring a lot of combs, some three or four colonies,

from box to movable frame hives, and as the combs did not quite fit, they thought they would make a better job of it by taking their own plan and not following our instructions. So with a darning needle and heavy string they sewed in the combs round the top bar and side bars. Of course it looked as if it was a perfect job but the bees did not take the same view of it, and thinking it was moth web or something that should be removed, they commenced cutting it away and very soon the combs fell down upon the bottom board. Even wax thread, or string would not do. We have used cloth dipped in wax and run through the foundation mill thinking to deceive the bees, but we soon learned that they were not to be fooled in that way. As soon as they had removed the wax from the cloth and found the shreds they commenced pulling it out and in a short time they had the foundation sheets full of holes. Every bee in the hive seemed determined to get the cloth out of the road as soon as possible for when a comb was lifted out you would see hundreds of bees pulling and tugging at the fibre. It was certainly amusing to see how earnestly they worked at it. The cause of the honey affecting your throat would likely be discovered if you could trace the source from which it came. It was probably taken from some poisonous flower.

FOR THE CANADIAN BEE JOURNAL.

Winter in England and Wisconsin.

WE LEARN by the British Bee Journal that the past winter has been one of unusual severity in England. Yet it does not appear by the accounts given that the thermometer has been as low as zero at any time over there. It would seem that what they call an extremely severe winter in England would be considered a very mild one indeed here in Wisconsin. The past winter has been one of the mildest in this locality which we have had within the last twenty years, and still the thermometer has been down to zero, or below, fifteen times during the winter. On one occasion it was 20 below zero. But I suppose that in this inland country the atmosphere is much dryer than it is on the sea-girt island of Great Britain; therefore the same degree of frost would be much more piercing and tedious to bear in that country than in this. And no

doubt the moist atmosphere of that climate has a deleterious effect upon bees in their winter quarters, as much or more than upon other animate nature. Creatures that have opportunities for plenty of exercise to promote rapid circulation of blood, may thereby be the better able to maintain sufficient animal heat to resist the permeating chill of the frost king. In this country, it we did not have any zero weather, we should be almost ready to conclude that our bees would not need any winter protection at all, beyond that of a good, substantial single-walled hive. But the facts are that we have but very few winters during which there are not times when the thermometer dips down from 30 to 40 degrees below zero. And yet, notwithstanding this intense degree of frost, I have been more successful in wintering bees out doors than in my cellar for the last seven years. Some of my hives are constructed on the same principle as the D. A. Jones porous double-wall hive, only the walls are about four inches thick, packed with sawdust or chaff. And some Heddon hives with an outer winter case which allows four inches of sawdust all around the hive. I have forty colonies wintered in this manner now upon their summer stands in excellent condition, also seventeen colonies packed in a beehouse with fly hole through side wall of the building (fly hole closed during winter) and winter ventilation given through the bottom board; something after the plan proposed by Rev. W. F. Clark in Bee Journal some years ago. These are in equally as good condition as those others out of doors and a few colonies in the cellar. I think that I never had bees in better condition at this time of the year. But the season is very backward. There has been but very few days yet when bees could fly freely with safety. Snow is not yet all gone and the ground is still frozen. The outlook for the future is not so encouraging as one might desire.

JOSHUA BULL.

Seymour, Wis., April 11, '91.

No doubt the damp atmosphere has a very injurious effect. We do not think that there is a place in America which is inhabited where the thermometer sinks so low that bee-keeping could not be made a success so far as wintering is concerned. Reports received from places where the thermometer sinks to 40° and 50° at the coldest times, state that bees appear to winter just as successfully as they do in warmer climates. It is not the cold, but the moisture that is the most injurious, moisture inside or outside their bodies.

Who ever had a colony of bees affected with dry dysentery? Are not the bodies of the bees swollen or distended with a thin watery substance? When the atmosphere is loaded with moisture, even though the temperature be scarcely below freezing point, one rapidly becomes chilled through. We have suffered more from cold in Europe than in America, all owing to the dampness of the atmosphere.

For THE CANADIAN BEE JOURNAL.

Bees Out, Bad Weather, Etc.

COMMENCED to set my bees out of the cellar on 16th April and finished 20th. As near as I can figure it, the winter loss with me is about two and a half per cent. The bees are in excellent condition this spring. I have not seen them so clean and nice for several years. In fast-bottom hives there is usually a *debris* of dead bees, etc., on the bottom board to be cleaned out in the spring. I have found but little of this. With the exception of a few colonies, the consumption of stores has been moderate—much less than during the winter of '89 and '90, owing to the higher temperature that winter than this. One colony, however, consumed about 25 to 30 lbs. and starved to death. So far as visible its conditions were the same as the others. The young queen probably felt it to be the right thing to keep on laying all winter. But that was a mistake on her part. I have heard people argue that the instinct of the bee was perfect, in fact an unerring guide, all of which means that her royal highness, as well as the others, is, or ought to be, infallible. That is another mistake. I have seen a colony begin to supersede its queen (which was still fairly good) so early in the spring that there was no prospect of a survival. Of course I stopped the business till the proper time came. That was a mistake. They will "swarm themselves to death," sometimes even in a "state of nature," so that the parent colony and last swarms are placed in jeopardy, and probably died in winter. That is another mistake.

The weather was very fine for a few days after the bees were put out and they gathered pollen in abundance and a little honey. But the weather changed without ceremony about the 24th and became very cool and windy, going on from bad to worse until to-day, 28th, which has been so cold that the snow has been flying. Besides, there has been so much high wind since the change that it has been very unfavor-

able for the bees. Those that were not packed suffered no doubt more or less. The fact is, bees that are not in double-walled hives ought, in this climate, to be packed in spring. And whether packed or unpacked, there are occasional days in April, and even May, when they are better shut in. Mine were shut in to-day, 28th, as it has been particularly unfavorable. When the wind is both cold and high, many that venture out can never return, and perish.

SPREADING BROOD.

This is a bad habit which prevails, especially among the novices. More harm than good has resulted from the practice. None but the thoroughly experienced bee-keeper ought ever to attempt to "spread brood" in the spring. Instead of spreading the brood keep it all as closely together as possible. Keep the fuller combs of honey on either side of it. If you must abrade a frame of honey to stir up the queen, abrade but one side of it at a time, and put the abraded side facing the brood nest on one side. The notion that it is necessary to artificially stimulate the queen in the spring is falling into disrepute as it ought; albeit the beginner is almost certain to go into this and other things he has heard about. I do not say that spring stimulation is always wrong and never necessary, for I practice it once in a while on this colony or that, that needs it. If the colony has had abundant stores through the winter, and still has in the spring, with a young queen, artificial stimulation is wholly unnecessary, and this is the condition every colony ought to be in in the spring. But as what is and what ought to be are often very different, we must in all cases adapt ourselves to the circumstances.

Although the clover has not come through in first-rate condition, the prospect for a good crop of honey this season is apparently good.

The winter mortality has, it would seem, been considerable—some I know having lost all, and others heavily, but this was owing to mismanagement.

ALLEN PRINGLE.

Selby, Ont.

REPORT FROM RIDGEWAY.

Mr. J. F. Dunn, March 31st, writes:—

Bees are flying nearly every day now and lose so far about 4 per cent, or a little less. Think we will have pollen from skunk cabbage in 4 or 5 days. Everything looks encouraging so far. Clover seeded well in the fall and looks fine now. I have made arrangements to move half my apiary to 150 acres of alsike clover as soon as the roads are good and will run the home yard for comb honey.

FOR THE CANADIAN POULTRY JOURNAL.

A Promising Outlook.

DEAR SIR,—I have not for a considerable time written anything for your valuable JOURNAL; but have been a very attentive and interested reader. You have given us from time to time all the information necessary for successful bee-keeping; but there is one thing that has been lacking which you cannot supply, and that is favorable honey seasons, without this all our knowledge amounts to little. For several years now my bees, instead of being a source of profit, have been a bill of expense to me, and had it not been for the deep interest I take in them and that I should almost feel lost without them, I would have retired altogether from the business. Along with the pleasure which I have derived from the care of bees there has been the hope that perhaps next season would bring better results and so I have persevered until the present time. I have a kind of premonition that the tide has turned and that better times are in store for us. The past winter, which has been so favorable for fall wheat has also been favorable to white clover and the high price of Alsike clover seed just now is inducing more of the farmers to go in for it. Besides, judging from my own, bees have wintered well and will be in good shape to do effective work when the honey flow sets in.

I set away twenty three colonies last fall, ten in the cellar and thirteen outside, packed in claff. Those in the cellar have not only all survived but, with one exception, are very strong. I have just taken them out and packed them in outside cases to prevent spring dwindling. And here I desire to state that I like these cases you manufacture very much. There were a few mistakes in those I received which gave me considerable extra trouble; but practice in their construction will prevent this in future. When everything fits all right they can be put together so easily and are so light and handy that they just fill the bill. Four out of the thirteen colonies in the clamp died from starvation although I had been at extra pains last fall in feeding them, giving about five pounds more than usual. The winter was so mild that Friend Clarke's "quiescent state" was wanting and so they consumed more stores. The remaining nine have queens and are for the most part very strong in bees. I will leave them in the clamp until June if, indeed, I do not leave them all summer. In former years I have removed them about this season and I am now convinced I have erred in so doing.

J. CARSWELL.

Bond Head, April 24th, 1891.

Friend Carswell, follow up this

same line, and give us something more frequently. What you say in reference to clover is true also in this section. The white clover appears thus far to be in most excellent condition and the sowing of Alsike will very much increase the amount of bee pasture. We are sorry for the mistake which was made in your clamps, but will be more careful in the future. This clamp will come in very handy this morning, when we are writing, this 28th day of April. Yesterday and last night the wind blew a hurricane from the west and north-west; to-day the temperature is quite cool, while yesterday and the day before were like hot July days. The heat seems to be all blown south. Slight flurries of sleet or snow are falling. Instead of bees tumbling over one another in trying to get into the hives with pollen to-day, all is quiet and there is scarcely a hum. They are waiting for the bright sun to make its appearance, and then they will leave their hives and visit the soft maples, which we planted for miles, about 10 years ago. Some of these trees are now 10 inches in diameter with top spreading from 20 to 30 feet. The bees are now beginning to enjoy the fruits of our labor, for when they come out, instead of having to go and hunt along the creek bottoms for alder or willow pollen they can strike these maples in any direction. Early pollen close to the apiary will assist in preventing spring dwindling, because bees that have to go half a mile to two miles for pollen are soon worn out and many that go never return. Whereas, if they had not this long journey to perform they would, perhaps, live for weeks to assist in brood rearing.

FOR THE CANADIAN BEE JOURNAL.

They Threaten to Poison His Bees.

DEAR SIR,—As I promised you some time ago that I would write I will now do so and give you my little experience in bee-keeping. Previous to the year 1888 I had bought three succeeding swarms, but winter took them every time, as I did not know anything about bees, although I had them well packed.

In the spring of 1888 I got another swarm, it swarmed twice. I packed them in a box and they wintered well, and I began 1889 with three

swarms and increased to fifteen, but I did not take more than 140 lbs of honey, so they had plenty of stores for the winter. All went well that winter except that one lost its queen in May. I increased to 32 the next summer. Owing to poor crops of honey last year I doubled up in the fall to 26 swarms. I lost eight by mice and lack of stores. Now, I would like to ask you a few questions:

I am living in the village. There are several persons here who are opposed to bee-keeping, and have threatened to poison my bees by mixing Paris green in something that will draw bees. What would you advise me to do in this case? Can they compel me to take my bees out of the village. My stands are something over 100 feet from the road or next house. Is there any law concerning distance of hives from houses or roads? If so, would you kindly let me know.

Yours truly,

THOS. KLIPPERT.

Elmwood, P. O.

We do not know of any law forbidding bees to be kept in a village. The law allows a person to keep anything that is not a nuisance. There is a law against nuisances, which we do not consider affects you, as bees are certainly not a nuisance, but a benefit. It must be some personal matter, for we don't see how they can be deemed a nuisance that distance from the road. We have for years kept from 100 to 500 colonies, some not 20 feet from the road, and we do not recollect one case of stinging to either persons or horses. In your case our advice would be, bring these parties into the yard, talk to them in a friendly manner, explain to them the value bees are for fertilizing flowers and especially fruit bloom, give as an illustration the result of importing bees in India, and the benefits derived from the fertilizing of the clover. The people of that country are now enabled to export large quantities of seed, whereas they had, formerly, to import every bit of seed they sowed. Many of our horticulturists and botanists would be glad to assist you with such information as should be convincing to your neighbors. Perhaps those possessed of such a disposition would be more easily approached by presenting them, or their children, with a can of nice honey, with your compliments. You can catch more flies with molasses than with

vinegar! We might add that if you could prove that any one put out Paris green in order to poison your bees, they would be liable to an action at law, the same as if they killed any of your stock, and they would have to pay the penalty. The chief difficulty, however, would be to prove that they were your bees. While you might be thoroughly convinced of the fact, it would be difficult to swear that a dead bee which you found about their poisoned dish was yours, or that your bees went there and got the poison, and came home again. Of course, by taking a little pulverized red chalk, flour, or any kind of coloring, and dusting the bees a little with this, you might watch them, if you would stand by the dish when they came, or you might dust it over them while they were eating and watch them return. It would be difficult to prove your case, however. So the easiest way to get along with such people is to conciliate them. We would not advise law, but would remove our bees first. We might mention that we have a high board fence around our bee yard, which necessitates the bees rising above it, thus elevating them over the heads of the people passing on the sidewalk. In some of our out apiaries, where we had a large number of colonies, we never allowed them to be very close to the road, but in driving to and from the apiary we have sometimes found the bees bother our horses, when about 10 or 15 rods from the yard, especially when the wind was blowing and large numbers of bees were lying low on the ground, in order to make better progress against the wind.

Refrigerator Wanted.



ESSRS. Editors.—If any reader has a good Refrigerator he wishes to exchange for bees in good condition in good hives let him address,

ALLAN PRINGLE,

Selby, Lennox Co., Ont.

Catalogues Received.

An eight page circular and price list of Carniolan bees and queens from F. A. Lockhart & Co., formerly Andrews & Lockhart, late St. George, New York.

The Wilcox Spacer.

THE Spacers that I am using are made with top bars as long as the width of the hive, inside, $1\frac{1}{2}$ inches wide and about $\frac{1}{2}$ inch thick. These are designed to rest on the ends of the frames over the rabbet of the hive, one in each end of the hive. To these I nail strips of wood a little less than $\frac{1}{2}$ inch wide, 4 inches long and a little more than $\frac{1}{8}$ inch apart, so as to make downward extending arms to go between the end bars of the frames, and give the proper spacing to the frames. These spacers will not stand rough handling, but are strong enough for practical use in the hive, and have the merit of being cheap. For making a hive reversible, I make holes through the top bar for screws, so that they catch in the rabbet of the hive and hold the frames when the hive is inverted.

IN REGARD TO THEIR MERITS.



An ordinary hanging-frame hive is converted into a reversible or movable hive. A hive is quickly and correctly spaced, and the frames are held in their proper position, and will not be lifted when removing the cover if they are fastened to it by brace combs. A contracted hive is made movable or invertible. By having the downward extending arms as long as the end bars of the frames, and suitable division boards in place of the outside frames, a hive is converted into a double-walled hive with the spaces between the end bars of the frames closed. This is a great aid to a weak colony in building up in the spring, if the hive is well packed on top of the frames. By putting one in the middle of the bottom board, and one on each side of the middle of the hive on the top of the frames, combs can be put into empty frames and held in position by the spacers until the bees fasten them to the top bars of the frames, when the spacers can be removed.

They prevent the bees getting to the ends of the frames over the rabbet of the hive, therefore, the frames are not stuck to the hive with propolis. By cutting the top bar into sections of any desired length, the sections can be easily pried apart and lifted out of the hive. In adapting this it requires no change in a hanging-frame hive with $\frac{3}{4}$ inch frame giving the advantages of the Hoffman frame, with a better form of frame for extracting purposes.

The amateur with a small number of colonies, who does not have fixed distances or swarming devise, can commence the use of spacers by getting a few pair, and putting them in hives prepared for swarms. If the frames should be too large to let the spacers go down easily, they can be rasped off with a coarse flat file; and if there is not sufficient bee space above the frames to let the top of spacer down even with the top of the hive, the ends of the top bars of the frames can be rasped thinner, either on the upper or under side. When the swarm clusters on the limb of a tree, the hive can be taken to the bees and by shaking the bees into a dish-pan on the end of a pole, and pouring them in front of the hive, they are quickly hived, the spacer preventing the frames being disarranged when handling the

hive. The spacers should be left in the hive until the combs are formed, when they can be removed.

Those with large numbers of colonies would use them in moving bees to out-apiaries, shipping cases, and experimental purposes that cannot be as well performed with loose frames. Should they wish to invert a contracted hive, they can cut a $\frac{7}{8}$ inch board to fit the inside of an empty frame, and nail it in for a division board. If the bottoms of the frames are even with the bottom of the hive a $\frac{1}{2}$ inch rim should be tacked on the bottom of the hive to make a bee space when the hive is inverted. To invert, remove the cover and put a bottom board in its place. Then put a cord twice around the hive near the middle and tie. Draw the cord taut toward the ends of the hive and invert the hive. Whole spacers can be worked in warm weather, when propolis is soft and yielding. In cool weather propolis becomes hard and unyielding; but by cutting the top bar into sections, and having a division board at one side of the hive, a section can be removed as easily as a single frame where spacers are not used, and after it is lifted from the hive, frames can be easily pried out. It is important that the apiarist should have system, and cut all spacers by a gauge, so that a section in one hive will correspond with one in all hives.

J. B. WILCOX.

Manistee, Mich.

Having the ends closed to save heat is a good point. That is one advantage with the Hoffman frames or the closed end frames. This devise actually makes closed end frames, and yet use ordinary frames. With the improved machinery now in use, there should be no difficulty as to their fitting, as all pieces are cut to certain sizes with absolute accuracy. Any one wishing to try the reversed principle may do so, and test it thoroughly with this devise. There is this point about it, that Mr. Wilcox in his description has failed to mention, that by reversing the hive as soon as the combs will permit it, they would become attached firmly to the bottom bar, which becomes the top bar when inverted. Combs will attach to the bottom bar the same as to the top bar, and are much more easily and safely handled. Such combs are worth more, in our opinion, not only for shipping, but for ordinary purposes, as queens can be found more readily and the ordinary manipulation of the hive carried out more rapidly and satisfactorily. This is one good point we found in connection with the Heddon hive. The narrow combs would be attached all round, and in fact we had hundreds of them that were so attached that one could not tell which was the top or bottom bars when the combs were out of the hive.

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.

Eggs or Larvae.

QUERY No. 295.—Are eggs or young larvæ used in the preparation of Royal jelly?

J. F. DUNN, RIDGEWAY.—No.

C. W. POST, MURRAY.—I say no.

S. CORNEIL, LINDSAY, ONT.—Neither.

J. K. DARLING, ALMONTE.—Don't know.

H. D. CUTTING, CLINTON, MICH.—I don't know.

EUGENE SECOR, FOREST CITY, IOWA.—I don't know.

PROF. A. J. COOK, LANSING, MICH.—No; not either.

G. A. DEADMAN, BRUSSELS.—I should say neither.

ALLEN PRINGLE, SELBY, ONT.—Not under normal conditions

R. M. KNIGHT, OWEN SOUND.—Don't know. Who says they are?

DR. C. C. MILLER, MARENGO, ILL.—I don't know. Don't think they are.

G. M. DOOLITTLE, BORODINO, N. Y.—No. What makes you think they are? I supposed the Kirby theory was dead long ago.

M. EMIGH, HOLBROOK, ONT.—I guess not. I have known many cases where the bees could not get such food unless they stole it from some other hive.

JAS. HEDDON, DOWAGIAC, MICH.—I do not know, and care but little, as that point is too far from the \$ we are after in our business. We can get large or small crops of surplus honey in either case.

J. ALPAUGH, ST. THOMAS, ONT.—I think not. I once inserted a very small piece of comb (containing about one dozen eggs) into a hive that had neither queen nor brood of any stage, and they raised about as many queens as I gave them eggs.

G. W. DEMAREE, CHRISTIANBURG, KY.—In my opinion neither eggs nor larvæ is consumed by the nursing bees when preparing the food for the young workers or young queens. No one

has ever seen it done, and it is an easy and safe matter to assert a thing that cannot be proven nor disproven. Until we have some proof that bees devour their young to obtain food to feed their young on we are justified in saying that it is not true.

J. E. POND, NORTH ATTLEBORO, MASS.—Who can tell? I will ask the querist, why he asks the question? Has he ever seen anything to lead him to suppose that eggs do enter into the preparation of "Royal Jelly," or does he ask the question from mere curiosity, and for want of some other question to ask? If he has a reason, or has seen anything to cause the question to be honestly asked, a field to us who keep bees solely for experiments may be opened and I want to work in just that field, but don't want to be fooled in the matter.

D. A. JONES.—No, they are not.

Making Nucleus and Introducing Queen Cells.

QUERY No. 296.—In making nucleus, is it advisable to introduce queen cells at once, or wait 12 or 24 hours.

ALLEN PRINGLE, SELBY, ONT.—Wait.

EUGENE SECOR, FOREST CITY, IOWA.—Wait.

PROF. A. J. COOK, LANSING, MICH.—It is far safer to wait.

J. F. DUNN, RIDGEWAY, ONT.—Depends upon how and when you make the nucleus.

DR. MILLER, MARENGO, ILL.—Depends on what they are made from. If from a colony having a laying queen, wait.

M. EMIGH, HOLBROOK, ONT.—I usually make nuclei from a hive that has swarmed six days previous and give queen cells at once.

G. M. DOOLITTLE, BORODINO, N. Y.—Wait twenty-four hours, unless you have queen-cell protectors. If you use them give cells at once.

C. W. POST, MURRAY.—It is safer to wait twelve hours; but if you make them with young bees, and not close them up you can introduce them safely same day.

JAS. HEDDON, DOWAGIAC, MICH.—You may succeed either way, but I have always found it safest to wait. Then there is the loss of time, so try both ways, and then decide.

J. ALPAUGH, ST. THOMAS, ONT.—At once if you have them nearly ready to hatch, otherwise I would wait a day or two until some young bees have hatched and queen cells started. They will then give the cells better attention.

J. E. POND, NORTH ATTLEBORO, MASS.—It depends. I always use queens where I can with nuclei. There is no reason why queen cells should not be introduced at once, as each nucleus

contains only young bees, or those just about to emerge from the cells, and cells or queens even can be given them with perfect safety.

J. K. DARLING, ALMONTE.—I generally take the card containing the queen cell with adhering bees for the first one, and then add cards with bees from other hives, shaking in some extra bees as many of the old bees will return to their old homes. In making nucleus for purchased queens I manage the same, cage the queen at once and liberate in about twenty-four hours.

G. A. DEADMAN, BRUSSELS.—If the colony from which you make your nuclei is making preparation for swarming then give queen cells at once. Otherwise make nuclei in the evening and give queen cells early next morning. If you make your nuclei by taking a frame and bees from two or three hives, then give queen cells at once. The best plan, however, is to make your nuclei from some hive that is making preparations for swarming, or that have queen cells nearly capped, or else let them swarm and return again then make your nuclei and give cells at once.

G. W. DEMAREE, CHRISTIANBURG, Ky.—If the nuclei are made from brood taken from queenless colonies the queen cells should be given at once, but if you take brood from colonies that have queens, the safe way is to wait twenty-four hours before giving the queen cells to the nuclei made in that way. The best way to make nuclei is to collect all the spare brood that can be had, putting the combs of brood in hives till the hives are full, and after the young bees have hatched so as to cover all the combs nicely, the old bees having mostly returned to their old homes, the queenless hives of young bees are divided into nuclei and given queen cells at once. Such nuclei can be depended upon to hatch out and take care of young queens.

D. A. JONES.—It depends on the way the nuclei is made. If in the ordinary way, wait, or the cells are liable to be destroyed. Bees with a queen, and with the swarming fever destroy cells usually, until they find themselves queenless.

HOW TO DIP HONEY WITH A SPOON.

One reason why honey is not more frequently used at the table is the difficulty most people experience in dipping it from one dish to another. The stringy, thread-like nature of the honey makes it drag from dish to dish in a manner which is not pleasant to the server. With a little practice, however, honey can be as easily handled as any other sweet or preserve. Dip the spoon into the honey and by quickly turning the spoon in the hand the honey is gathered up on it so that it can be readily transferred.

SELECTIONS.

Early at Work.

ALF. WAGNER, NAPANEE.—Just a word about the bees. I put out some between the 7th and 10th of April. They brought in pollen on the 16th, and to-day, the 20th, they are making things hum. I lost four out of 72 hives. It is rather early to set them out, but if it gets cold I can put them in again for a day or two.

If you put your bees in winter quarters after setting them out, you should leave the lids or some mark on each stand, with a corresponding mark on the hive, to indicate the stand they belong to, as they are liable to fly out and go to the stand they were last placed on. Bees usually mark the location when set out, and if set in a new spot afterwards many might go to the wrong hive. This might cause a lack of queens. The first day bees are set from their winter quarters they may be doubled up in their hives, or the hives may be exchanged.

HE LOST HIS BEES.

R. F. WHITESIDE, LITTLE BRITAIN.—My bees wintered out doors. Nearly half of them died, mostly from starvation. They ate so much last fall, and were breeding up late and got no late honey. To winter cut doors they should have about eight frames and three or four pounds of honey sealed at the upper part of each frame.

We are sorry to learn you had so many bees starve. We saw your difficulty last fall and warned bee-keepers frequently to be careful and see that their colonies had plenty. The hard breeding of course would consume stores and it takes so much more to winter outdoors than indoors. Just fancy fifty cents worth of stores more to a colony would have saved each colony. But what is the use of preaching what we don't practice. We are usually very careful, but sometimes we neglect the very thing that we should not. We have warned the people against mice time and again and this year we find our apiary a great sufferer upon that very point.

Now is the time to subscribe for the C. B. J. When you sell a few colonies of bees to your neighbor, starting them in the business, be sure you get them to take the C. B. J.

AN AMATEUR'S EXPERIENCE.

JAMES BEST, SANDFORD.—Sir, I am an amateur in bee culture, and seeing that you publish reports from all parts of the Dominion, I take the liberty of sending you an account of my experience in bee-keeping. Three years ago I had a colony given me in the fall by a friend, in one of the old box hives. I wintered them in the cellar of my house and the noise overhead kept them very uneasy all winter. In the spring I put them out on the summer stand. They took the spring dwindling, and before the flow of honey started they became very weak. I got one swarm from them the first summer and fifteen pounds of comb honey. The next summer I increased to eleven. Last winter I lost my old swarm that I still wintered in the cellar. All the other bees I put into the improved chaff hive. This summer I increased up to twenty-four. Some of the colonies that I worked for comb honey gave me fifty pounds and no swarms. The first swarms from the others averaged me about twenty-three pounds of fine comb honey. This year, in one locality, the only flow of honey to amount to much was from Alsike clover, thistle and basswood yielding very little. This fall I tried doubling up some of the late swarms on the plan given in your JOURNAL, and I must say that it worked like magic. I have taken the BEE JOURNAL since the first of September, and I consider that it has paid me three times the amount of subscription. How any one in the bee business gets along without it I cannot see. Pardon me for making the remark but I think that the professional bee keepers do not make themselves quite clear enough for greenhorns to understand. Any improvement or advice given in the JOURNAL should be clear and distinct so that it will be readily understood. At some future time I have some questions I would like to ask if agreeable to you.

Why certainly, friend Best, ask all the questions you like. That is just what the JOURNAL is for; to give the information required in connection with our pursuit. It will always afford us pleasure to answer any questions in the interest of bee-keepers. We sometimes think there are not nearly enough questions asked. We do not know what our friends want to know. If they will just ask, it will enable us to talk to them in their own interest and it makes the JOURNAL more interesting to have it filled with just such matter as all our friends desire. So now we shall expect to hear from you at your earliest convenience. Send on your questions, and no doubt you will ask many that will be as interesting to others as to yourself.

PROSPECTS GOOD.

H. COUSE.—Bees have wintered very well in this locality, although many have died from starvation, owing to the great amount of

feed consumed during the winter, and from this cause I have to admit that I lost ten colonies out of 100 put into winter quarters. I took most of them out of the cellar on the 8th, after which the weather was cold till the 13th, when I put the balance out and, as many were short of stores I fed about 200 pounds of honey. On the 16th the first pollen was gathered. It was from black alder. Soft maple and elm are yielding pollen and honey. Some strong colonies are capping honey now. Golden willow will also soon be in bloom. Taking it altogether this spring is very favorable for the bees. Prospects for bee-keeping this season seem good as the clover has wintered well and this is the season we expect a yield from basswood.

Cheltenham, April 27th, 1891.

HIS BEES WERE BURNED.

GEO. ROGERS.—Price list to hand and in reply would say I don't think I will need any supplies this season, as my house was burned on the 29th January last, and all my bees, but twelve hives. Under these circumstances I will ask if you would give me a yard to work on shares this season to help to raise my stock again. If you can let me know your terms at as early a date as you can so I can make arrangements to come and see you. Halton, April 9th, 1891.

We are sorry that Mr. Rogers met with the loss he did. We had all our help engaged before receiving this letter, otherwise we would have tried to manage with him. This is a splendid opportunity for some one wanting help or trained assistance. Write directly to Mr. Rogers to above address.

A SUFFERER BY FIRE.

On April 24th we received from W. A. Chrysler, Chatham, the following:—"Fire has destroyed my bee-hive factory and all its contents, machinery, hives, sections, lumber, etc., etc.; all gone except some smokers, honey knives, extractors, and a quantity of foundation, which were in another building." We wrote Mr. Chrysler to say that if we could do anything for him, we would be glad to do so, and to send on his order and we would furnish him goods to fill all his orders promptly. His order arrived yesterday, and to-day we are shipping him a very large quantity of perforated metal sections of suitable sizes for his customers, in short all the necessary goods he may require to fill his orders promptly, and we hope that his many friends will extend to him the patronage he deserves. Mr. Chrysler did not tell us whether he was insured or not, but as insurance on that class of property is so high, we fear he, like many others, has neglected that important duty.

Cowan's new book has some capital things in it—in fact it is all good. Hundreds of them are being sent out to bee-keepers in Canada.

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

CAPPINGS.

CUT FROM A VARIETY OF COMBS.

NO NECESSITY OF DESTROYING COMBS AFFECTED WITH FOUL BROOD.

WE SEE in the Wisconsin Farmer the following notice: "Combs affected with foul brood should be destroyed by fire, cremated. That is the only safe disposal of such combs. The degree of heat necessary to melt beeswax is not high enough to destroy the foul brood spores. Therefore, let us beware of such economy."

There is no necessity to destroy such combs by fire. There might be some worth melting into wax. If placed in a kettle of boiling water and occasionally stirred until all the wax is rendered from the combs, no germs will ever afterwards injure a colony. There is no danger in rendering such combs into wax, provided plenty of water is kept in the vessel surrounding the wax and it is thoroughly boiled. We have rendered many thousands and never in one instance did the disease return, and we have ample proof from the best authority in the world, that all danger of disease from that source is past if the wax is properly handled by the ordinary skillful foundation makers. The American Bee Journal of April 16, page 501, says in reference to this same subject:

That scare is over about foul brood being spread by the use of comb foundation made from the melting of combs which contained the disease. The letters of Messrs. Dadant & Son and M. H. Hunt in last week's Bee Journal are supplemented by one from Ernest R. Root this week. These testimonies settle the matter—proving that we were correct in presuming that the long-continued high temperature, to which the wax is subjected before sheeting is commenced, *does kill the microbes and spores*. Mr. Corneil's fears are therefore groundless, and all may use comb foundation without the least anxiety in that direction. We are glad, however that the point was raised, so that it may be forever settled by such testimony as we have presented.

SPRING DWINDLING AND THE CAUSE.

I think that E. S. Fowler, of Bartlett, O., is partly right about spring dwindling. There is another cause more frequent. It is this: When we have a long cold spell of weather, say two months of downright hard freezing, then, unless the bees are in warm hives, their constitutions are used up in the endeavor to keep up the necessary heat in the hive; and if they don't succeed in it they get cold and go into dysentery, which I call "cold weather dysentery," and very different from that caused by poor honey, but nearly as fatal, as they die off as soon as they begin work in spring, simply being worn out by being obliged to fire up so much in cold weather.—Gleanings.

A HUNGRY QUEEN EASILY INTRODUCED.

C. C. Millar, in Gleanings, says:—

A hungry queen, I am somewhat inclined to believe, is more easily introduced. She's so much engaged trying to get something to eat that she doesn't go around trying to raise a row.

OUTSIDE CASE TO PROTECT BEES IN SPRING.

This is the time to test the matter. Pack some of your hives carefully and leave others unpacked. Keep them warm and brooding night and day until the clover commences to bloom, then see the difference between the packed and unpacked. In fact, see if one packed colony does not produce nearly as much honey as two unpacked. Keep count of cost of packing, difference in quantity of honey secured, and after the honey season is over let us hear from you, whether the packing is not the best investment in connection with your apiary during the entire season. You cannot expect to get a large crop of honey from a few bees. It is just as important to keep the brood chamber warm and have a uniform heat night and day so that the bees will brood to their utmost capacity, as it is to have honey in the hive. Now, this cannot be accomplished, especially from a light colony if all the heat is not retained in the hive, and we shall not be surprised if we have a considerable amount of cold weather yet. It will retard brood rearing in unprotected colonies very much. The last few warm days has started the brooding rapidly, but this cold weather that is coming on will have the effect of checking it very much unless the necessary precautions are taken to protect them. Hives should be closed up to one bee at night and the entrance blocks may be moved back every morning.

THE VALUE OF EMPTY COMBS.

The following experiment showing that bees secrete wax when compelled to build comb, is given in the April number of Gleanings:

"With Prof. Cook, I greatly doubt whether bees have to secrete wax unless there is a great honey flow, and no place provided for them to deposit it. A few years ago this same subject was taken up in the bee journals, and as I had helped some in an apiary for over twenty years, and had read so many different opinions and

theories on the secretion of beeswax, I felt very much like making a few observations, and it was not long before an opportunity presented itself. It was a very warm morning in the swarming season. Mr. M. was called from home and I was left alone to care for the bees. In a short time the swarming note was sounded and "the bees had swarmed." We were making use of some drawn-out combs at the time, and I got a hive, filled it with some of them, and I loved the bees; then I wiped the sweat from my face and returned to my labor. This was swarm No. 1.

I had hardly got settled down to work when "buzz, buzz," and out came another swarm of bees. "Ha, ha," I said to myself, "now is my time to experiment a little." So I went and got a hive, filled it with empty frames, hived swarm No. 2 and then awaited results.

The next day I went to look at them. Swarm No. 1 I found very busy at work bringing honey from the field, and depositing it in the combs; and on the alighting-board and bottom of the hive there was quite a quantity of those little wax scales; but it was very difficult to find any scales in the wax pockets on the bees. Then I went to No. 2 and found there were not more than half as many bees going and coming from the field as there were from No. 1. I very gently raised the cover and looked in, and found the rest of them hanging in festoons to the top-bars, quietly working at their trade of comb-building, while those that came from the field seemed to be bringing honey for them to consume, to produce the wax to build the comb from; and the secretion of wax was very plentiful on the bees, but there was none on the bottom-board nor around the entrance of the hive.

They worked on in this way for a few days and built comb very fast; then the yield of honey in the field diminished, so they could get but a little; and although they were still inactive, the wax secretion diminished, and comb-building progressed very slowly. Therefore, I think consumption causes production; and if circumstances are such that the bees consume a large amount of honey, they will secrete a large amount of wax. But this is no saving; for, if the honey that they consume to fill the hive or boxes, were stored in surplus boxes or comb, it would pay for combs or foundation to fill a number of hives.

OBSERVER.

[My good friend, you have given us a most valuable experience. First, it indicates beyond question that a colony will store more honey for the extractor when they have a full set of combs. Sheets of foundation would probably come next to full combs; but empty frames are away behind. Our older readers may remember that I made experiments in just this line nearly twenty years ago. A new swarm with a full set of empty combs, does, however, secrete quite a little wax. They put it on top of the top-bars, extend out the length of the cells wherever the space will admit of it, and often put little around the end bars. The point of great value to the bee-keepers is this: A new swarm, hived on empty frames, will at once—at least the greater part of them—hang idly until the wax scales are secreted; whereas, with full sets of combs, nearly all these bees could go at once to the fields for stores].

PREVENTING ROBBING OF WEAK COLONIES.

Mr. T. C. Kelly, in the A. B. J., gives the following plan to prevent robbing of weak colonies:

Having read an article from the pen of our esteemed fellow bee keeper, G. M. Doolittle, in the American Rural Home, on the prevention of robbing by bees in the spring, I will give my method:

When I find a colony that is being robbed, I close the hive for a few minutes, until a number of bees collect at the entrance, and in the meantime get a handful of flour, then open the entrance (by this time the robbers are loaded with honey), and the little rascals will make a rush for home. As they come out, give them a good dusting with flour, until they look like "millers," then keep your eye over the apiary till you see the white-coated chaps entering their hive, then close the hive that is being robbed again, and let it stand ten or fifteen minutes. By that time the most of those engaged in the business will be gathered around the entrance trying to get in.

Take the hive that the robbers came from, carry it to the stand occupied by the weak colony, remove the weaker one from the stand, turn the hive around, brush all the bees off of it, and set the hive containing the strong colony on the stand. Pick up the hive containing the weak colony and carry it to where the strong colony was, making it look as much like the other one as possible; return to the strong one and change its appearance by placing a piece of colored cloth in front.

You can then sit down in the shade and watch the proceedings with pleasure and amusement—and it is amusing to witness the humble supplication of the little fellows on their return to the old stand, and the humiliating attitude they assume, standing on their four legs, with the business portion of their anatomy elevated in the air, and pleading for admission and recognition from those whom, a few minutes before, they had been trying to rob. If there are more colonies than one engaged in the robbing process, I change them with others that are not so strong.

Now, this is no theory, as I have practiced it for several years, and always with success, and if there are any suggestions, improvements or criticisms from our bee-keeping brothers, they will all be accepted in a spirit of friendship.

Slippery Rock, Pa.

REMEDY FOR BLACK ANTS; HOW TO GET RID OF 'EM

If they are the large ones get a cent's worth of tartar emetic and mix about a quarter of it in a little honey (about an ounce or two), and place in their haunts. After they have eaten it you will see no more of them for about three or four months, when they will begin to come back. A second dose has cleared our house for three years. It will not work on the small ants, for they won't eat it; and if the coal tar (page 101) will clean out the small kinds, then with both you can be "ant clear," both in the hives and the house. This recipe came from the *House-keeper*, Minneapolis, Minn. Don't let the bees eat it for it may lay them up till the harvest is over.—*Gleanings*.

OUR OWN APIARY.

Set Out Mice Instead of Bees.

THOSE who have read the JOURNAL for years past will doubtless recollect how urgent we have always been in reference to precautions against mice, for we have had a colony or two destroyed in that way. Last fall at our home apiary we sold off most of the colonies, leaving us with less than 100 by the first of September. We afterwards sold a large number of queens and bees, the result was that we had few to put in winter quarters. Taking the ordinary precautions to destroy all mice about the bee-house late in the fall, we thought that we might trust it, as heretofore, to be free from mice until the following spring. Such, however, was not the case, as the mice seemed to have gathered from all directions after the bees had been set in. As our winter quarters are only a short distance from several large barns we fancy the mice must have held a convention, and appointed every mouse a delegate to meet in the bee-house. Let that be as it may, the facts are that when we went to set out the bees this spring, we noticed that all the bees on the floor appeared to be chopped up or cut in two and noticed the mice scampering away. The first hives we commenced to lift off the shelves convinced us that something was wrong and we ventured the statement that half of the bees were destroyed. Our surmises were correct as examination proved there was scarcely a hive in the bee house that had not from one to five mice in it. We carried out one hive into the yard and stood around it with sticks and as they came out, killed twenty-nine mice. We did not kill any bees in that hive as the mice had taken the contract and finished it. Two-thirds of the bees in the bee-house were similarly treated, and those living were very much injured. We used to think that mice did not touch live bees or kill them, we are now convinced that they do. We noticed on the bottom boards of most of the hives, bees bit in two at the thorax, not one, but many, life still being in them. Their feet were moving showing clearly that they had been very recently destroyed. As one colony that ap-

peared very strong did not show any signs of mice, when we set it out we left it until the next day, before examining it, and when we came to look it over we noticed the same thing—bees bit in two yet alive, showing clearly that the mice had been at work just before the hive was opened, as a number of pieces of bees lay there working their feet, and three of them could yet move the probosis. The mice were all fat and slick, they had evidently done well on their winter rations. Some of you will say, no doubt, "we would have known better than to allow bees to remain all winter with mice, destroying them that way." Well, we went into the bee house on several occasions, but as we disliked to make it light and thus agitate the bees, we went in at dark and listened at the different hives, and hearing a pleasant hum came to the conclusion that everything was all right, as usual. Now, friends, we hope what was our loss will be your gain. You ought to take a lesson from this, as we most certainly will, and be sure your bees are not injured by mice. A little metal at the entrance is all that is needed, as a $\frac{3}{8}$ entrance will shut out all mice, while the bees may pass in or out freely.

INTRODUCING QUEENS.

After all that has been written and said about introducing queens in the *Bee-Keepers Review* and other papers lately, has any one suggested a simpler, better and safer plan, than the following: Go to a queenless colony in the evening, puff a little smoke in at the entrance say for about ten seconds, you then lift off the lid very carefully, and if you have quilts on each hive raise up the corner of your quilt. Have your queen to be introduced ready and just let her crawl in and drop the quilt, with sometimes a puff of smoke after her. Usually queens may be introduced this way without any smoke. We have frequently done it by simply raising the quilt and letting her crawl in late in the evening, perhaps after dark would be even a better time than during daylight, as the bees would be much quieter after sunset than they would be during the day when all are busy and active.

THE CANADIAN BEE JOURNAL

ISSUED 1ST AND 15TH OF EACH MONTH.

D. A. JONES, - - - - - EDITOR-IN-CHIEF.
F. H. MACPHERSON, - - - - - ASSOCIATE EDITOR.

BEEETON, ONTARIO, MAY 1ST, 1891.

The Illinois Bill on foul brood was introduced into the House of Representatives on the 9th inst.

■ We have just received a very superior lot of extra heavy tin molasses gates and can fill all orders promptly.

■ Latest reports from Mr. Macpherson, Assistant Editor of the C.B.J., indicate that there is very little, if any, improvement. ~~VERY~~ ~~LITTLE~~

Queen excluding honey boards are being more extensively used every year. Our orders this season, so far, indicate a tendency in that direction. Of course it takes time to convince people of the advisability of any new departure, but our best bee-keepers are beginning to see their advantages and are using them extensively.

Mr. James Heddon has renewed his patent in Canada for another 5 years, or rather we did it and assigned it back to him. All parties wishing territory in Canada or individual rights to make these hives, not having heretofore secured them, must write Mr. Heddon at Dowagiac, Mich. All Mr. Heddon's orders for hives will be filled from our establishment. We still keep a number of them in stock in the flat and made up, and can ship on receipt of order.

Our stock of force pumps is large enough to supply every bee-keeper who needs one. They are a great convenience about the premises, especially in case of a fire, and every householder should have one for this reason, if for no other.

We have just purchased a very large consignment of wax from the south, also 2000 lbs. of imported wax, and we expect to be able to keep it on hand ready to ship every day. The high rates that we are paying for wax has enabled us to secure large quantities that were being held for high prices. Those who have wax for sale had better sell at once as we do not guarantee to pay present high prices right along.

DO NOT SEND ANY MORE HONEY.

Friends, we have already given notice that we can take no more honey in exchange for supplies, as we have a larger quantity on hand than we care for at this season of the year. A number of our customers continue shipping us honey from all over the province, without sending word of their intention to ship beforehand. We do not like to return honey after it has been sent to us, but we cannot under present circumstances accept any further consignments. Any honey which arrives, therefore, in the future unannounced and not ordered by us, will have to remain at the station, subject to the order of the shipper. We hope this warning will be sufficient.

WAX IN EXCHANGE FOR SUPPLIES.

Some of our customers gave in orders for goods some time ago and after they were shipped some time sent us in payment wax, which they valued at the advanced prices. This we think, is unfair, and we consider we should take the wax at the price it was going when we shipped the goods. We shall not dispute with those who have shipped, but will take no more wax on that principle in future. We prefer the money for our supplies but if we take goods in exchange will allow for them the price they are bringing at the time supplies are shipped. If we were to send these customers of ours a consignment of foundation, and a month after when that article had rapidly increased in price, send in our bill at advanced rates they would object, we think.

CLARIFYING WAX.

Many of our customers who send us wax for the manufacture of comb foundation seem to be under the impression that clarifying wax, as we term it, is improving its condition by some chemical process. The treatment to which the wax is subjected is simply a thorough heating, which purifies it of all sediment and spores of disease. The wax is placed in a room heated by steam to a temperature of from 175° to 200°, which heat is maintained for days, if necessary, and then the steam is shut off and the wax is allowed to cool gradually. Just previous to shutting off the steam a certain quantity of water is poured into the vessel which immediately settles to the bottom while all the sediment in the wax gathers between the water and the wax and so can easily be scraped off when the cake is cool. The very best of wax which reaches us, when treated to this process, reveals a considerable amount of impurity. Not only is the wax purified by this treatment but it is much improved for working. And it is

surprising how readily bees will draw out such foundation than they will that made from wax not so treated. An experiment along this line will soon convince one of this fact. This is especially noticeable with section foundation which clearly shows that it should always be clarified by some skilled manufacturer of comb foundation. This extra pure wax being so tough and pliable it can be made into very thin foundation and those who use it will not be troubled with "back bone," as it is termed, in comb honey. It will pay comb honey producers to give five cents a pound more for such foundation for the increase in their honey crop will amply reimburse them. We would like our readers to test this matter thoroughly in order that they may be convinced of the truth of what we say.

A NEW PLAN FOR USING SECTIONS.

A new plan of using sections partly filled with comb is given in the B. B. J. by Walter Marshal. He scrapes the cells off down to an eighth of an inch of the section, when the wax is cold and brittle and lets the bees work on it. They use it much more readily than comb foundation.

SEND IN YOUR ORDERS NOW.

Now, friends, send in your orders for comb foundation, and just see if you can get ahead of us this year. The hands are just starting on an extra lot of 1,000 pounds of wax. This, with large shipments coming in from other sources, will enable us, we think, to keep you supplied. But, first come first served. Orders will be filled in rotation, and at this writing we are only a few hundred pounds behind, so that before this reaches you we expect to have sufficient stock on hand to ship by first freight or express. But don't delay your order, thinking you are sure to get all you want at any time. That was the great mistake many made last year. If you do not want it for two or three weeks place your order at once that we may know how much you want and have it ready for you. Then we can advise you when we ship.

A Lucky Ohio Farmer.

Recognising the fact that there exists a widespread interest in the pursuit of agriculture and its sturdy devotees, the Cosmopolitan Magazine recently offered two prizes of \$200 each for essays bearing upon farm life and the farmer. The first of these prize articles was published in the April Cosmopolitan.

The \$200 offered for the best essay on "The

needs of the farmer, his hours of labor, and the national legislation necessary to his prosperity," was awarded to Abner L. Frazer, of Milford, Ohio, and will appear in the Cosmopolitan for June. This essay was selected from a very large number of manuscripts submitted by farmers throughout the country, because of the many sound practical suggestions that it contains. "Times have changed and the farmers, whose work is the foundation of national prosperity, have not kept pace with the advance in wealth enjoyed by merchants and manufacturers; but the agriculturist is awaking to his opportunities. Education, organization and contentment with moderate profits—these are the secrets of success. Comfort, independence, leisure—these are the rewards." The essay closes with a well considered resume of the only legislation which the farmer asks in his behalf—laws to prevent the manufacture and sale of adulterated and spurious food products as genuine, to curb monopolies, and to secure an honest government for the whole people. Dan. C. Beard and F. G. Atwood have illustrated the article with pertinent cartoons and the essay is a notable contribution to the literature of the farmers' political movement which is attracting so much attention. The June Cosmopolitan containing the prize essay, may be obtained of any newsdealer. (Price 25c. Cosmopolitan publishing Co., Madison Square, New York

* * Subscribers who fail to receive their copies of the JOURNAL promptly, will kindly advise us. Missing numbers are always replaced where possible.

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ADVERTISEMENTS.

EXCHANGE AND MART

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

BEES

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

FOR SALE—100 Brood Foundation 10½ x 12½, 45 c. per lb. F. O. B. here. Cash with order. Lindsay Poultry Farm and Apiary, Lindsay, Ont.

ITALIAN Bees and Queens for sale. Comb foundation a specialty. Agent for the D. A. Jones Co. supplies. Bees wax wanted. Ship either by G. T. F. or C. F. R. H. COUSE, Cheltenham

1,000 LBS. OF BEES, at \$1.00 per lb. 50 colonies of bees for sale. Comb foundation and sections and everything you want cheap. Send for price list. J. A. Foster, Tilbury Centre, Ont.

BEEES, BEEES, yes all the bees you want. 2000 lbs. for sale, also Queens, Root's Comb Foundation, Honey Extractors, Sections, Hives, and all kinds of supplies at rock bottom prices. Send for price list for 1931 now out. PETER BUSSEY, Cottam, Ont.

D. RAMER, Cedar Grove, Ont., is prepared to fill all orders for bee hives and sections and all necessary bee-keepers supplies. Write him for prices before ordering elsewhere..

FOR SALE OR EXCHANGE—For anything I can use about one hundred empty bee hives, very superior to any in this country for storing honey and bees, glass boxes, sundries, etc., etc. Also a first class patent incubator by the very best maker, cost \$40, capacity, 200 eggs; also brooder, capacity, 300 chicks. The above have only been in use one season. WM. SNELGROVE, Woodstock, Ont.

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D. A. JONES, CO., - BEETON.

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FOR SALE—Pekin Duck Eggs, only \$1.00 per setting. Packed carefully. Address: J. A. GUTTIN, Owen Sound, Ont.

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EGGS from choice W. Wyandottes, R. C. B. Leghorns B. Plymouth Rocks and S. C. W. Leghorns at \$2 per 15, or \$3 per 26. Fine Pekin duck eggs at \$1 per 11. My birds win at Canada's largest shows. Satisfaction guaranteed. R. J. GRACEY, Wellandport, Ont.

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I pack Mam. Russ. Sunflower seeds with each order. Dark Brahmas and Toulouse Geese. Eggs 10 and 40 cts each, respectively. From best prize-winning strains. Price reduced one half, owing to large numbers. Mention this Journal. S. R. B. SMITH, Brighton, Ont

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- Light Brahmas—Six yards. Fletcher, Duke of York, Williams and Bucknam strains
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- Buff Cochins—Three yards. Gold Dust strain
- Black Cochins—Two Yards. Williams strain
- Langhans—Three yards. Croad strain
- White Plymouth Rocks—Four yards
- White Wyandottes—Two yards
- Silver Wyandottes...Two yards
- Barred Plymouth Rock...Twelve yards. Drake Upham and Corbin strains.
- Hondans—Two yards. Pinckney strain
- White-Faced Black Spanish—Two yards. McMillan and McKinstry strains
- Rose-Comb Brown Leghorns...Two yards Forbes strain
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- Single Comb Brown Leghorns...Two yards Bonney strain

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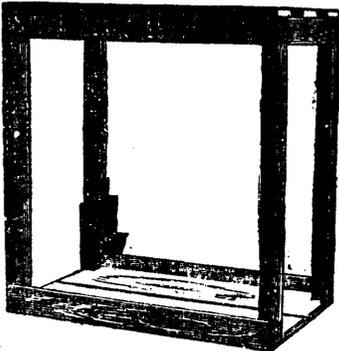
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In these pens are females scoring 95 and 97 points, and more just as good. Eggs, \$1.50 per 13 I can ship from Buffalo, N.Y., to American customers. Stock for sale after Oct. 1st.

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34 in.	30 in.	19 GAUGE.	48 in.	72 in.
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BLACK AND WHITE LEGHORNS

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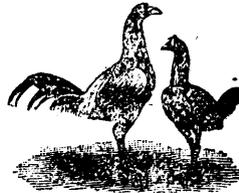
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Will be able to spare a limited number of eggs from the above varieties. My Black Leghorns have always won highest honors wherever exhibited and have genuine standard legs, "no artificial coloring about them," my whites are headed by "Snowball," recently purchased from R. H. Marshall of Dunnville, Ont., having scored 904 points last winter at the Ontario and 944 again this winter at Dunnville as a cock. I have him mated with Hens and Pullets, scoring from 944 to 97 I consider this as grand a pen as there is in Canada to-day. My pen of ducks comprise the 1st prize Drake and 2nd prize Duck at Industrial last fall, owned then by Aller Bogue, London, Ont., also 1st prize Duck at Milton this winter. Leghorn eggs \$3 per 13 or settings one of each, \$5. Duck eggs \$2 per 11, packed carefully in baskets with handles. Address P. H. Hamilton, Hamilton.

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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

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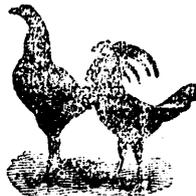
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EGGS IN SEASON \$3 per 13 or \$5
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**DARK BRAHMAS,
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EGGS for sale from a grand pen of my strain of
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1890, score 94, and 1st as a cock at Owen Sound, 1891,
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1st prize winners at Toronto and Brampton, 1890. Eggs,
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