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THE CANADIAN BEE JOURNAL

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

VOL. VI, No. 6. BEETON, ONT., JUNE 15, 1890. WHOLE No. 266.

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	\$10.00
2 months.....	3.00	4.50	5.50	6.50	11.00	17.00
3 months.....	4.00	5.50	7.00	9.00	15.00	25.00
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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.

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

Space measured by a scale of solid nonpareil of which there are twelve 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 especially 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 everyone, and we will cheerfully correct them if you write us. Try to write us good naturedly, but if you cannot, then write before 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.

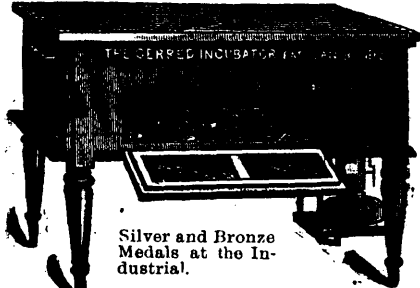
THE CANADIAN BEE JOURNAL and
THE CANADIAN POULTRY JOURNAL \$1.00
THE CANADIAN BEE JOURNAL and premium queen 1.00
Both JOURNALS and premium queen..... 1.25

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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.

J. L. CORCORAN,
Stratford, Ont.

Breeder of Exhibition
BARRED P. ROCKS
White Wyandottes,
S. G. and Colored Dorkings
Imperial Pekin Ducks.
BIRDS FOR SALE AT
reasonable rates.
Eggs, \$3.00 per setting.



All sizes, 50, 100 and 300 egg machines. Send for descriptive list. MENTION THIS JOURNAL.

Silver and Bronze Medals at the Industrial.

Address **E. J. OTTER, Manager The Gerrerred Incubator Co.** 96 De Graast street, Toronto

A. J. GORDON,
ST. JEROME, - - P. Q.

—BREEDER OF—

BLACK B. RED GAMES
(Heaton and Mathews Strains.)

At Montreal last winter I won first on cock; third on cockerel; first, second and third hens; second on pullet. Score from 89½ to 94. Eggs \$3 per sitting of 13. Stamp for reply.

MENTION THIS JOURNAL

GOLDEN WYANDOTTES !



McKEEN'S STRAIN
Cannot be beaten. Scored by Judge Bicknell, 92, 90½, 90, 89, 89
EGGS \$2 per 13
Stock for sale. Pekin Duck eggs, Rankin's strain, \$1.00 doz
One of my customers, says "Out o 112 G W eggs I had 12 fine chicks."
JOHN A. NOBLE, Norval, Ont



THOS. BARRETT,
Norfolk Poultry Yards,
BREEDER
AND IMPORTER OF
Langshans,
S. G. Dorkings,
S. C. B. Leghorns,
White Cochins,
Black Hamburgs.

Eggs in Season \$3 per 13 or \$5 per 26
BIRDS FOR SALE.
ANGUS. ONT.

W. T. TAPSCOTT

Has expended large sums of money in improving his stock of



S. L. Wyandottes

Yet his prices are not advanced. Before buying anything in the line of

WYANDOTTES

LEGHORNS, COCHINS, PLYMOUTH ROCKS, MINORCAS, BRAHMAS, B. C. R. G. BANTAMS AND PEKIN DUCKS.

+ + + + +

Send for his new Circular now ready. Address.

W. T. TAPSCOTT,
BRAMPTON, ONT.

MENTION THIS JOURNAL

EGGS, \$1.00 for 13.

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

I make a specialty of furnishing eggs in large quantities for incubators at reduced rates. Send for 890 catalog.

E. H. MOORE, Melrose, Mass.

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PARK Poultry Yards
DUNNVILLE.

C. H. McCRAB, Prop.

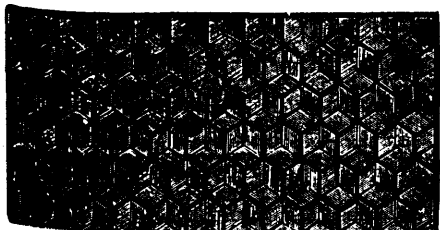


After several years' experience and a large outlay of money I have birds second to none.

S. C. B. Leghorns and Black Minorcas

The breeding pens should be seen to be appreciated. Eggs and birds reasonable. Correspondence kindly solicited.

FOUNDATION



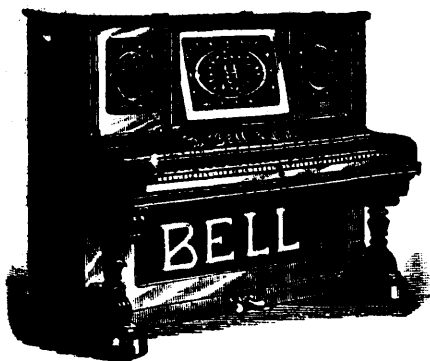
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THE D. A. JONES Co.
Beeton Ont.

THE SWARM HIVER

BY mail, and the AMERICAN APICULTURIST one year for \$1.50. Sample copies free. Address AMERICAN APICULTURIST, WENHAM, MASS. MENTION THIS JOURNAL.

BELL PIANOS



QUALITY, FIRST-CLASS,
TONE, PURE and BRILLIANT,
DURABILITY UNAPPROACHED,
CATALOGUE FREE.

W. BELL & CO.
GUELPH, Ont

E. L. GOULD & CO.
Brantford, Ont.

Dealers in Bee-Keepers Supplies of all Kinds.

Wax made up on short Notice. A so Canadian Agents for, Dadant's Foundation.

THE CANADIAN

Bee Journal

EDITED BY D. A. JONES.

75 cts. per Year.

Poultry Journal

EDITED BY W. C. G. PETER.

75 cts. per Year.

Until June 1st we will send Either Journal on trial trip for 6 mos. for 25 cts.

The D. A. Jones Co., Ltd., Beeton, Ont.

AFTER HIAWATHA.

BY SEOB.

HO! ye gleaners after knowledge in the field of apiculture, Stop a moment, please, and read this, Stop and read this advertisement. Send and get my creamy MONTHLY, (I will send three samples gratis) It contains the views of leading Bee-men on some special topic; Points out errors; makes you ponder, And abandon wrong ideas. If you'd march with those who "get there," Send your stamps to "Hutch the hustler" - Fifty cents per annum only; Twelve REVIEWS for only 1ft.

Address **BEE-KEEPERS' REVIEW,**
W. Z. HUTCHINSON, Ed. & Prop. Flint, Mich.

Bee-Keepers Guide

—OB—
MANUAL OF THE APIARY.

This fifteenth thousand much enlarged and more richly illustrated than previous editions. It has been fully revised, and contains the very latest in respect to bee-keeping. Price by mail \$1.50. Liberal discount to dealers and for clubs.

A. J. COOK, Author & Publisher,
STATE AGRICULTURAL COLLEGE,
LANSING, MICH.



BEEES AND HONEY

The Developted Strongest, Best and Cheapest BEE-HIVE for all purposes. Please everybody. Send your address to the Largest Bee-Hive Factory in the World for sample copy of *Gleanings in Bee Culture* (a 1 illustrated semi-monthly), and a 44 p. illustrated catalogue of Bee-Keepers' Supplies. Our A B C of Bee Culture is a cyclopedia of 400 pp., 6x10, and 500 cuts. Price in cloth, \$1.35. Mention this paper. A. I. ROOT, Medina, O.

Carniolan Bees!

Pleasantest Bees in the World, Hardest to Winter,
Best Honey Gatherers.

In order to introduce not only the bees, but our paper,
"THE ADVANCE"

We offer to anyone who will send us \$1.25, a copy of our paper and a nice Carniolan queen. The queen alone is worth \$2. Address,

THE ADVANCE, Mechanic Falls, M. C.



Safford & Kisselburgh

Mountain Home Poultry Yards
STONE ROAD, - TROY, N.Y.

BREEDERS OF

Mammoth Light Brahmas, Laced
and White Wyandottes,

Barred and White Plymouth Rocks,
Black Minorcas, SCW Leghorns

Eggs Per Sitting and a year's subscription to the
Canadian Poultry Journal, \$2

MENTION THIS JOURNAL

S. C. W. Leghorns.

GREAT SUCCESS PAST SEASON.

12 Firsts and 4 Seconds, and 4 Special Prizes won at
various fall and winter shows.

My Breeding Pen won the handsome Silverware

Given as a Special Prize at the

Ontario SHOW AT St. Catharines

For the best cockerel and five pullets. Eggs \$2.50 per
13. Stock any time. Send for Circular.

R. H. MARSHALL, DUNNVILLE.

Prices to suit the Times.

A FEW pairs of Silver Laced Wyandottes and a few
Plymouth Rock cockerels for sale cheap. Brown
White and Black Leghorns, White and Barred Ply-
mouth Rock, White and Silver Laced Wyandottes.
Eggs of any of the above varieties, or mixed, at \$1.50
per setting, or two settings for \$2.

WM. MOORE,

MENTION THIS JOURNAL. Box 462 LONDON, ONT

I have decided to go out of the pure
bred poultry business, and devote
my time, energies and intellect
to the exclusive breeding
of the highest type of
Mammoth BRONZE
TURKEYS, and as
an initiative
in that direc-

tion
I have
selected a
breeding pen
from three famous
yards in the U.S. head
ing it with the 2nd prize
gobbler (Arthur II) at Detroit
Jan. '90. A few sittings of eggs
to spare at \$3.50. Address WILL A.
LANE, Turnerville, Ont.

Poultry Netting & Fencing.

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

19 GAUGE.			
24 in.	30 in.	48 in.	72 in.
\$3.10	4.00	4.85	6.00
18 GAUGE.			
\$3.25	4.00	6.00	8.30
			9.90

In less than full roll lots the price will be 1 1/2 sq.ft.

THE D. A. JONES CO., LTD.

Beeton, Ont

CONDENSED DIRECTORY.

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

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 Agr
Jan. 14 to 16 1890. Eggs \$2 per setting.

MENTION THIS JOURNAL

**BIRDS, Parrots, Dogs, Ferrets, Cats, Monkeys, Rab-
bits, Bird Eyes, Goldfish, Song Restorer, Trap
Cages, Distemper and Mange Cure. Wilson's Big
Bird Store, Cleveland, Ohio.**

CARNIOLAN QUEENS. After June 15 untested
\$1.00 each, six for \$5.00. Tested \$3.00 each.
LANGSTROTH, Seaforth, Ont.

POULTRY-MEN—Do not order your spring circular
or in fact any kind of printing until you have first
asked us for samples and estimates. The D A JONES
CO., Ltd., Beeton.

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 & Sons,
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.

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

HOLY LAND QUEENS. Home and imported
raised a specialty. Bees by the pound and frame
queens by the dozen. MENTION THIS JOURNAL. GEO
D. RANDENBUSH 445 Chestnut St. Reading Pa. 1

\$1 WILL BUY a tested Italian or Heddon strain
queen under 2 years old. \$1.25 will buy a tested
Italian or Heddon strain queen under 1 year old. The
Italians are mostly from one of Doolittles \$10 queens
and the Heddon strain from selected stock. Can
ship at once. G A DEADMAN, Brussels, Ont

1890 ITALIAN QUEENS from imported or
home bred honey gatherers. Each 75c. six
\$4.00. Order now, pay when queens arrive.
W. H. LAWS, Lavaca, Sebastian Co. Ark.

FRIENDS, Look here! Italian Queens for sale: our
tested 45 cts. each; tested 85 cts each; one frame
brood 50 cts; three-frame nuclei, with Untested queens,
\$2; with tested queen \$2.50. E. S. VICKERY, Hart-
well, Hartwell co., Ga.

LOOK HERE!

IT will pay you before ordering your Supplies to
send for our 1890 Price List of Hives, Supers,
Foundation, Sections, Queen Cages, Smokers, Bee
Escapes, Extractors, H. Knives, Shipping Cases, Bee
Queens, etc. Address

J. & E. H. MYERS,

MENTION THIS JOURNAL. Box 94, Stratford, Ont.

THE BRIGHTEST!

Five banded Golden Italian bees and Queens
and the Reddest Drones. Very gentle; very pro-
lific; good honey gatherers—working on red clover—
and the Most Beautiful bees in existence! Took
1st premium at Mich. State Fair in 1889. Reference as
to purity of stock, E. P. of C. B. J. Sample of bees five
cents. Untested queens, before June 15th, \$1.25; after
June 15th, \$1.00. Tested (3 bands) \$2.00; selected, test-
ed, (4 bands) \$3.00; breeding queens, (4 to 5 bands) \$5.00
Virgin queens, 50 cts.; 5 for \$2.00. Safe arrival and sat-
isfaction guaranteed. Canadian currency and stamps at
par.

JACOB T. TIMPEL
GRANDLEDGE, MICH.



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

VOL. VI. No. 6.

BEETON, ONT., JUNE 15. 1890.

WHOLE No. 266.

THE CANADIAN BEE JOURNAL

ISSUED 1ST AND 15TH OF EACH MONTH.

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

EDITORIAL.

HERE are at this date 302 members of the Ontario Beekeeper's. We asked for 300 members, and our request has been pretty well complied with. Eleven local associations have affiliated, viz: Oxford, Bruce, Brant, Lambton, Kent, Haldimand, Norfolk, Listowel, Perth, Middlesex and Western Ontario. This makes three more than ever before, and four more than last year.

A late number of Ingalls Home Magazine contains a very pretty colored study representing a bunch of Golden Rod, with a bee hovering over it. It is a beautiful representation of America's National Flower.

Detroit intends to out do itself in the way of its grand International show, to be held August 26th to Sept. 5th; it has been suggested by the editor of the Review, that a day be set apart for a "Bee-keepers's Day," when all beekeepers gather at the Apiarian Department at a stated hour, and "do" the

exhibition in a body. He suggests Tuesday, Sept. 2nd, (1 p. m.) as the day. This is a good idea, and is one which should be acted upon by all intending visitors, of course there may be many who will want to stay more than the one day, but for this day at any rate let them all report to Superintendent Cutting;

Though a falsehood will always travel faster and farther than the truth; yet there is a chance that the "wily lie" may yet to a great extent be corrected throughout the country, as very many of the leading scientific and other papers throughout the U. S. and Canada are reprinting and commenting on the able article from the pen of Mr. Allen Pringle which recently appeared in the *Popular Science Monthly* refuting the statements made by Prof. Wiley. Mr. Pringle did just what should have been done years ago—went to the fountain-head—and made the corrections. Surely it would be but the right thing for the author of all this mischief to acknowledge the untruth of his assertions in the magazine in which they originated. We hope he will do so.

The *Australasian Bee Journal* has discontinued publication, because of the continued ill-health of the editor, Mr. Isaac Hopkins. We regret to notice the decease of this Journal. It was a good one, and was needed by the beekeepers of Australia.

GENERAL.

The Present.

A cloudless sky, and a stretch of meadow
Dotted with daisy and clover blooms ;
A farm-house old, in the white trees nestled,
And a hum of bees in the lilac plumes ;
Tassles of alder so slenderly swaying,
And flower-bells swinging in every breeze ;
A song of birds from the woodland shadow,
And a carol of joy in the budding trees ;
A lake's dark calm in the distance lying,
With cliff's gray turrets reflected deep,
And flag-fringed shores where the trees are
bending
O'er stilly shades where the fillies sleep.

FOR THE CANADIAN BEE JOURNAL.

Bees, and Whey.

THE sense of smell is very keen in bees, and seems to be their guiding star in almost everything. It guides them to the honey field miles distant, it detects a sweaty man or horse, it detects a robber bee, or a strange queen, and in many things the sense of smell in the bee, as unerring as nature itself, is its only guide. An unwholesome smell of itself is not so repugnant to bees as to irritate them, if they are used to it, but any smell they are not used to seems to tell them that an enemy is present and they are in battle array at once. This perhaps explains Mr. J. H. Davison's case. His bees were kept close to a cheese factory, and were used to the smell of whey. He having the smell of whey on his person, by reason of working in the factory, made no difference to the bees for they were used to it, while they chased and stung others simply because they had no whey on them. Mr. Pringle's case was just the reverse. He always handled his bees with no whey on his hands, except that one time, when the bees as once detected it and rebelled. I can do almost anything with my bees without bee-hat or gloves, while they detect a stranger at once. I have allayed the fears of my neighbors, by causing a swarm of bees to alight on my bare arm and displaying it to them, and with the queen caged, have made it a source of unceasing wonder to them by causing the swarm to alight in any place I wished, even on my head, with a bee-hat on of course, and with the bees on my head have went in and sat down at my table to dinner, raising my bee-hat a little in order to feed myself, while the bees were perfectly docile, hanging on my head and shoulders.

JOHN F. GATES.

Ovid, Erie Co., Pa., June 2nd, 1890.

Your argument is very good, but you go rather far when you say that

"others, simply because they had no whey on them" were chased and stung. If they had some other disagreeable odor about them they might be subject to attack, but not if they were perfectly free from such odor.

FOR THE CANADIAN BEE JOURNAL.

Temperature of the Brood Nest.

WHEN I first mentioned this matter, I did so because so many had got the idea that the temperature in that part of a cluster of bees occupied by brood, which we call a "brood nest," was 65° and I wished to point it out that brood could not be reared at all in a temperature less than 95°. Also that no matter how cold or hot outside the hive, or on the outside of the cluster, this temperature never varies. It is just like the temperature of the human body, known as "blood heat," which never rises above one point, even if we go in an oven, hot enough to roast a leg of mutton, nor does it fall below it, even near the North Pole. Of course a "brood nest" is not a brood nest unless it contains brood; but I never for a moment had the idea of fighting the matter, on the "Correct Nomenclature" footing as suggested by Mr. W. Z. Hutchinson, on page 1014, for Jan. 29th. I simply pointed out that brood could not be reared in a temperature under 95°, and I did this because it is one of those matters every one who keeps a stock of bees should know. If he does not, and he had the idea that brood was reared in a temperature of 65°, he would naturally think all his manipulation safe if the mercury staid above 65; but once firmly impress on him that nothing under 95° will do, and his own common sense guides him to do right, for chilled brood means weak worthless bees, even if they hatch, and this in turn means a profitless stock, even if it lives.

I don't at all regret the discussion, because I think much good will result, and I certainly have been amused, all through, by the way Mr. Hutchinson has "doubled," as soon as he was "pinned."—It takes a clever dog to catch a hare, because she never runs straight, and little boys who can't run very well soon learn to "double" when being chased; but all the same I always consider the best policy in a controversy, is to "own up," when worsted. We may not like to do it, but we feel all the better for it.


No doubt many think I have "got my knife into Hutchinson," if so let them read what you have to say on page 1002, and remember that no

Englishman can fight a man, and whether he wins or loses bear him no ill feeling afterwards. My motto is, "Hit as hard as you can, do your best in all things, and never be vicious if licked."

A HALLAMSHIRE BEE-KEEPER.

FOR THE CANADIAN BEE JOURNAL.

Setting Bees Out Early.

 YOU know for a few years past I have advocated early setting out—that is as soon as there is warm enough weather for the bees to fly freely, and snow mostly gone.

As a rule we have a few fine days early in April which just suits me. The seventh of the month was a nice day so about the middle of the day I set out about twenty, and really they seemed to enjoy it, and appeared as numerous about the hive as on setting them away. It cooled off towards evening, and a few days until the twelfth was cold; on that afternoon the balance were removed taking the time nearly to sundown; but the evening promised as good as could be desired. Next morning was delightful when all made the air resonant with their hum. Two died in wintering out of seventy six. The cellar was warm and to occupy the leisure time they have gnawed holes in their quilts. With few exceptions all are tarred with the same stick. With the cellar door open to carry them out, although the entrances were closed, they flew about the cellar in great numbers and crawled out over the hives so that it was hard to carry them without crushing some.

PROTECTION IN SPRING.

The next thing in order is to make them warm, this I do by covering with two or three thicknesses of paper, and putting on the cover without opening the hives at all. Following days I visit them, and if suitable weather when they are flying, take notice how each one is. If weak few will be flying; if queenless they will not go to work with the same zest. Having found one I set my tent over it and go to work supplying what is needed; leaving only what few combs they can attend to until I have gone over them. After several days some that appeared strong are now very weak—and here is where the advantage of having them out before real steady everyday work commences. When they are first set out the activity and new life imparted starts them breeding and it will be three weeks before bees are hatched to take the place of the old ones, many cold days intervening keep the bees at home and they do not die off nearly so fast as if they gathered every day. I got a lesson by keeping most of my bees in until nearly

May one year. Fine weather commenced, and day after day they were gathering, and by the time the three weeks was up I had a lot of combs containing sealed brood on my hands and very few bees. Those of the same year set out two weeks earlier just made progress while the others went back. I always think now that if I can tide them over three weeks I have those colonies for the summer sure.

The weather has been so very cold and cloudy with seemingly no exceptions this last three weeks that I have let the strong colonies do the examining for me. I watch them and when they commence robbing one I remove it and tend to it in the way it should have been. I found this year in my apiary what I never met with before, a drone laying queen wintered over, and I decided at once not to summer her.

At this writing I have sixty eight colonies, with sixty all that could be expected this season at this date. Quite a few have drones flying. I was thinking the other evening that he is a happy apiarist that left plenty of stores in the hives last fall. All I have done towards helping the bees is to lift them all, and any that were light, give them a frame of sealed honey in the back of the hive. It takes a good deal of experience to get the "knack" of prying loose a frame this cold weather without disturbing the bees. I do it towards the evening when all is still, and I do not use smoke or but very little. I am going to give you an article on smoking bees at some future time. I do like to see a row of bees come peeping around the corners of the frame in British square style backed up by row after row, to see what is going on in the rear. When they find it is a frame of honey of a different flavor to their own they think it is a bonanza, and go to work and remove it to the brood nest. If they have considerable, I do not know but it pays to exchange combs for this purpose. I had to feed sugar to several colonies a few years ago in a spring similar to this, but lost about half of my bees by balling and otherwise made a miserable failure of the whole thing. Let any one try it and succeed in the cold spring months. I think I have gone up a gradual incline with experience to back me in nearly all I practice now.

FRAMES AT FIXED DISTANCES.

Yes, I tried frames at fixed distances; that is past, do not want any more of them.

THOS. STOKES.

Minesing, May 19th.

You are right, Friend Stokes, in keeping plenty of honey for stores as in a season like this we require double the stores, that would be necessary in an

ordinary one. We have colonies that have consumed, since set out, more honey than it would take to winter them. By all means let us have your article on "smoking" bees. Any light or hint that is an improvement is what we want. No doubt the different flavor of honey, especially something strong, would incite the bees to work more readily, but if put in warm they will go at it more vigorously. Where combs are taken from a cold store-house they should be left in a warm room say from twelve to twenty-four hours, at a temperature from 80 to 100, and the bees will take to them more rapidly. Warm sugar syrup is preferable for feeding as it is less liable to cause robbing. We used to space our frames in various ways, but we now do it with our eyes and fingers, and when a person is accustomed to it they can put them at from $1\frac{1}{4}$ to $1\frac{3}{8}$ inches.

Honey Packages.

(Essay read at the meeting of the Vermont B. K. A., at Burlington, Vt.)

MR. President, Ladies and Gentlemen. It is through no wish of mine that I am called upon here to-day, but as our excellent secretary said he must have my name to fill the programme I reluctantly consented to prepare a short paper on the subject named. Believing as I do that that which is best and cheapest for the producer is also best for the consumer, because it can be had at minimum cost. I will here recommend only such packages as will best serve both. First in order come packages for comb honey. In this connection we must start at the beginning or with that which the bees use to store the freshly gathered honey in, but we need not stop here long as the extended and almost universal use of section boxes has done away with the cutting and daubing of comb honey. Section boxes of a capacity of one pound or less are so much superior to all others that there is no use of my giving any other proof of their superiority than the large and constantly increasing demand for them. After we have obtained a crop of nice honey in sections, the question will naturally arise how shall we put it up for market? Much now depends on what kind of a market we are to sell in, so much in fact that I can only give a few general rules. If your market demands a fancy article I know of nothing better than cartons with mica fronts, finely labeled with colored labels. Wood sides come next and

in point of protection to the delicate comb are superior to cartons and they also permit a more easy examination, which many insist on making. In cost there is no material difference. For crates, for these sections, I believe those holding twenty to be the very best. For a market not quite so fancy, or one that demands more honey for less money, I think it unnecessary to protect each section separately, but would recommend the use of smaller crates as this kind we hope to sell in larger quantities to the consumer, direct.

At our last state fair I saw a crate or case which held six sections with one or both sides glazed, which pleased me very much as it was light, cheap, and showed part of the honey it contained to very good advantage. Such cases could be made, filled with good honey, and when so filled the whole could be sold for an even dollar each, at present prices. Many times I have a call for a dollar's worth of honey and I think it would be an advantage to have such a package to supply such demand, and if they were put forward I think more would buy in dollar quantities, and perhaps in this way we could increase consumption. Such cases would have to be crated for shipment, but sections with cartons or wood sides also have to be crated. The principal question of the difference in cost between such a case ready for market, and an equal number of sections with cartons or wood sides on is one which I cannot answer, and shall be glad to hear the opinion of the convention on this point. I will now say a few words on packages for extracted honey. Between the production of comb and extracted honey, I prefer the latter; between the sale of the two I prefer comb, and why? Because people are used to comb honey and it attracts the eye quickest, as well as taste. The last remembrance of liquid honey being of some poor strained stuff procured of the neighboring box hive bee man. Thus in putting up extracted honey we must put it up in such shape that it will first attract the eye, second put up only such as is of superior quality so it will be sure to please the taste, and thirdly it must be put up so it can be sold cheaper than comb or a market will never be established for it. Here we have two apparently conflicting conditions. The honey must be put up so as to attract the eye, but still be sold for less than comb. Luckily for us the present cheapness of glass, tin and printing enable us to do it and still compete with comb honey. For small quantities, glass has the preference as a package and when filled with fine clover or basswood honey properly labelled with litho-

graph labels it is pretty to say the least. The small glass receptacles most used, are the Dime jar, the one pound tumblers, one pint fruit jars holding 1½ pounds and the one quart fruit jars holding about three pounds net. The honey must be put up in liquid form and but a little while before selling. Larger quantities than three pounds should be put in tin and as we should always try to sell in as large quantities as possible the main part of our crop should probably be put in tin. In tin packages we also have a large assortment and of varied design; such as will be of use after the honey is removed, will be found most reliable. Each must suit his own market and always try to sell all the extracted he can in the candied state. In regard to packages for honey smaller than 10c or 1½ pounds, I have had no experience, nor do I believe them practicable.

A "GREEN MOUNTAIN BOY" BEEKEEPER.

Mr. McKnight is right, I did not get the full meaning of his article on which I raised a question, and I don't know where in mine he found that I pretended to tell what an average crop is, unless I have the correct and full figures. I hope Mr. McKnight does not feel injured. I don't. I would like to see him and thank him for the many valuable ideas I have received from the perusal of his writings in the C. B. J., and elsewhere.

H. W. SCOTT.

Mr. M.—Yours of 10th came duly to hand, also the journals etc., for which accept thanks, I enclose your essay on honey packages just as I read it at the convention, if it is long, clip it, or do as you please with it. I don't want anything I write to be published merely because it is sent, but always on its own merits, if it cannot stand on them let it fall into the waste basket. The winter here is extremely mild so far, sleighing has been interrupted frequently this winter, at all times thin. I am to have charge of a yard of bees in Stowe the coming season, which I hope will be a good one. This will try me to see if my five years study and experience has fitted me to venture alone. The change in the journal meets with my approval, (which is not of much account). Wishing you much prosperity I remain, yours respectfully.

H. W. SCOTT.

Williamston, February 18, 1890.

Haldimand Bee-keepers' Meeting.

The May meeting of the Haldimand Bee-keepers' Association met in the parlor of the Campbell House, Cayuga, on Saturday, 17th inst.

Present—Frank Rose, president, in the chair, and Messrs. Jas. Armstrong, Wm. Kindree, R. Coverdale, M. Schisler, Isaac G. Wismer, Wm. Atkinson, Israel Overholt, Alex. Stewart, J. D. Rutherford, Hugh Rose, J. Winger, and the

Secretary.

RAISING QUEENS.

Mr. Armstrong said he did not raise queens until swarming time, and only from his best colonies, good honey gatherers, nice color, and gentle. He gave a very interesting account of his methods; and had very good success, losing very few young queens in mating.

The President and Mr. Kindree explained their plan of raising queens.

INTRODUCING QUEENS.

Mr. Atkinson uses a Peet cage, which he puts into the hive requiring a queen, and leaves it there until the bees gnaw her out. He then removes the cage when everything is quiet.

M. Schisler gave an amusing account of his first attempt at introducing a queen.

Mr. Armstrong said he thought a great many queens were lost through the bee-keepers being too anxious to see whether the queen is all right and examining the hives too soon after the queen has been introduced. He now leaves the colony alone for several days, and never loses a queen. He uses a Peet cage, but instead of putting it between the frames he puts it on top of the frames and lets the bees get her out.

Mr. Overholt lets the queen run in on top of the frames in the evening, about dark, and he has had good success.

The President thought the most important thing about introducing queens was not to disturb the colony, do it in the evening as quietly as possible.

WINTER REPORT.

	Fall '89	Spring, '90.
F. Rose,	80	76.
Jas. Armstrong,	129	129.
W. Kindree,	52	46.
W. Atkinson,	31	29.
R. Coverdale,	45	40.
Isaac G. Wismer,	10	9.
M. Schisler,	5	5.
J. D. Rutherford,	3	2.
J. Winger,	21	20.
Israel Overholt,	25	25.
Alex. Stewart,	1	1.
E. C. Campbell,	14	14.

Moved by Mr. Armstrong, seconded by Mr. Overholt, that the Secretary write to G. B. Jones for his terms for a lecture at our next meeting on the last Friday in August.—Carried.

Moved by Mr. Armstrong, seconded by Mr. Kindree, that this association offer the same terms as last year to the Cayuga, Jarvis, Rainham and Dunnville shows.—Carried.

Moved by Mr. Overholt, seconded by Mr. Atkinson, that our next meeting be at Fisherville, if a lecturer be not obtained.—Lost.


Moved in amendment by Mr. Kindree, seconded by Mr. Rutherford, that the meeting be held at Nelles' Corners.—

Moved in amendment to the amendment by Mr. Schisler, seconded by Mr. Armstrong, that the meeting be held at South Cayuga.—Carried.

FRANK ROSE, Pres.

E. C. CAMPBELL, Sec.

A Good Subject For Bee Stings.

 FANCY that there are few better (or perhaps I should say *worse*) subjects for bee stings than myself. Five years ago (in July) I was stung twice on the back of the left hand, just over the largest vein, and I came near choking to death, as the glands of the throat swelled almost shut and would have closed entirely had not an antidote in the way of a strong dose of ammonia counteracted the effects of the poison. Since that time, I have been very careful not to come in contact with any bee having those old-fashioned base-burning propensities; but a week or so ago I was unfortunate enough to again win, the displeasure of a single individual, who forthwith proceeded to make "his x mark" on my person. The spot chosen was just behind my left ear. Within twenty minutes of receiving the sting I began to feel effects coming on similar to my former experience, so I hurried home, and called for a dose of Ammonia. I fancy I could not have taken enough, as it did not seem to counteract the effects of the poison at all, and as I kept getting worse the doctor was called in. He at once gave me a heavy dose of ammonia, (a big spoonful in an equal quantity of water) repeating it after a few minutes. My feet were hurried into a pail of hot water and kept there for a time, after which I was ordered to bed. I had a terrible headache till next day, when I arose feeling all right again, but extremely weak—it seemed to take all the strength I possessed, and for several days the least exertion used me up entirely. The symptoms this time were exactly as recounted in the former instance (page 494, Vol. I, C. B. J.)—First came a tingling sensation all over the body, next large white spots all over, followed by the swelling of the glands of the throat, the lips and the spot stung; then my face became purple as from strangulation, and I could scarcely gasp the shortest words, so closed up was my throat. The action of the poison this time was more violent than the time I was stung five years ago, taking into consideration that there was perhaps less virus injected into the system (one against two). The locality of the sting, however, may have had a

good deal to do with the increase in violence mentioned.

I do not recount this circumstance with a view of scaring any one, but because of the assistance which the remedies applied in my case may be to some one similarly situated in the future. It is probable that it would not have the same effect on others not once in a thousand times.

F. H. MACPHERSON.

Beeton, June, 10, 1890.

FOR THE CANADIAN BEE JOURNAL.

Observations.

I have had too much to do lately to give any time to Observations, though I have attentively watched the different journals, and for "good solid meat," I haven't noticed any of them present a greater quantity, in nice shape, than our own CANADIAN BEE JOURNAL. You stick close to the text and do not include a half-dozen other topics, which are of no particular moment to beekeepers who are specialists.

I want to hear from some one who has used one of Alley's "Catch-em-alives," and can say it is just what we want—there has been time to test it now.

It seems to me that a certain Massachusetts beekeeper is giving himself and the particular race of bees which he is producing a good deal of free advertising in articles contributed to several of the beepapers.

I do not believe that smokers can be sent safely by mail. The O. B. K. A. smoker, which I received, was very badly damaged, and I believe others in my neighborhood were too. Wouldn't it be better to send them by express? The cost will only be two or three cents each more, and the safe arrival will be almost ensured. [We have decided that we will not send smokers by mail anymore, but by express, and all smokers which have yet to go to members of the O. B. K. A. will be sent by express to the nearest office.

Wouldn't it be interesting reading to hear regularly from Inspector McElvoy while on his tour of inspection—he could give us interesting and chatty letters. Very likely he will come across many little conveniences about the apiary which others would like to adopt, if they only knew of them. Could you not arrange to have him write.

I have watched the comb-spacing articles

which have appeared in the various journals, and I think the advice you give in the last issue of the CANADIAN BEE JOURNAL the best I have seen—do your spacing with your eye.

* * *

The magnificent showers we have had this past week have helped on vegetation wonderfully, and you can almost see the growth

OBSERVER.

FOR THE CANADIAN BEE JOURNAL.

Beekeeping as a Pursuit.

IT seems as though the question of hitching the bee-business up with other professions is being agitated beyond all reason, and to the detriment of beekeepers who have made beekeeping a life study, and should now have some protection from slipshod despoilers of prices who keep only a few swarms of bees and sell their honey at the first price offered. This third horse, or fifth wheel to a wagon, commonly known as some other business to run in connection with beekeeping, or beekeeping in connection with other professions is deceptive. If a man cannot make one kind of business pay, two kinds won't better his condition. If his attention is divided, and drawn to the fifth wheel, he will in nine cases out of ten divide profits with the honey buyer in such a way that the specialist will find prices ruined. A man must be a specialist if he would succeed in any direction. You can't drive two nails at one time with one hammer. If you had seen as many non-specialists as I have, and seen them knock prices to pieces as though the whole matter was all children's play, you wouldn't go to the convention and for the want of something else to say, start up some tomfool argument in favor of a business-twin-baby, or some crotched tree that will split down some day no matter how much you prop it up, and the weight that split it will bring down the price of your honey. Honey is a luxury and a tender plant that will bear no fooling with. Most people are ignorant of the mode of its production, and if a man happens to have luck enough to raise a few pounds, and from lack of knowledge of course sells it cheap, people imagine he has any amount on hand, and of course he sets the price. I have had enough trouble with this class of hogging beekeepers. Still by study and persistence, I have got my price for honey, but its up-hill work, and its enough to make an angel declare, when you drive in town with a load of honey as I have, and half a dozen dish-water, two business, bee-boglers, gather at the wagon and swear till they sweat, that I must have fed my bees sugar to get all that honey, for they knew positively that there was no honey in

the flowers this year, for their bees hadn't laid up a pound. Keep on your philanthropic five wheeled changers, go and lecture to every wizen-pated lippy that you can gain audience with. Tell him of the glories of the bee business, and in fifteen years you'll wish they were all in some hot place, or perhaps by that time you'll change your mind and want to save their lives as you do that of the busy bee; by frying them on a hot stovetid along with brimstone.

JOHN F GATES.

Ovid, Erie Co., Pa.

FOR THE CANADIAN BEE JOURNAL.

Spring Session of Oxford Bee-Keeper's Association.

THE meeting of the Oxford B. K. Association called to order at 10 a.m. by Vice-pres. S. T. Pettit and after the routine business of reading minutes &c., a resolution was passed fixing the annual meeting for the 2nd Wednesday in Dec.

The Legislative Grant is to be disposed of as follows: \$10.00 to go towards defraying advertising and \$20 to be expended in giving lectures on foul brood at the Farmers' Institutes throughout the country. Mr. J. E. Frith was appointed to give the lectures.

The afternoon session opened with the President, Wm. Goodger, in the chair. A very interesting letter from Mr. R. F. Holterman was read by the Sec. Mr. H. had just returned from a short trip to A. I. Root's manufacturing establishment at Medina, O. He stated in few words what might be accomplished by stick-to-itiveness in any line. His letter was an apology for not being able to write a paper on location in time for the meeting, but the hints on that subject brought out good healthy questions and answers on such a subject.—"Priority of location".

Bee-keepers who had gone to a great deal of expense and trouble in qualifying for bee-keeping were sometimes crowded out by a host of amateurs and those who are in the habit of getting, all they can without expense. In very many cases our neighbor, the bee-keeper, is not properly considered.

A second question of some importance was well talked up and that was that bee-keeping should go with some other business as it alone would be a hazardous one, but it was hard to decide what occupation would go well with it, we having at the meeting a doctor, a school teacher, a carpenter, a mail clerk, several retired men and a goodly number of farm-rs. All had serious objections in uniting other things with bee-keeping.

The third question was that the pasture o

to-day would not be good bee pasture in time to come. A good illustration was presented by beekeepers of Woodstock vicinity. The cow bylaws of the town and surrounding townships prohibiting the running at large of cattle, allowed a large proportion of the white clover to be smothered out by grass and weeds, and the demand for basswood lumber in the furniture factories has destroyed nearly all the basswood pasture for bees, hence beekeeping in the vicinity of Woodstock was practically at an end.

A paper on Comb Honey was read next by the S.-c. from Mr. Wm. Couse, and a good one it was for it caused a panoramic review of producing, preparing for market, selling, what kind would sell, how much would be smashed in shipment, cleanliness, kind of bees to produce good marketable honey and the sort of fellow to carry on the whole business. Cheers.

Vice-President S. T. Pettit of Belmont, read a more than ordinarily good paper on brace and burr-combs. He clearly and definitely described their uses and gave some practical methods of getting, or rather keeping rid of them. His ideal bee-spaces in every part of a hive should be as near $\frac{5}{16}$ of an inch as it is possible to get them. If all hives had exactly $\frac{5}{16}$ in bee-spaces there would be no burr-combs. To get and keep rid of brace-combs the hive should be firm and solid, that is to the bees. These brace-combs are built for the purpose of security and are to the manipulator a great source of annoyance, hence combs &c. should be so arranged as to be firm. Mr. Pettit was asked a good number of questions on the subject, all of which were answered in a concise and practical way.

Some one asked why some bees made so much neater comb honey than others. Everything that some men do is neat and tidy, so with bees, some queens produce neat working bees and store bees should be reared for the producing of neat comb-honey.

A paper on foul brood and why we needed legislation was next read by the secretary, J. E. Frith, which was followed up by a long and interesting talk from F. A. Germmill, of Stratford, to whom the beekeepers of Ontario owe much as one of the principal movers in securing legislation on foul brood. The subject of foul brood interests every body in this vicinity, as several members of this association have had a good deal to do with it and some flourishing apiaries have suffered not a little from the disease in times past.

Mr. D. Anguish, sec. of Brant Association, being introduced, gave an interesting account of how the bee-men and bee-women of Brant County were progressing and of the fair pros-

pects for the coming season. A vote of thanks was tendered Mr. Anguish and he was requested to convey our greeting to the Brant Ass.

1890's prospectus was then discussed. Beekeepers of Oxford are in good spirits as to the season now upon us. There had been very few winter losses and foul brood had apparently disappeared from the infected localities, and all things considered, a good and prosperous year is looked forward to.

A vote of thanks was heartily given to all contributors and a resolution that the paper on foul brood be published was unanimously carried.

An adjournment to meet in December ended one of the most enthusiastic and profitable meetings it has been Oxford Association's lot to enjoy.

J. E. FRITH,
Secretary.

Queen Rearing in Relation to Hybernation and Winter Dysentery.

ON May 16th, 1889, page 40. (See C. B. J. for July 10th, page 353.) I touched on this subject, but for want of time I could not do full justice to it, and I promised to deal with it as soon as I could. The article was reprinted across the Atlantic, and caused some stir in America. Mr. James Hedden, whom I quoted as being the champion of the pollen theory, had a laugh at me, saying that he reared nearly all his queens by the natural (?) method in full colonies under the swarming instinct," and implied that I did not know what I was writing about. This is his mode of rearing queens: He lets the stocks swarm, then he places the swarms in a new hive, and sets it on the stand of the old stock so as to get more than a fair share of the bees from the old stock. This is placed behind the swarm with the entrance facing the opposite way. He then daily moves it round until at the week's end the entrances of both hives are one way and close together. When the bees are at full work he takes the old stock away to a fresh stand, so that all the bees which are out in the fields, and those that are working, fly to the old stand, and, not finding it, unite with the swarm. The result is that the old stock is so depleted of bees, they at once lose the desire to swarm a second time, and the first queen that hatches destroys the rest. This is known as Hedden's system of preventing after-swarming, but let us consider the result.

A HALLAMSHIRE BEEKEEPER.
(To be continued.)

CAPPINGS.

CUT FROM A VARIETY OF CO

Poisoning Bees by spraying Paris Green

DOWN in Kent County, bee-keepers are having a serious time through the carelessness, wanton or otherwise, of owners of fruit trees, by the spraying of the trees with paris green. Mr. W. R. Sterling has called our attention to the fact, and enclosed us a clipping from the *Blenheim News*, which very sensibly protests against the practice of spraying fruit trees while in bloom. It may be that those who are spreading the poison do it through ignorance of the fact that the time so spent is to a great extent wasted, as the moth whose work they are endeavoring to counteract does not visit the flowers—but the small apples—and deposits its eggs in the calyx of the embryo fruit, after the blossoms have dried up. If these facts were known to them, they would probably refrain from the needless work until the proper time, which time would also suit the beekeeper, whose bees would have sought "pastures green" when nothing more was obtainable from fruit blossoms. The *News* says:—

"A number of our citizens are just now suffering heavy losses in their bees from the spraying of fruit trees with paris green. An eminent authority has given the opinion recently that damages can be collected in such cases, as bees are public benefit in fertilizing the fruit blossom and as spraying while the blossom is ripe for the bee is of no use in protecting the fruits from the insect that does its work a few days later. As there are many bees in this section, and as they are beyond all doubt a public benefit it is desirable that they should not be wantonly destroyed. To injure this industry is to destroy one that is of great value in some sections of the world."

Commenting on the above, Mr. Sterling thinks that the Government should do something to protect beekeepers in this matter.

NOT LAW YET.

Some time since we printed from the *British Bee Journal* a copy of a law relating to bees, as passed in Germany, according to L. Stachelhausen, Selma, Texas. What we published was merely a draft of a bill which was introduced in the Reichstag, but which did not go through.

DRONES FED BY WORKERS.

Ms. Schoenfield, in the *Bienenzritung*, (German) says on this point.

"He experimented with drones and found that they will die in three days if not fed by the workers with larval food. These experiments explain how at once, in what manner the drones are killed by the workers. They simply do not receive any nitrogenous food. The reason for killing the drones of a colony is not on account of the end of the swarming season, but the scarcity of pollen in the field. With scarcity of pollen it is more difficult for the bees to prepare larval food. At first the drone-brood is not fed any more; then the drones are so weak the second day that they are easily carried out by the bees. Hereby it is necessary to know that drones, like the queen, feed themselves on honey, but never eat any pollen. All nitrogenous food for drones and queen comes from the chyle stomach of worker-bees."

REVERSING SECTIONS.

Henry Alley says in the June number of the *Apiculturist* what we have often mentioned before, and for the carrying out of which our reversible honeyboards, and reversers were invented.

"If you want all your sections nicely filled, and the comb fastened to all sides of the section reverse them when about two-thirds filled with honey."

A NEW USE FOR THE SOLAR WAX EXTRACTOR.

H. R. Boardman in writing about the solar wax extractor, suggests a new use to which he has put it, as follows:—

"We all know how much trouble it is to liquify granulated honey. But some one says, "don't do it." But we have to do it sometimes; and when we have occasion to do a job of this kind, just place it in the solar extractor, if in cans or pails, or any convenient packages to go inside; or if in bulk, have a large pan on purpose. It is much better than any method where artificial heat is used. It can also be used to evaporate extracted honey by having a wire-cloth screen at the upper end, to be opened for ventilation. In order to make it convenient for melting or evaporating honey, I would suggest, instead of fixed legs at the back end, a standard with holes through it, and a pin with which to fasten the machine at any desired inclination. It could then be let down to a horizontal position for this purpose. Just put the honey in and go about your business. It won't burn nor spoil, but the work will be done in the cheapest and very best possible manner."

STATISTICS FROM THE U. S.

The following paragraph we extract from *Gleanings*, with reference to the present statistics of beekeeping as shown by the reports of a corps of special correspondents from all over the U. S.

"A summarized statement is as follows:—The

average percentage of loss among the special reporters during the past winter is only 8½ per cent. By referring to the statistics of a year ago, we find that the loss was 9 per cent. We expected to see a smaller percentage for this year. The only losses, with few exceptions, that occurred during last winter, of any account, were from over-breeding and consequent starvation. If we eliminate this cause of mortality, the percentage will probably be very low. The average loss in the vicinity of the reporters, we find to be 14 1/6 per cent. Last year at this time it was 17 per cent.

Perhaps it will be interesting, right here, to compare the average losses of the three preceding winters, since we began the department of statistics. The special reporters' loss during the winter of 1887 was 16 per cent; during 1888, 9 per cent; during the winter of 1889, 8½ per cent. The locality losses for the winter of 1887 were 33 per cent; for 1888, 17 per cent; 1889, 14 1/6 per cent. It is to the credit of the books, periodicals, and progressive apiculture, that the winter losses have been decreasing."

LITTLE CONVENIENCES IN THE APIARY.

The Review for June is devoted to this special subject, and amongst some of the things mentioned are the following:

PITTING SWARMS.

E. E. Hasty, Richards, O., refers to this subject:

"And what is the most comfortable comfort I have, do I hear somebody asking? It is those little pits in the ground (usually have a dozen or more of them) into which swarms of bees in their baskets can be chucked and covered with a few shovel-fulls of earth until matters cool down a little. The main use of these pits is to retain second swarms until they can be returned to the hive with tolerable certainty of remaining. I usually hold them in durance two days. Another important use is to solve those awful messes of half a dozen swarms combined in one, which sometimes swarm. Scoop seven or eight pounds of bees in a basket, and pit them before they have time to get out. Keep on doing the same until you have them all. At eventide, or in the cool of next morning they can be hived with deliberation if not with comfort on frames of young brood."

ROBBER CLOTHS.

Dr. C. C. Diller, mentions among other things, "robber cloths" as extremely handy to have around the apiary:

"If you have never tried one, you hardly know what a comfort it is to have one or more robber-cloths to use at a time when you must work, but when robbers are so bad that you can't work. I'll tell you how to make one: Take a piece of common cotton cloth or sheeting twelve or fifteen inches longer and wider than your hive, and four pieces of lath about as long as your hive. Lay the edge of the cloth that is twelve or fifteen inches longer than the hive on one of the laths, so that the cloth shall project alike at each end, and lay another lath directly

over it. Drive 1½ or 1¼ inch wire nails through both lath at intervals of perhaps three inches, and clinch. Serve the opposite edge in the same way and your robber-cloth is complete. Suppose you want to take frames from one hive and put in another. After you have taken out the frames, grasp the robber-cloth by the lath at one side, and by a single fling with one hand throw it over the hive. Your hive is instantly covered bee tight, with no possibility that it is not properly adjusted at some point, and the hive in which you are putting the frames having been covered with a robber-cloth, is quickly and easily uncovered and covered in the same way. Sometimes I have wanted to take out the frames of a hive to get a queen or for some other purpose, when I did not want robbers to have a chance to trouble much. By using two robber-cloths, one on each side, I could have the top of the hive covered, all but just the space where I was working."

COAL ASHES FOR THE BEEYARD.

J. A. Green, Dayton, Ill., advocates the use of coal ashes, and says:

"The whole surface of the ground is covered so deeply with coal ashes, slack coal, etc., that the ground between the hives is almost like a pavement. But few weeds struggle through this, and these are easily kept down. The ground is always dry, never muddy, and tools cannot well get out of sight as they do so easily in grass."

INTRODUCING QUEENS.

If I had a valuable queen that I wanted to introduce to a colony of bees, I would open the hive that had the queen to be superseded, and remove the queen, close up the hive, and let the bees get quiet and flying; say half an hour after the queen was removed, pick up the hive and carry it a rod or more away to a new stand. This will draw the old workers away from the hive, which can unite with a hive near by, or go to a hive and comb of brood on the old stand. The queen can now be introduced with a Peet cage, or some cage that has the entrance closed with the "Good" candy.

Another way to introduce queens that is the least trouble, if we should happen to go away from home for that purpose, is this: Open the hive, remove the queen to be superseded, put back the frames, blow smoke between the frames, so as to drive the bees down to the bottom of the hive; now place the cage between two of the central brood-combs near the top of the hive, the entrance to the cage to be stopped with bee-candy. Now blow smoke on the queen and cage, and close the hive, which should not be disturbed for 3 or 4 days, and if no honey is coming in, the hive should not be opened for a week. If the bees keep on building cells after the queen is introduced, it is a pretty good sign that the queen is being neglected; if such is the case, the combs of brood should be exchanged for combs with no unsealed larvae, which will bring the workers "to time."—J. A. GREEN.

* * * Please send us the names of your neighbors who keep bees, that we may forward copies of the BEE JOURNAL to them. A postal card and five minutes time will do it.

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.

Average Mortality of 100 Colonies

QUERY No. 267—How many patent pails full of dead bees during winter (say five months) will be on the cellar floor from 100 strong colonies, supposing they winter well?—A. McG.

S. CORNEIL, LINDSAY, ONT.—Never measured them.

J. K. DARLING, ALMONTE, ONT.—Two or three.

WM. McEVoy, WOODBURN, ONT.—Not more than two if they winter well.

ALLEN PRINGLE, SELBY ONT.—They might winter well with one or up to five.

PROF. A. J. COOK, LANSING, MICH.—This varies so much that no answer would be satisfactory.

G. M. DOOLITTLE, BORODINO, N. Y.—If the "patent pail holds one quart, 10 to 20 pails should hold the dead bees if they winter well.

MARTIN EMIGH, HOLBROOK, ONT.—I usually take from 3 to 4 bushels of dead bees from cellar floors from each 100 colonies.

EDGEVE SECOR, FOREST CITY, IOWA.—I would not feel alarmed if there were two (2) bushels.

JAMES HEDDON, DOWAGIAC, MICH.—Sometimes not a quarter of one pail full, and other times several pails full, and that too when they winter really well in both cases.

J. ALPAUGH, ST. THOMAS.—"Supposing they winter well" and in a warm cellar so that they can throw out all the dead ones, and there are no mice in the cellar to eat any there ought to be about 15 patent pails full.

J. E. POND, NORTH ATTLEBORO, MASS.—As I don't know the size of the "patent pails" I cannot answer. I should suppose, however, the loss would average about a pint to a hive, perhaps a little more. It will depend on too many factors however to give more than a guess.

DR. MILLER, MABENGO, ILL.—At a rough estimate I should say eight. Depends on circumstances and time of taking out. If mine had been taken out just after five months confinement the dead bees would have been less. More dead bees are now (April 12) coming out than any

time before.

R. McKNIGHT, OWEN SOUND, ONT.—This is something "no fellow can tell"—till the spring comes. There are a variety of causes that tend to increase winter mortality—If the fall flow of honey be light then breeding will cease early, and bees will go into winter quarters, "well up in years" or days in consequence of which the death rate will be high. I should look upon more than two bushels of dead bees with misgivings.

H. D. CUTTING, CLINTON, MICH.—There are so many different conditions that it would be but a guess to say how many. I carried out ten times the dead bees this winter that I ever did before. Temperature too high, it was at 50° and above the greater part of the winter. I prefer 30° to 40° in my cellar.

G. A. DEADMAN, BRUSSELS, ONT.—I took out nearly 3 (sugar) barrels full one year from 225 colonies but it is hardly necessary to say that they did not winter well. The temperature got 100 high in December and some colonies that had 25 lbs. of honey starved. I should say that $\frac{1}{2}$ barrel would be about right from 100 colonies. I use saw-dust now, it is therefore not so easy to compute.

G. W. DEMAREE, CHRISTIANBURG, KY.—Well now my friend "A. McG." I am an old lawyer and have studied hard questions for a living, but I "give it up," just what the size of a "patent pail" is, I beg to be excused. I have heard and seen patent bee gums and their size and form are legion. They fill the world like dust and stick (to the inventor) like beggar lice. Pray tell us the size of the patent pails.

Weighing Sections with Honey.

QUERY No. 268.—In Query No. 257 I notice that G. W. Demaree says that when he ships sections he ascertains the net weight by weighing a crate filled with *empty sections*, and this is deducted as tare from every crate. Is this the common practice?—F. H. C.

S. CORNEIL, LINDSAY.—No.

G. A. DEADMAN, BRUSSELS, ONT.—I believe not. It is not with me.

WM. McEVoy, WOODBURN, ONT.—No, but it should be. A man should never sell anything for more than it is.

R. McKNIGHT, OWEN SOUND, ONT.—It is not the common practice but it is the honest one nevertheless.

M. EMIGH, HOLBROOK, ONT.—No not with me tail goes with the hide every time.

J. ALPAUGH, ST. THOMAS, ONT.—Not with me, I sell the sections along with honey, so much per lb. which I think is the common practice.

A. B. MASON, AUBURDALE, OHIO.—I think not. In this locality the sections are weighed with the honey.

J. K. DARLING, ALMONTE, ONT.—I weigh sections with the honey. They are very light and will bring just about their cost.

EUGENE SECOR, FOREST CITY, IOWA.—I didn't know that it was. I don't. When I buy fish the scales, heads, and sometimes entrails, are all counted in at so much a pound.

DR. MILLER, MARENGO, ILL.—I think not. I never heard of any other case when the section was not weighed with the comb.

PROF. A. J. COOK, LANSING, MICH.—I think it is, I see no better way unless the weight of crate with empty sections is already marked on crate as I have known to be the case.

G. M. DOOLITTLE, BORODINO, N. Y.—Not with me. The sections sell for the same price per pound as does the honey. The crate only goes as tare.

JAS. HEDDON, DOWAGIAC, MICH.—No. I noticed Brother Demaree's statement referred to and it is the first time I ever heard of deducting as tare, the weight of the sections. We always deduct the shipping crates, but never the sections.

H. D. CUTTING, CLINTON, MICH.—I think not. I have not heard of such a case since we began to use sections. When the 5 and 9 lb. box was "the thing" then it was customary to deduct for the box.

J. E. POND, NORTH ATTLEBORO, MASS.—I do not know if the crates and sections are all the same size and weight, it would seem to be as easy a way as any, as only one weighing would be needed to denote the amount of "tare."

ALLEN PRINGLE, SELBY, ONT.—The common practice with me and with every one else so far as I know, except Mr. D., is to weigh the section with the honey and only deduct the crate from the gross weight charging a fixed price for the crate when it is not returned.

G. W. DEMAREE, CHRISTIANBURG, KY.—In a department like this, one cannot explain all points in a question. He must trust to the reader to fill up the gaps. Let me illustrate here what so often occurs with me. A customer, sent me an order for 100 pounds of comb honey and accompanies the order with a check for the price. Would I send him 100 sections that weighed from 13 to 15 oz. each, and call it 100 pounds? Would you permit any body to treat you in that way more than once? I would not. If I was going to send sections in crates to a commission house I would consult the commission man as to how he wanted to handle the honey. But when a man buys one hundred pounds of honey from me and pays for one hundred pounds, he must have it by weight I can't say what the practice is. Every man must be honest or dishonest for himself.

BY THE EDITOR.—We were surprised at the statement made by Mr. Demaree when we noticed his reply to the query mentioned, and we were not astonished to receive the above query on the subject. It certainly is not the common practice; but we cannot say with Mr. McKnight that it is the "honest" one, if by that he implies that the other and "common" method is a dishonest one. There are many other lines of business, in which the package is weighed in with the goods—nearly all the packaged shelf goods in any grocery store being put up on this principle. The section costs the producer money and there is no reason why he should not receive pay for it, if not at the rate of 15 or 20 cents per pound, than at an advance of about one-half-cent per pound on the price received, and give net weight every time. It would not be honest for a person to weigh in the package, were it heavy, and the goods of an expensive nature, so as to be out of proportion to the cost of the package. An empty section weighs oz. and weighed in with the honey at 15 cents per pound it nets three-quarters of a cent, so that the producer gets but little more than the cost of the section, and he does not get even that much where a crate is given away with every dozen or two of sections.

WINTERING IN A HAY MOW,

R. RIVERS.—I put away seven hives of bees last fall and all are alive and well at present. While working with them the other day I failed to see a queen in any, though they seemed to be doing well. I cannot see how it is that so many talk of finding them so easily. I want to tell you one man's experience: He was an enthusiastic bee-keeper in a small way. Said he, "I began with a few bees, they did well through the summer and I planned to keep them well in the winter, so put them in an upstairs room but they came through so badly that the next winter I placed them in the cellar. (I thought sure I was right this time) and there they died with damp. Must try another plan, so put them in the hay mow, piled hay upon them. I thought, nice even temperature, dry, and quiet." So quiet I forgot all about them, but on going for hay one sunshiny day a peculiar buzzing refreshed my memory. Thinks I, they want to get out. I picked up a forkfull of hay when a sharp hint or two reminded me that they might be out already, and then I remembered I had not closed those entrances as I meant, and there was that hay just alive and swarming with bees, and it was not long before horses and man were quite aware they were in the stable." Well I laughed and says he, "Guess I'll put them in clamps, next with plenty of elbow room," but I haven't seen him since.

WALKERTON, April 11, '90.

We rather think your friend will try another plan next season. He must have had a lively time surely.

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

SELECTIONS.

A GOOD REPORT FOR SPRING.

J. H. DAVISON.—As a number of our bee-keepers in this section have taken out their bees, I write you to say that so far as I have heard all are in good order, the great trouble has been to keep them quiet in cellars. Bees in clamps are enjoying a flight every warm day, but I think they will stop at home for a while now as we had a thunder storm and it turned cold after and gave us rain, then hail, then snow and high winds from north west. To-day is cold with snow flurries. My own bees are still in cellar very quiet. One colony was slightly affected by dysentery, to this I gave a flight.

Mount Forest, April 10th, 1890.

TEN POUNDS PER COLONY FOR WINTER.

G. L. PEARSON.—My bees have come out very well. I put in the house 117 hives and took out 115 but found 5 queenless ones that I put in with other swarms. My bees never consumed so little honey in any season since I have had bees as they have this winter, on an average, I don't think more than ten pounds each, and I never had them to come out so clean and nice before, no dead bees in the hives worth speaking of or molded combs.

Clarksburg, Ont., May, 1890.

JAS. DONEY.—A few words for the C. B. J. I have been asked to send in my returns for 1889, but I must go back to '88. I then bought three colonies of bees, increased to seven, packed 5 in chaff 2 in saw-dust all wintered well except one which came out a little weak, sold one swarm at \$8 left 6, increased to 16 swarms in 1889, extracted about 500 lbs. of honey, sold 1 second swarm at \$4, sold 1 colony in Oct, 1889 for \$7, doubled 2 swarms in one, packed 13, can't say how they are at present. I use the Jones deep hive, as I think them good for wintering bees in. I must thank the C. B. J. for my knowledge in bee culture.

Camilla, Mar. 31st, '90.

H. S. GRANT.—I am pleased with the change the JOURNAL has undergone, but I am sorry to be so late with my account of last summer. I began two years ago with one colony in an old box hive. It increased to four and I transferred it the next spring. I took the four out safe and increased to fourteen, and took 125 lbs. of extracted and 25 of comb honey. The bees are still safe in the cellar. Some around here have their bees out but I think mine are safer in the cellar.

Moose-Creek, April 8th, 1890.

REPORT FROM THE CHARD APIARY.

W. J. BROWN.—Seeing that it is both beneficial and interesting to know how the bees came out this spring throughout the province, I drop you a few lines with regard to this yard. I winter my bees in the cellar under the dwelling-house. The thermometer stood from 55 to 60 degrees, until about the first of March, when I put in a second ventilator, which brought it down to about 50. Bees were terribly uneasy until the 7th of April, when I put them on their summer stands—fifty-nine, as that was the number I put in winter quarters. They were generally in a weak condition, and from spring dwindling, robbing, and doubling up, I now have but forty-one colonies. Some of these are very strong. I have been obliged to put on the third storey on some already. Up to this writing we have had the worst weather for the bees that has been known in this section; cold, wet and windy. The bees cannot work quarter time. Thousands left their homes never to return. There is a good flow of honey at present, but it is only by spells that they can go to work. The complaints from the western and central parts of the Province are much the same as from here, but, in my opinion, there is a great difference in your favor with regard to the climate, I find that the loss is still greater in many yards in this district than in mine. If we could get a few days in succession of favorable weather it would help to pull up for at least a part of the loss suffered. I only wish I was able to give as good a report as Friend Anguish, of the Mount Pleasant Vineyard Apiary, and I hope sincerely that all may have a prosperous season.

Chard, Ont., June 9, '90.

WIRING FRAMES.

A. F. DEY.—Is it necessary to wire frames having inside dimensions of $10\frac{1}{2}$ x 14 in.? What is the name of this frame?

Moose Creek, April 8, '90.

The authorities differ on this question of wiring frames. Our reply should be that it is *totally unnecessary* to wire frames of the dimensions you name, or in fact *any* frame having a sufficiently stiff top-bar to prevent sagging of the comb. Our experience is based on years of work in building combs and shipping bees. The frame for the S. W. Jones hive is $10\frac{1}{2}$ x $12\frac{1}{2}$ inches inside measure, and is thus very nearly the same size of frame as your own. Though we have shipped thousands of colonies to all parts of Canada and the United States we have never had combs break down, excepting in one or two instances. If there is any great virtue in wiring at all, it seems to us it is to prevent breakage in shipping, and in the face of our experience we cannot see that there is any necessity for the time and trouble taken.

OUR OWN APIARY.

COMBS TOO FAR APART IN SPRING.

DURING the last week in May we had occasion to visit a large number of beekeepers, and our opportunities for observation were unlimited. We found a great many apiarists who have the fault of leaving the combs too far apart. In hundreds of colonies which we examined, those having the combs well crowded together were very much stronger than were those which had not. It seems as if those that left the combs spread from $1\frac{1}{2}$ to 2 inches apart wintered in splendid condition, and although they clustered and bred well between such combs they had not bees enough to cover their circle of brood and keep it warm. One-and-a-quarter to one-and-three-eighth inches is ample spacing for such combs in the early spring, and to secure this close spacing we would shave down the tops of the combs to the necessary thickness, should they be drawn out and filled with honey. There is no objection to placing the combs close together at the top, if there is room for the bees to care for the brood below. We have on more than one occasion placed the combs close together at the top, and we found that the bees would shorten up the cells as they removed the honey, and required the space for brooding purposes; it thus left them a warmer and nicer brood nest. What we wish to emphasize just now is that with combs put just far enough apart so that the bees can do no more than get room to care for the brood, one quart of bees will do as much brooding as double their number when the combs are spread far apart. Especially is this the case in a cold wet spring such as we have just had.

PROTECTION NECESSARY IN SPRING.

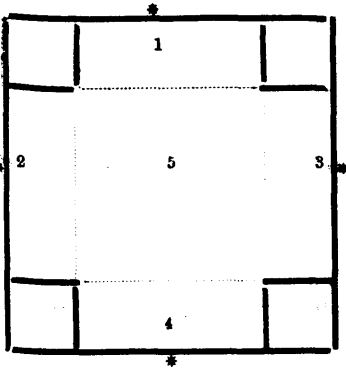
In all our examinations we noticed that those packed in chaff, sawdust, or other material that would keep them warm after being set out from their winter quarters, were very much stronger and better than those in single-walled hives without any protection; this spring has demonstrated clearly that hives properly packed and protected

from the sudden changes and cold fully repaid the entire expense of the outside case or other packing. When one season will repay the expense of such cases, is it not reasonable to suppose that it is one of the best investments that can be made about the apiary. We are studying just now on some such outside case that will be portable in its nature, and easily handled—one which can be put away, when not in use, without occupying much room. Light material will answer for it nicely, because it is not the thickness of the outside case so much as the packing that is beneficial. We should like suggestions from those who have or are using outside cases which are to their liking.

AUTOMATIC SWARMING.

On page 133 of Gleanings on bee culture I notice a very interesting article to me from G. M. Doolittle, on "Automatic swarming" as it is termed. Over 40 years ago, my father then being a large beekeeper, but only in box-hives and log gums, concluded that he would try a similar plan to that suggested, and he prepared a number of hives both box hives and log gums, some double and some treble. Taking some of his strongest colonies he placed these hives around them, boring large holes in each and giving the bees free access from one to the other; in this way he succeeded in having the bees store large quantities of honey in the side hives, but although he got combs with brood and larva and plenty of freshly laid eggs placed up in the hive, he did not succeed in getting them to form another swarm, although he did his best without the benefit of moveable frames. Some of the hives were quite full of bees and he supposed there were swarms in them, but late in the fall, on cutting off the connection between the hives, he found them to be queenless. During my earlier experience with movable frames I tried a great many plans without successful results, but after my return from Palestine and Cyprus, bringing with me as I did from England, the first queen excluding metal to this country, I then thought I could accomplish what I had frequently thought of, so I ordered the

factory to make me some hives similar to these shown in the diagram.



NOTE.—The * denotes the entrances; the dotted lines represent the perforated metal division boards; the four corner squares were filled with sawdust.

You will see by this that I had 5 hives inside of one outer case—Nos. 1, 2, 3, 4 and 5—these were so constructed as to hold the ordinary Jones frame and there were four entrances to the hives numbered 1, 2, 3 and 4, while the 5th compartment had no entrance to it. Now I placed a laying queen in the 5th compartment and then placed brood and bees in all the others—brood in all stages—and made it a very strong colony, and as the bees hatched there were five strong colonies joined in one, and they built some queen cells. I placed hatching cells in the four outer compartments and have had three or four queens laying at one time in the same hive, but a larger proportion were killed in returning from their wedding flights to these compartments, than to ordinary hives; apparently the bees having free access to all parts of the hive, and becoming accustomed to one queen, did not take to the new comer so readily. They never swarmed and it seemed to be the means of preventing them from swarming, but they might have swarmed if I had not changed the queen cells they had built, as the object I had in view was to ascertain if a number of queens could be kept long in the same hive. You see that the old queens in the centre and the young queens in the four outside compartments were all in the same hive so far as the bees were concerned, as they

passed through the perforated metal freely to every part of the hive, and we sometimes turned two hives around, so as to change the entrances at the north and south, and from east to west, so that every few days although the old bees returned to the same entrance they were really entering through another compartment. Whether they placed their honey and pollen in the new compartment, they hunted around until they found their own, passing the central one to it. I cannot say that we did not find the results so far as the production and easy manipulation of the colony was concerned, entirely satisfactory. On the whole we considered that it had advantages over the single hive system, but its disadvantages over-balanced its advantages. I have long known that queens can be fertilized in the same hive with the old queens and, if my memory serves me right, it was about ten years ago at a Michigan convention I was telling someone, I forget who, perhaps it was Mr. Hutchinson, that I was then practising and testing the mating of queens in the same hive, but had not, from all the experiments that I had tried, been convinced yet. I think what would be preferable to the sugar holes would be a double hive with a wooden division board and a queen excluding metal division board, then when the hive got sufficiently strong, draw out the wooden division board, thus you allow the bees to cluster more readily in the next hive.

THE CANADIAN BEE JOURNAL

ISSUED 1ST AND 15TH OF EACH MONTH.

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

BEETON, ONTARIO, JUNE 15, 1890.

Orders still crowd us, and we are subjected at times to some pretty harsh letters, when we have been doing our best to get off whatever may have been ordered in each case. Our trade in foundation has been larger this year than ever before, even though some of the other supply dealers have been selling it at less prices than we; at this moment have about all

ADVERTISEMENTS.

EXCHANGE AND MART

BEES

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

TO BEE-KEEPERS.—I manufacture and keep on hand all kinds of Beekeeping supplies, such as Extractors, Storing cans and Honey cans, all sizes; at prices that will surprise you. Send for price list to G. R. HANNAH, Shelburne, Ont.

AGENTS WANTED.—If you want to make money, take hold and sell our choice Nursey stock. Now is the time, write us at once for terms. MAY BROS., Nurseymen, Rochester, N. Y.

25 SWARMS in single board 1 1/2 story hives \$4 and queens \$1.50, Hybrids and Italians, fine Italian tested queens \$1 apiece, Hybrids 40 cents each, 3 \$1, 2 Frame Nuclei and tested queens \$2, 3 Frame Nuclei with tested queens \$3. Address ADIN BUKRHOLDER, 1288 Chene St., Detroit, Mich.

WANTED, three good salesmen, either on salary or commission. Independent territory given to each. Write at once for terms and secure choice of territory. "The more the merrier." Address, MAY BROTHERS, Nurseymen, Rochester, N. Y.

STUDENT.—We want a young man, with a little experience, who wishes more knowledge of the business, to assist in our home apiary. Write at once. The D. A. JONES CO. LD., Beeton, Ont.

EASTERN Customers.—We have 900 sections 3 1/2 x 1 1/2 at Aultville, C. P. R. station, which were shipped a customer by mistake. \$3.00 will take them. THE D. A. JONES CO. LD., Beeton.

BEE SWAX wanted. Will pay 30 cents in cash or 33 cts in trade for any quantity of pure beeswax. Comb foundation for sale to suit any size frame or section. Wax worked on shares or for cash. All freight to Campbellville station C. P. R. If by mail to ABNER PICKET, Nassagawaya P. O. Ont. Agent for D. A. Jones Co.'s supplies.

WILL sell 200 eight frame Combination hives complete for ext. Honey at 50 cts each. Reversible honey boards 15 cts each, Supers 5 cts each, reversers 5 cts each. Part of the above have been in use for two seasons. Also brood foundation in 20 lb lots 45 cts. in 50 lb lots 40 cts per lb. For goods or further particulars apply to BURTON BROS., Onanbruck Centre, Ont.

QUEBEC Bee keepers! Get prices on my beautiful Fdn. (both thick and thin). No. reflections (one and four piece), Smokers, etc., before purchasing and get good goods at bottom prices. Fdn. made up. F. W. JONES, Bedford, Que.

A RARE chance for farmers, mechanics and others to increase their income. Having successfully kept bees for the last twenty years I am not now able to attend to so many as formerly. I will now sell or exchange for anything I can use a quantity of bees hives, surplus glass boxes, bee tents, &c., &c., also about 50 empty hives surplus. My hives are considered by experts to be the very best in this country and takes the improved Jones and Langstroth frames. WM. SNELLGROVE, Woodstock, Ont.

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