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THE CANADIAN BEE JOURNAL



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

VOL. VI, No. 7.

BEETON, ONT., JULY 1, 1890.

WHOLE No. 267.

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
3 months.....	3.00	4.50	5.50	6.50	11.00	17.00
6 months.....	4.00	5.50	7.00	9.00	15.00	25.00
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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 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.

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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 honey, 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.



DON'T PUT off, but order now.
Wait till the busy season.

GET Hives, frames, sections, ready.
them now and save delays.

GRIP The present opportunity.
The lowest prices and good
Goods in Bee Supplies

Circulars Free. Address,

W. A. CHRYSLER,
Box 450, CHATHAM, ONT.

Muth's Honey Extractor.

Perfection Cold Blast Smokers, Square Glass Hone
lars, etc. Send ten cents for "Practical Hints to Bee
Keepers." For circulars apply

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

**PURE STOCK
CARNIOLANS**

Bred in an apiary by themselves. Tested Queens
\$2.50; after July 1st \$2, or 6 for \$10. Untested \$1 or
six for \$5. Send for price list of Italian Bees and
Queens bred in my Nappanee Apiary. Make money
orders payable at Nappanee address.

MENTION THIS JOURNAL. I. R. GOOD,
Vawter Park, Kosciusko Co., Ind.

VACANNEY FOR A STUDENT

AT ROSEDALE APIARY OF

The Toronto Apiary & Honey Company, Ltd.

200 COLONIES

Handled on the most advanced methods based on scientific principles. Increase thoroughly under
control. Section honey a specialty. Transferring, swarming, dividing, and increase by nuclei
will be practised this season. Deep and shallow frame hives working side by side, on the one
story, two-story and tiering systems. Competent student will have good position this coming
winter and next summer. Apply to the manager, G. B. JONES, 26 Darling Ave., Toronto.

**WEBSTER'S
UNABRIDGED
ANCIENT EDITION.**

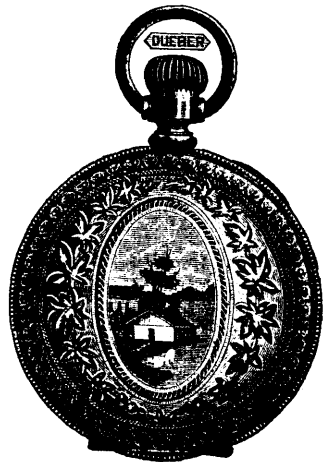
A so-called "Webster's Unabridged
Dictionary" is being offered to the public
at a very low price. The body of the book,
from A to Z, is a cheap reprint, page for
page, of the edition of 1847, which was in
its day, a valuable book, but in the pro-
gress of language for over FORTY YEARS,
has been completely superseded. It is
now reproduced, broken type, errors and
all, by photo-lithograph process, is printed
on cheap paper and flimsily bound. A
brief comparison, page by page, between
the reprint and the latest and enlarged
edition, will show the great superiority
of the latter. These reprints are as out
of date as a last year's almanac. No hon-
orable dealer will allow the buyer of such
to suppose that he is getting the Webster
which to-day is accepted as the Standard
and THE BEST,—every copy of which
bears our imprint as given below.

If persons who have been induced to
purchase the "Ancient Edition" by any
misrepresentations will advise us of the
facts, we will undertake to see that the
seller is punished as he deserves.

G. & C. MERRIAM & CO.
SPRINGFIELD, MASS.

WATCHES

WATCHES



WHOLESALE PRICES!

WE buy all Watches direct from the factories, and
Watches that you would have to pay \$25 for we
can sell you for \$18.75. We can furnish both gold and
silver Watches, also gold filled cases, warranted for 15
to 25 years. Guarantee with each watch. We have done
quite a trade with the bee-keepers of Ontario since put-
ting out our new Price List for 1890.

Watches sent on approval, by sending 50 cts to cover
express charges. Send for our new Price List of Watches
at Wholesale Prices now out.

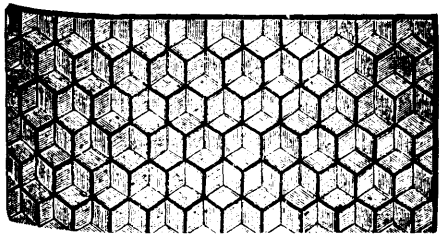
R. E. SMITH & CO.

WHOLESALE JEWELERS,

BOX 72.

TILBURY CENTRE, ONT

FOUNDATION



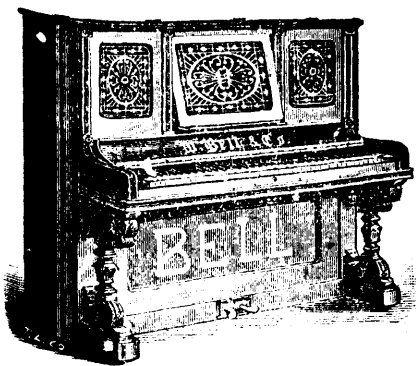
Customers will need to place their orders at once to get their supply in reasonable time. All orders filled in rotation.

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, WILMINGTON, 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. Also Canadian Agents for Dadant's Foundation.

THE CANADIAN

Bee Journal

Poultry Journal

EDITED BY D. A. JONES.

EDITED BY W. C. G. PETER.

75 cts. per Year.

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 HIWATHA.

BY SMOOR.

HO! ye gleaners after knowledge in the field of apiculture, Stop a moment, please, 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 fifty.

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

Bee-Keepers Guide

—OR—
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 Dovesided Strongest, Best and Cheapest BEE-HIVE for all purposes. Pleases everybody. Send your address to the Largest Bee-Hive Factory in the World for sample copy of Gleanings in Bee Culture (a 11 illustrated semi-monthly), and a 44 p. illustrated catalogue of Bee-Keepers' Supplies. Our A B C of Bee Culture is a cyclopaedia of 400 pp., 6x10, and 300 cuts. Price in cloth, \$1.25. 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, Me.



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, S C W 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 Plymouth 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 BRENZE TURKEYS**, and as an initiative in that direction I have selected a breeding pen from three famous yards in the U.S. heading it with the 2nd prize gobble (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.	36 in.	48 in.	72 in.
\$3 10	4 00	4 85	6 00	9 50

18 GAUGE.				
\$3 25	4 00	5 00	6 30	9 90

In less than full roll lots the price will be 1/4c 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, Rabbits, 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 circulars 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 those 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, cockerel 95, J Y Bicknell, judge. Eggs for hatching \$1.25 per 13. WM. COLE, Brampton.

HOLY LAND QUEENS. Home and imported queens by the dozen. Bees by the pound and frames GEO D. RANDENBUSH 445 Chestnut St. Reading Pa.

1890 ITALIAN QUEENS from imported of 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: untested 45 cts. each; tested 85 cts each; one brood 50 cts; three-frame nuclei, with Untested \$2; with tested queen \$2.50. E. S. VICKERY, Hartwell, Hartwell co., Ga.

ITALIAN QUEENS.—I can supply untested Italian queens from selected Doolittle stock for \$1 each or 6 for \$5. A few beautiful tested queens left, reared last season at \$1.15 each. 2 lbs. of bees or 3 frames brood and bees with either of above for \$1.75 extra. G. A. DEADMAN, Druggist, Brussels, Ont.

LOOK HERE!

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

J. & E. H. MYERS, Box 94, Stratford, Ont.

MENTION THIS JOURNAL.

THE BRIGHTEST!

Five banded Golden Italian bees and the Reddest Drones. Very gentle; very prolific; 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, ed. of C. B. J. Sample of bees free cents. Prices: Tested (at least 3 bands) \$3.00. Selected (4 bands) \$5.00. Breeding Queens, none to offer, but will furnish them, 4 to 5 bands, for \$7.00. All former quotations are null and void. Arrival and satisfaction guaranteed. Canadian currency and stamps at par.

JACOB T. TIMPHE GRAND LEDGE, MICH.



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

VOL. VI, No. 7.

BEETON, ONT., JULY 1, 1890.

WHOLE No. 267

THE CANADIAN BEE JOURNAL

ISSUED 1ST AND 15TH OF EACH MONTH.

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

EDITORIAL.

THE *Farm Journal* asks that its "readers will be on the lookout for damage that may be done to fruit by bees. Any report for or against them will be gratefully received. So much has been said lately against bees that we want to verify or disprove it." Surely this hackneyed old subject is not on the war-path again? If the *F. J.* will but refer to the back numbers of any of the bee journals he will find lots of evidence, disproving the fact that bees injure sound fruit—evidence from professors, lawyers, doctors, and practical fruit growers, and orchardists. The claim that bees injure fruit comes only from the ignorant, or those having some evil purpose to serve.

Rev. L. L. Langstroth, is still in very poor health, and unable to write, though his mind is very active.

The past week has brought us a number of Prize lists, and their receipt calls up to mind the fact that the fair season will soon be upon us. Of all the

airs which interest us Canadians, the Toronto Industrial undoubtedly heads the list. The prizelist which is just to hand shows many improvements—new classes having been added and premiums increased. The dates set for this year are from the 8th to the 20th Sept. The prizelist in the apiarian department we published on page 60, issue of May 1. Toronto is a great city of carnivals and conventions, but the greatest of all is its annual exhibition, when friends from the remotest end of the Dominion meet together in the one common interest—to study the manufacturers and resources of the country in which we live, and of our neighbors' across the line. A copy of the prize list can be obtained by any bee-keeper who might desire one, by sending the request on a postal card to Mr. H. J. Hill, the secretary, at Toronto.

Patent, under number 430,104, (date June 17, 1890) has been issued to Henry Alley for a bee-swarmer.

The value of honey imported into the United Kingdom during the month of May, 1890, amounted to £7515. The amount for April was £8391.

The membership of the Ontario Bee-keeper's Association is now 310. Receipts from members generally indicate that the great majority are well pleased with the premium received by them, and will likely continue permanent members.

GENERAL.

FOR THE CANADIAN BEE JOURNAL.

Basswood, Alsike and Buckwheat for Honey.

THE question of planting and sowing for honey is one which may be profitably discussed. Back of it is the main question—Is it profitable to do so? My own opinion is that it is not profitable to sow or plant *exclusively* for honey only occasionally under exceptional circumstances. But if two birds can be killed with the one stone it will pay to throw it provided the birds are good eating. In the matter of alsike and buckwheat I have been fetching two good birds with the one throw, and now I am about to try if the same thing cannot be done with the basswood or linden, that is, if I live long enough to see the result, and this I shall steadfastly endeavor to do by continuing to cultivate the acquaintance and friendship of that beautiful though inexorable Goddess, Hygeia, who was the daughter of Esculapius. (I may say here *sub rosa*, and by way of parenthesis, that I greatly admire the daughter and am on very intimate terms with her; but with the old man I have nothing to do, and want nothing to do with him. You know that old fellow is called the "Father of Medicine," and that is one reason why I give him a wide berth. The other reason is he thinks I am too intimate with his daughter, which makes things unprofitable for him.)

But to return to the basswood. Three or four years ago I decided to give up one small field to basswood—to about a thousand trees. My objects were, first, honey for the bees; second, the pleasure we would derive from having and seeing a grove or little forest near the domicile; and third, the ultimate prospect of a lot of good timber for self or a future generation, as the case might turn out to be, and I was not particular which way it turned out. But the field in the right place was not in the right condition for the trees. I set to work to put it in condition and have it all ready this spring. The next question was where to get the sprouts or little trees, for I did not care to await the slow process of growing them from the seed. There is a range of "basswood hills" some 12 to 15 miles north of here, and there I succeeded in getting about 550 little trees which I carefully planted in the field above referred to, occupying less than half of it. Next spring, if all is well, I shall put out about as many more. They are growing finely. It is difficult to get young

basswood trees for transplanting, as you will hardly ever find them growing up alone—each with an independent or separate root. They usually grow in bunches or "clumps" around the stump of the parent tree which is gone either before the woodman's axe or from some other cause. These sprouts come out from the stump just at a little below the surface and are therefore minus roots. But here and there a clump of them may be found which have grown up around the stump of a small-sized parent tree which has so completely rotted away that the offspring are supplied with good substantial roots. These we sought out and took possession of, digging up and drawing away the whole bunch together. The bunch would contain from a half dozen to two dozen sprouts, from two to six or seven feet high, all having one solid bunch of roots. Of course it was questionable whether these sprouts would grow after being separated, as some of them would have hardly any root, while others having occupied a central position in the bunch would be fairly well rooted. By sacrificing all the sprouts of a bunch except one or two of the central ones one could make a pretty sure thing of it, but this would be a lot of work on a few trees and slow progress. I therefore decided to risk a close division and sub-division and depend upon judicious pruning of the top to match the amount of root, and to mulch them heavily if required to save them. I carried this subdivision so far that some of the sprouts, 4 to 5 feet high, would have nothing at the bottom more than one or two tiny little rootlets, and some not even that much. But, so far, they are all growing nicely, with, perhaps, half a dozen exceptions. Of course there is much in the care and skill exercised in planting. I shall report again in the fall or next spring how they are doing. Meantime I feel delighted at the prospect of the little Linden forest. Intending to give up the land to them, and also in view of losses, I planted them close together, 8 to 10 feet. I also put out about a hundred maples, hard and soft, mostly soft, which are more rapid growers than the hard and more hardy, every one of which is growing.

There used to be considerable basswood in the woodland within reach of my bees, but two paper mills near at hand have swallowed nearly all, and I am now writing upon some of it.

ALSIKE.

We now come to alsike clover—my great favorite among all the honey producing plants and trees. I have been sowing it for honey and hay during the past 20 years. The white

clover may fail to yield occasionally, and the red may not be getatable, but the alsike never fails to yield nectar in this locality. Nor does the seed, which comes with the first crop, ever fail like the red, and always commands a higher price in the market. The hay from it is as much superior to the red as its stalk is smaller and its fibre finer. This season it is a splendid crop and is now booming and blooming.

BUCKWHEAT.

The buckwheat has many enemies (bipeds) but I am one of its friends. I sow it every year, commencing in May and winding up in July or August, and some seasons have not only a crop of flowers for the bees but a crop of grain from every sowing, early and late. What kind is best? The "Silver hull" is good, but the Japanese is a great deal better. Last season from a half bushel sown I had 20 bushels on a piece of flat land, which, through excessive rains, was unfavorable. The grain is large and heavy and the variety is better in every respect than the old varieties.

To farmer beekeepers I would say, sow alsike and buckwheat and plant basswood if you haven't got them.

ALLEN PRINGLE.

Selby, Ont., June 22nd '90

We do not know of anything that we would recommend ahead of this same question, the planting of basswood, and we are sure that Friend Pringle will not have to wait very many years before he will begin to derive benefit, both pleasurable and practical. On the street on which our office is situated are a number of basswood trees about ten years of age, and they are now yielding an abundance of blossoms yearly, and the bees in our home apiary have a regular picnic close at hand. They make elegant shade trees as well. On the outlying streets of the village we planted, three years ago, several hundred young basswood trees, from six to eight feet high, and a walk around a day or two ago, reveals the fact that with but one or two exceptions, they are all doing well. A few years more and we will derive a practical benefit which will more than repay us for all the trouble we have been to.

FOR THE CANADIAN BEE JOURNAL.

Beekeepers' Supplies.

IT may be thought rather out of place to write an article under the above heading, yet the supply dealer knows it is not, and knows that too many wait until the swarm has almost issued before ordering, and then write post haste, or even telegraph, and are very much disappointed if they do not get their goods at once. Now, as one who is not interested, but who has been interested, in the supply business, and seen that side of the question and also kept bees, let me say no well conducted supply business can be prepared for anything like a large business, or a business more than ordinary. Those in it know best how much the business depends upon not only how the bees have wintered the past winter, but how much has been done the previous summer and even the winter before that; for instance you come across good beekeepers who take advantage of the winter and the discounts offered, who buy in say January 1888. Their winter losses are very heavy, and their bees come out poorly, and they can do no more than cover their empty hives and keep the moths from destroying them; they will therefore be, if they succeed, by the spring of 1889 just where they expected to be in 1888; and the supply dealer will be a stranger to any transaction with him. If this proves the rule with beekeepers, as in a measure it sometimes does, to prepare for a large business would result in a large capital being invested in these goods, which most cautious business men would require to cover by extra insurance, which is high in a factory. Again, unless the goods are well stored many deteriorate in appearance, if not in practical value, by keeping; again, if an improvement crops up, or a supposed improvement, the goods, as Friend Root says in *Gleanings*, must be sold at a sacrifice. But are there not other losses? Yes! men may have to be kept working on short time at a season when they expect, and with reason, that they should work full hours, if not a little more. The beekeeper must meet the supply dealer and order goods early. A man who has his bees well put up for winter, and in good condition inside of the hive, may reasonably expect to winter a large percentage of his bees, and he should order at least such goods as he has a reasonable certainty of requiring. Of course it may be urged that the larger quantity purchased secures a better rate. That is true, yet by ordering early an extra discount is secured, and in addition it is well worth pay-

Secretaries of local associations are requested to forward us, at the earliest possible moment, the dates of their meetings; and when the convention is over, a full report of the proceedings.

ing a little more and having your goods when wanted. It might pay the supply dealer to print a ticket with quantities of hives printed, also other leading lines, and give a due bill punched with the amount of goods secured, and upon presentation of these within a certain time, a reduction be allowed upon the rate to which the beekeeper is entitled upon the two lots separate.

Again, the majority of beekeepers are not alive to the importance of accurate workmanship in the construction of beekeepers supplies. They will purchase hives made at any old country sawmill, the owners of which never heard about bee-spaces, if they can only secure them for five cents less per hive. Of course a first-class man working a first-class machine should turn out a better article, and as surely cannot afford to do it for as little money as a poor man on a poor machine, but the best is surely the cheapest. To be less troubled with brace combs, to have frames come out just nicely, not to stick or rattle, to have frames go down without striking the lower story frames or the bottom boards, nor crush bees, or to have the joints bad on the hive and have the bees robbing, or the cold and rain get in; all this is worth much for actual comfort but yet more valuable are they for dollars and cents, the object most of us have in view in having bees. I have at my side a frame, which is $3/8$ in. deeper on one side than on the other. It was secured by a friend of mine from a supply dealer in this vicinity, and the frame was given to this friend of mine as a sample. The price per hive is cheap (so considered) but I call it pretty dear for anything but kindling wood. Now let it be remembered, I do not say every small supply dealer makes poor goods, and every large one good, but the ruling prices are not greater than they should be to turn out good work and make a fair living. When they get away down I suspect they are too cheap to be good. And foundation the same way. A first-class make and good material pays. Paraffine and cerasin is cheap, but no good for the bees. Lard and tallow is also bad as a storehouse for honey, or a cradle for young bees. Large quantities of foundation can rarely be sold at low prices when wax is high and scarce. Why beekeepers should look upon supply dealers with the same natural animosity that man looks upon the serpent I cannot understand. I have many a time felt under that last, and could not but feel hurt. A supply dealer cannot get up and advocate anything without a smile going the rounds that he is

"grinding an axe." I say to myself, and to others, that we often require to be a little more charitable, and we should not be so suspicious. The bee journals, too, are remarkably free from booming any particular line, especially when we consider that the most of them are connected with supply businesses. It would not pay them to do so; their own interests would prevent them from doing so. Let us hope their better nature prevents them and give them credit for it.

R. F. HOLTERMANN.

ROMNEY, ONT.

The truth of the statements made by the above correspondent are being felt by us, oh! so much, at the present time. Beekeepers who might just as well have ordered their supplies months ago, coming along the past two weeks with orders of \$50 and \$100—wanting them filled at once. They seem to think of no one but themselves, and feel very hard toward us if we do not get their orders off at once. Let us suppose an instance of a spring and summer like we had two years ago, when we had made big preparations, for a season's trade, only to have the pleasure (?) of looking at our stock all that summer and a good deal of the next,—because the season of 1889 was no better—and would you believe it, friends, we are only now reducing our stock in some lines, that we have carried since the spring of 1888. What wonder then that we did not feel like making up a big stock of hives and sections until we began to see what the season was likely to be. In this respect, we have been a good deal like our customers, and who can blame us. With the cold backward weather we had in May, who would have cared to run the risk of making up a lot of hives and sections. The editor of the *Record* puts it nicely, when he says, in speaking of this very thing:

"Goods cannot be made up in large quantities during winter and 'stocked.' Hives and most of the appliances used are too bulky for that. Besides, there always must arise the questions, 'What hive is going to be most in demand?' and, not less in importance, 'Is there going to be any demand for hives at all?' So that it is really very difficult for them to prepare a long way ahead. 'A good season promises, and orders come with a rush; a bad time for bees threatens, and customers hold aloof and will order no goods until they really need them.'"

We are doing the very best we can,

under the circumstances; orders have come in like they never did before, and in many lines we have had great difficulty in getting supplies of raw material. We have bought more wax than ever before, and yet we have been totally unable to fill our orders for foundation. To help us out, we have bought nearly two thousand pounds of foundation from other manufacturers, and yet we are behind. We have bought up every available pound of wax in the country, and are still advertising for more. And all this notwithstanding the fact that other supply dealers have been offering foundation at ten and twelve cents per pound less than our prices. Just in this connection it may be well to notice the request which appears on page 160. Now, dear friends, all we ask is that you exercise a little more forbearance, remembering that you are yourselves responsible for a good deal of the worry and annoyance you are giving yourselves. Remember, too, that it grieves us more than it does you, to be unable to fill your orders as promptly as you would like. We lose a good deal more sleep over the matter than you do, or are likely too.

FOR THE CANADIAN BEE JOURNAL.

Muskoka.

POLEN NEEDED BY THE BEES DURING WINTER.

COMMENCED last season with 13 colonies, took 2,400 lbs of extracted honey and 500 well-filled sections. Increased to 20, doubled, or rather crowded them back to 16. I use two stories on the hives I run for extracted honey, with generally 34 combs to the whole. In the forepart of the season I leave 12 combs for brood rearing, later on but 10. I find by this plan, which I have tried for two seasons, that I can control or prevent swarming or increase to some desired extent. With only one story in the lower hive, or 24 combs, which I tried previous to this, I could not accomplish the desired end.

These 16 colonies I prepared the second week in October by raising the combs $1\frac{1}{4}$ inches, and leaving them always enough honey for two winters. They weighed then from 70 to 85 lbs without the lids. On the 8th of November I put them in the cellar. On account of the mild winter the temperature in the cellar was several degrees higher than other winters, but

the bees showed no uneasiness. It even seemed to me that there were not quite so many dead bees on the cellar floor. No sign of any dysentery was seen until the beginning of April, when one hive showed some spots. The weather, however, remained so cold that I would not set them out until April 26, even then, during the time of setting them out, the mercury fell 5 degrees. I weighed every hive as it came from the cellar, and found that the bees had consumed an unusual lot of honey, some colonies up to 27 lbs, the lowest 16 lbs—average 21 lbs. I got somewhat scared when I noticed the great amount of stores they had consumed this winter, but when I looked them over, April 28, I found that they had all wintered very well. The hives are all full of bees (except one which covers only 7 frames) with lots of brood in all stages, some having 4 combs of brood nearly full, and apparently lots of young bees. This convinces me that a higher degree than 45 degrees is in no wise detrimental to the well wintering of bees. And what about the "Wintering without pollen theory?" Well, that knocks the bottom out of it completely. The last two years when I prepared my bees for winter I selected for each colony as good a comb of pollen as I could find, and gave it to them for brood rearing through the winter. The result is when the bees come out of the cellar, or wherever one winters them, there are enough of young bees in the hives to pull through, no matter how trying the spring may be on them, provided one leaves them enough stores when he sets them out. Taking all the pollen from the bees as formerly recommended, deprives them of recruiting during the winter, the old bees can not very well face the severe weather in spring, and spring dwindling sets in. I shall stick to the plan of giving a comb of pollen to my bees for the winter, as the results are very satisfactory to me. Likewise I shall give enough stores for winter as no one is certain how much they may consume. As far as I could learn, bees wintered well with neighboring beekeepers. A few colonies starved, not being properly cared for in the fall. The weather is very bad, cold, high winds and rain; bees can only fly an hour occasionally and the outlook for a good honey crop so far very dim. Trees and shrubs that gave honey and pollen by this time other years, have not even any pollen this year. I noticed only one poplar with pollen this spring, and that was several miles away. The buds on the willows are very slow in developing, they seem to be crippled from some cause or other. Soft maple is not in bloom yet. If the rainy weather continues I

fear there will again be very little clover honey, ut hope for the best.

E. SHULTZ.

Kilworthy, April 5, 1890.

No doubt, friend Shultz, your management will prevent increase partially, or entirely, and give very satisfactory results as far as honey yield is concerned. The yield from a three-story colony would be at least double what it would ordinarily be in a single colony. We had colonies this season that consumed in all about 40 pounds of honey. We have never had such a large amount of honey consumed in winter quarters. When bees are brooding very heavily they consume a very large amount of stores; there were more dead bees in proportion to the number of colonies on the floor of our bee-house this season than usual. We think a large colony can raise brood without injury to themselves much better than a small one, but perhaps with a higher temperature a small colony would raise brood without so much injury to them as is usual in an ordinary temperature. 45° is too low for a small colony to attempt to raise brood without injurious or fatal results. Pollen, in strong colonies, well wintered, enables them to carry on brood-rearing which they could not otherwise do and in your case it has proved not to be injurious to them, as is also the opinion of a great many others.

P. S.—The above report from Friend Schulz was mislaid by some means, and only came to light a few days ago, since which time we have had a pleasant visit from him (June 18) and he reports prospects of a honey crop more favorable.

FOR THE CANADIAN BEE JOURNAL.

Beekeepers Conveniences.

A RECENT issue of an American periodical has been devoted entirely to beekeepers conveniences, so possible a mention of such as I deem necessary may be of service to the readers of the CANADIAN BEE JOURNAL. Well first and foremost is a waggon, yes, two of them, each with a box large enough to hold two comb buckets and still some room to spare. In extracting season while one is being unloaded at the extractor the other is being filled up in the apiary with frames of honey, so that there is no lifting out the comb

buckets or need for carrying them a step. One of these waggons has attachments to the sides, front or back of the box to hold everything I may possibly need when at work in the apiary, such as frames of honey or empty combs in the comb buckets, division boards, perforated or otherwise, a screwdriver, an indispensable tool for a variety of purposes but especially for loosening the frames should some have got fastened together. Then what is known as a thistle spud, with its handle shortened to about 2 feet. This is an excellent tool for removing pieces of comb from the sides of the hive which the bees may have built from the frames. It can also take the place of a screw driver should that tool be missing. Then I have an apartment for flags, which are nothing more than pieces of tin, say 2 inches square, fastened on the end of a 4 inch wire. These I use to advantage by placing them in different parts of the covers, their location tells me some things I wish to know regarding the condition of the colony. I paint them red. Then there is an apartment for the smoker and fuel, and a goose wing, also my recording book for swarms and queens. Then I have a tin can with a cover that is easily removed, for holding bits of comb and scrapings of wax. A few queen cages are in order as we may need them to cage a queen from a swarm that may issue. A little jackknife is desirable for caring for queen cells and a spare lead pencil in case one should get lost. An uncapping knife is sometimes useful. Whether the honey house is close by or far I would not think of dispensing with the waggon for three times its cost. They can be had very cheaply now. They are about a size larger than the ordinary child's iron axle waggon and cost about \$2.50 each. It is very essential that the box be wide enough to hold the comb buckets, and a little longer is an advantage. Let us have things convenient and so make beekeeping as enjoyable and as easy as we can.

G. A. DEADMAN.


Brussels.

DAVID JEFFREY.—I began the season of 1899 with 40 colonies, all in chaff hives (which I wintered on summer stands) got very little honey till white clover began to yield. With this came fair weather and a grand honey flow right up to buckwheat bloom. My crop was 7200 lbs., mostly extracted (average price 10c.) with 80 colonies of an increase.

JARVIS, Ont.

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

The Origin of Foul Brood.


 E C. B. J. did sass me back some in its comments on my article on page 54 and 55, but never mind, it may help me to kick up a row in the JOURNAL on the foul brood question. The question of eradicating foul brood presents a problem which I think, the strong arm of the law will never solve, though it is right it should help. Law is all right as far as it goes; it helps out in cases of emergency, but is like a fence around one's garden which protects, but does not hoe the plants. Not until we are rightly educated, as to the cause and effect, will we be able to surmount the difficulties which environ the apiarian pursuit. My hobby, that foul brood is not a fatality, but is the out growth of mismanagement, may not be correct, but w on't someone prove it. Any body can doubt, but won't some-body dig? So sure as we study in the right direction, so sure we will find the cause of the disease; we may say this ain't it, or that ain't it, but how do we know. If all is found that ain't the cause, some-body *must* know the cause. I honestly believe that the primary cause of foul brood lies in the direction of mismanagement. When you prove it don't, then we can look in some other direction. You interpret me as suggesting that spreading brood is the cause of foul brood. I said, "foul brood becomes a marked and chronic disease only when our *management* has caused it to be." Then I only spoke of spreading brood as one cause, but as space forbade then, as it does now, enumerating the many causes which must of necessity, and does, I believe, produce foul brood, so long as subjects of great importance are shunned by those who ought to know, and made light of by others, just so long will we be in the dark. That man whose fear of making a mistake is so great as to hinder him from telling what he honestly thinks, is no good. The suggestion as to spreading brood I am happy to admit was not born of experience, as you say, for I never yet spread brood or had a case of foul brood in my apiary, but must a man possess the evil in order to be in position to explain its origin? I kinder guess not. Won't somebody prove that spreading brood is not one of the many unnatural things that is done with bees, which causes foul brood; you say spreading brood has no doubt something to do with what we call dead brood which some people mistake for foul brood. If dead brood ain't foul brood, then what is it? You say you tried to make foul brood by letting brood die, but could only succeed in getting dead brood that stunk so you could smell it all over the apiary. If that ain't

foul enough then I dunno. Perhaps you say it was foul but not contagious. That was because you made it too quick. Contagious diseases are not produced in a few days. They come through a long chain of events. We inoculate with cow-pox, as a preventive of small-pox, and have the disease in a mild form, which is not contagious simply because we precipitate the disease. You made foul brood straight enough, but the virus was not malignant enough to be contagious. For the same reason, you could not cause a person to have small-pox, on short notice without coming in contact with virus of that disease. It would take deeper study to produce a specific disease than it would to cure it after being produced. Disease don't come when wanted, it comes when not wanted. If we could produce a specific disease, then we would have no use for medical science, for we could cure the disease by taking our back track. It is evident the brood you allowed to die had no tendency to foul brood, or it would have produced it. Try the same experiment with your whole apiary, and you will find enough that will develop foul brood. If the same virus existed in all animal and vegetable creation, then would the same disease exist in every direction. So long as nature's laws continue to be broken, just so long will monstrosities not only continue to exist, but will multiply. Every colony can not be made to produce foul brood, but by continued mismanagement, some will produce enough for all, by-and-by.

JOHN F. GATES,

Ovid, Erie Co., Pa., April 10, '90.

Your ideas of foul brood and its origin are much the same as the ideas of many others, who know nothing of it practically. I recollect once hearing a man say that he knew that dead brood in the hive for a number of years at last caused foul brood. He was a conscientious man, and he was positive that the dead brood left in the hive year after year would produce foul brood. Now, I have given this matter all the tests I think are necessary, to convince me at least, that the disease has its seat in the honey, or in the honey sac of the bee, and that it is spread *through* the honey. I have talked with some of the best microscopist in Europe and America, and as yet they tell me that they have been unable to discover the disease in the honey—the very place in my opinion where it lurks, awaiting development. I should like to have Professor Cook, or some other of our professors to try

further experiments in this direction, by examining foul brood honey for these germs, or by feeding this foul brood honey to the bees and allowing them to make the food for the larvae from it, and then examine the larval food as soon as placed about the egg or larvae; also to watch the various stages of its development. I feel satisfied that new light would be thrown on the subject. Again, if diseased honey were fed to the bees, and the honey sac were examined at various stages after the honey was consumed, during its changes in the honey sac preparatory to its being fed to the larvae, it might be determined at what stage the disease take a tangible form.

Queen Rearing in Relation to Hybernation and Winter Dysentery.

Continued from last week; page 128.

THE first swarm comes off and leaves but few bees behind, to create sufficient heat to develop the queen cell, and as more hatches, he further reduces their number until the most critical moment arrives, when he "riddles" the hive of all the bees capable of creating any heat at all. Then the most forward cell hatches out, and this weak and worthless queen tears down all the other cells, becoming the mother of the hive. When cold weather sets in her bees are so constitutionally weak they cannot digest their food, and because he finds undigested grains of pollen he at once concludes that pollen alone is the cause of winter dysentery. Neither Hedden nor anyone else has ever hinted that the digestive organs of the bees were at fault.

The Rev. W. F. Clarke has noticed that if bees went to sleep, which he called "hybernation," they would winter all right, no matter how much pollen there might be in the hives, but he does not appear to have suspected that the manner in which queens are reared, had anything to do in the matter, which he admits to be the case in the CANADIAN BEE JOURNAL, nor does he seem to be quite certain that bees are as capable of hyberating as wasps, &c. The greatest opponent to Clarke's theory, was Professor Cook, who is the author of a standard book on bees in America, and is looked upon as an authority on all entomological subjects. This gentleman very dogmatically asserted that "bees never hybernate," and stood on his "authority pedestal" as the foundation for his assertion; but as a witness is always cross-examined for the purpose of testing his credibility, it is only fair, to see

if Cook is so good an authority as he would have us believe; hence I will quote from an article of his in the American Bee Journal for November 19th 1884, page 748, which is on the Common Bumble Bee. He says this, "When the first bees come forth in the spring from extemporised cells, caused by eating holes in the pollen, the bees wax these cells and so form honey cells," As a matter of fact, none of the bumble bees make "wax" or use it. They mix a paste of honey and pollen, in which eggs are deposited, then the larvae eat it, and when full grown they form a cocoon round themselves just where they may happen to be, which makes the comb resemble a bunch of grapes. When the bees hatch out, these vacated cocoons are used for storing honey, just as they are. Before any are vacated, or if they are deprived of them, they construct cells for honey of pollen, but never of wax, as they are incapable of secreting it, these cells being afterwards eaten up by the brood.

Hedden, as I have said, contends that all his queens are reared in a "natural manner." How he can assert this, and yet keep moving his old stock hive about to get rid of the bees puzzles me, as the old stock hive is never moved when bees are existing in a state of Nature. I am sorry to say that it is the fashion in the States to make any statement that appears to floor an antagonist, and I am afraid that some of our bee friends are not always quite proof against its influence, notwithstanding their good intentions, which I admit.

Dampness, bad ventilation, bad food, and cold have all been described as prime causes of winter dysentery; but wherever it has broken out I have been able in most cases, by learning how the queens were reared, to note that cheapness of production rather than high quality had been the ruling guide, Hedden placing the value of a queen as capital in a hive of bees as low as two cents, and Mr. W. Z. Hutchinson, editor of the "Bee-keepers' Review," who teaches nearly all that Hedden advances, and is almost always a heavy loser from winter dysentery, says "one queen is as good as another in a hive if she has descended from the right stock." He contends that the manner of rearing has very little to do with it, though he seems to incline to the view that cells reared on the swarming impulse are the best to depend on for fine queens. Neither he, nor anyone else who practises queen-rearing in America, believes that after the cells are sealed, it makes any difference where they are matured. The cells are nearly always cut out and hatched in the weakest nuclei, or they are

A HALLAMSHIRE BEEKEEPER.
To be Continued.

CAPPINGS.

CUT FROM A VARIETY OF COMBS.

Why Do Bees Kill Off Drones In June ?

So many have asked this question during the past few days we have thought best to answer it here. I know of no other cause for such a state of affairs than a break in the honey flow or pasturage: and, as a general thing, it indicates that you had better commence feeding until honey begins to come. If you do not, you will lose in brood in a way that will be damaging to your colony, even if you do not lose the colony outright by starvation. Watch the honey flow, especially if you have colonies nearly destitute of stores.

A. I. Root.

SENDING SPECIMENS OF FOUL BROOD BY MAIL.

A. I. Root speaks of the above practice, in the last issue of *Gleanings* to the following effect:

"Every season we have more or less such samples sent in paper boxes, which are often burst open in the mail-bags. The clerk who opens the mail sets the specimen in a certain place until the letter describing it is found. Then the one who examines it to see whether it is real foul brood or not may be careless. They ought not to be in our establishment, for foul brood has cost us already more than \$1000, clean cash. The point is, this sending of samples or specimens by mail or express, or any other way, should be stopped. It is very dangerous, and there is not a bit of need of it. We can tell you from description, just as well as to see the brood itself; and our text-books and journals have all described it, over and over. Please do not send any suspicious combs through the mails or in any other way. Let all the bee-journals echo the request. If you are afraid it is in your hives, examine the description in our text-books; then if you are not satisfied, state the matter plainly; write to us or some other competent authority. Meanwhile take every precaution against spreading. It should be treated like scarlet fever, yellow fever, cholera, etc. Stamp it out of existence; and by no manner of means give a chance of spreading it by your own thoughtlessness or foolishness."

We have always been in the habit of allowing our customers to send us samples of comb, when they think disease exists, providing they are *securely packed* so there is no danger of breakage in the mails, and while we deprecate as much as any body every means which would be the least assistance in spreading the disease, yet if *proper precautions* are taken, we do not think there need be any danger of spreading the disease by the sending of samples through the mails. In our rather large experience, we know of not

a single instance where foul brood was so started. We cannot agree with Friend Root's remark to the effect that "there is not a bit of need" of sending such samples, and that it can be told "from description just as well as to see the brood itself." Perhaps our Madina friends can tell it, but if so they must get a good deal more minute description than we can get here—especially in the earlier stages of the disease. Those who have the disease in its later stages should be able to tell it, after carefully reading the descriptions which have appeared from time to time in the various books and journals, but even then the "novice" with the disease, likes to have his suspicions confirmed by some of the authorities. And now as to the packing. It should be done so there will not be the *remotest* possibility of a breakage in the mails. The consignor of the specimen should first procure a small pasteboard-box about the thickness of comb in depth, and as large as the circumstances of the case require. Place the comb therein, so packed that it will not shake around in transit, and after putting on the cover, wrap the box in a thick paper, and tie it. Wash the hands thoroughly before going any farther, and then cut pieces of very thin board ($\frac{1}{8}$ in. is best, with thicker ends) and make a case of this—top, bottom and two sides—into which put the package, and then put another wrapping of paper around the whole. If the hands are clean at this operation there will be little danger of the disease catching. We are careful to see that all samples are consigned to the stove here very shortly after their arrival. Remember that we do not urge that samples be sent by mail promiscuously, but where doubt exists in the mind of the owner of a colony, we are willing to help him out if he will protect us, and the mails, as above described. We think a good deal as Prof. Cook, that "it is never quite safe to diagnose a case till you have seen the patient."

HIVING TWO OR MORE SWARMS TOGETHER.

A. E. Manum, says in reply to a correspondent, who asks:

"When you hive two or more swarms in one hive, how do you unite them without their quarrelling? and what do you do with the extra

queens? My answer is, that, in a large apiary, there will usually be several swarms out in one day—we sometimes have 20. In that case two or more may be hived together without fear of their quarrelling; but if they issue one per day, or one has been hived two or three days, and it is desired to unite another with them, I first cage the queen already in the hive, and hang the cage in the hive, and then shake the bees off the combs in front of the hive, and at once dump the new swarm with them, having first secured their queen, and at once sprinkle them, hive and all, with sweetened water well flavored with peppermint, and allow them to run into the hive. Just at night I liberate the queen. Now, if the extra queen is an old or inferior one, I pinch off her head: but if she is only one year old, and a good one, I either introduce her in place of some old or poor queen, or return her to the hive from which she issued, after first removing all queen-cells. Having lost so many bees by swarming, she will not be likely to attempt to swarm again in the same season. At this time I usually discard all my two-year-old queens, and for the past two years I have had calls for all such at fifty cents each. By this practice I winter no queen over one year old. If you wish much increase you can have the extra queen with just enough bees to cover one card of hatching brood; and by giving them a card of brood occasionally, you will soon have a colony in good condition for winter, without having much reduced the working force in those hives run for surplus."

GROWING LINDENS FROM SEED.

On page 104 Mr. A. Fyfe asked for information on the above subject, and we furnished replies from two of our prominent nursery firms. A correspondent in the *American Bee Journal* has also been seeking like information, and the editor finds in an agricultural exchange the following, which is virtually the reply given by Morris, Stone & Wellington, but more fully:

"In growing basswood from seed, a little shade is usually necessary while the plants are young and making their second and third set of leaves. Gather the seed in the fall as soon as ripe, and then mix in about as much pure sand as there is of seed. Place all in boxes and then bury in some dry place in the open ground, covering only a few inches deep, or deep enough to keep out the mice and prevent alternate freezing and thawings. In the spring, as soon as the weather is favorable, sow seed and sand together in wide drills, made with a hoe, and about the width of the blade. Cover with fine, light soil to the depth of a half-inch, or a little more, then spread brush along over the rows, just thick enough to give a little shade to the young plants. When the plants are four or five inches high, remove the brush and give frequent cultivation during the summer. Wild rabbits and many other animals are fond of young

basswood plants, and this is probably why few seedling trees are found in the woods."

REMOVING BEE STINGS.

There is a great knack in doing it nicely, but unfortunately the writer of these comments does not evidently have that knack, as you will all observe after reading the article on page 125 of the *JOURNAL* for June 15. G. M. Doolittle writes on this subject in the *A. B. J.* as follows:

"Some recommend using the thumbnail, a pair of tweezers or the blade of a knife. I use none of these, as they are all too slow. Two-thirds of all the stings I get are removed before the lance strikes deep enough to cause any pain, and this "laying-hold" feeling enables me to do this. As soon as I feel this, I know that I am to be stung, and at that instant, an instinct comes over me which causes me to rub the place where the bee is against my clothing, thus crushing the bee, and, if the sting has been thrust, removing it at the same time.

If the bee is on my hand, it goes down against my clothing at my hips or near the knee, whichever will reach the position the bee occupies; if on the face or neck, then the sleeve on the fore-arm goes to the place and rubs bee and stinger off. In this way one half or more of the bees which intend to sting me are killed before they have had time to push their lance into the skin. Since I have learned these things, I do not receive one sting that affects me any, to where I had twenty formerly. Try it, reader, and see how easily it is done."

MOVING BEES SHORT DISTANCES.

In reply to a querist who desired to move bees about thirty yards the editor of the *Record* (English) says:

"Bees cannot be moved so short a distance as thirty yards at this season without loss and disturbance, unless by following one of two plans:—(a) To move them gradually a yard at a time every day they have been flying well. (b) To take them away two or three miles for three weeks, and then return them to where they may be intended to go."

The first method is correct; the second *might* work sometimes, but we have frequently found that the bees still remember the old location and return to it. We have had instances where colonies, which were set out of winter quarters for a purifying flight, and return again, and when finally set out were put on a different stand in another part of the yard, but they remembered the first place they had been set down and returned to it, and this after having been housed two or three weeks.

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.

QUERY No. 270.—An old bee-keeper tells me that foul brood was never known in America until bee-keepers began extracting from the brood-chamber and disturbing the brood. Has this statement any foundation in fact?—F.M.

Was Foul Brood First caused by Extracting.

J. ALPAUGH, ST. THOMAS.—I do not know.

J. K. DARLING, ALMONTE, ONT.—Ask some of the bee doctors.

G. A. DEADMAN, BRUSSELS, ONT.—It may be that foul brood was not known before movable frames, but it does not follow that they have been the cause.

EUGENE SECOR, FOREST CITY, IOWA.—I think not. I have not the necessary statistics at hand but I expect some one who has, to refute the fallacy.

S. CORNEIL, LINDSAY, ONT.—I believe it is said that foul brood was known to the ancients.

R. MCKNIGHT, OWEN SOUND, ONT.—I don't know, but from what I have read believe it did, believe also that injudicious extracting greatly increases the malady.

A. B. MASON, AUBURNDALE, OHIO.—Not a particle. Foul brood was known long before movable frames were invented, and extracting was not practised till many years after movable frames were in use.

G. M. DOOLITTLE, BORODINO, N. Y.—Not a bit. Father lost all his bees by foul brood 20 years before the extractor was thought of.

H. D. CUTTING, CLINTON, MICH.—I don't believe for a moment that extracting from the brood chamber has anything to do with foul brood in this case. But if you already have foul brood then the extractor is a nice thing to spread it.

Wm. McEvoy, Woodburn, Ont.—Friend, that old bee keeper is a little mistaken. Foul brood was in America before the extractor was ever thought of. But since the introduction of the extractor foul brood has been greatly on the increase. It is the bee-keeper that is to blame for so much of it and not the extractor nor the hive.

Jas. Heddon, Dowagiac, Mich.—No. Foul brood did exist in America and other

countries before extracting was practiced at all, if I am not misinformed.

DR. MILLER, MARENGO, ILL.—I don't know. I know that I never heard much of foul brood till late years, but I don't know whether disturbing brood chambers had anything to do with it.

M. EMIGH, HOLBROOK, ONT.—I don't think it has much foundation, there was plenty of foul brood 25 years ago; don't think there was much extracting done in Ontario at that time.

J. E. POND, NORTH ATTLEBORO, MASS.—No sir. Foul brood was known, and the means of treating it taught, years and years before the extractor was thought of. In fact I had foul brood in my own apiary long before even the idea of the extractor entered into the mind of its inventor.

G. W. DEMAREE, CHRISTIANBURG, KY.—No. Foul brood is an old disease. Less was known about foul brood in the olden times than now, because less was then known of the internal working of the bee hive. The movable frames has made it possible to watch every stage of the disease. I often meet "old bee-keepers" who have not yet learned that the "king" has turned up a queen.

ALLEN PRINGLE, SELBY, ONT.—It may be that foul brood was never known here till the extracting began, but it by no means follows that it did not exist here before that time. Indeed we should not expect it to be known under the old box hive system before the extractor and other modern appliances appeared. The bees died in the box hives and their owners were quite ignorant of the cause. Sometimes they all die within an area of miles, probably of foul brood, but no one knew anything about foul brood. In time the bees would be re-introduced and maybe escape for years and so on. If that "old bee-keeper" means that no foul brood existed in America before the time of the extractor he is asserting a good deal more than he knows.

Loose bottom Boards and Moisture.

QUERY No. 269.—With the temperature at 45°, will there be less moisture in the hive, with entrance to hive three-eighths by three inches, as there will be with loose bottom boards, and hive raised up one inch all around?—J. B. L.

G. A. DEADMAN, BRUSSELS, ONT.—No.

J. ALPAUGH, ST. THOMAS, ONT.—No, there will be more.

R. MCKNIGHT, OWEN SOUND, ONT.—There will be less in the latter case.

A. B. MASON, AUBURNDALE, O.—No. There will be less with hive raised from bottom board.

Wm. McEvoy, Woodburn, Ont.—Less moisture in the hives raised up.

EUGENE SECOR, FOREST CITY, IOWA.—More in my opinion, though I never tried it.

G. M. DOOLITTLE, BORODINO, N. Y.—Less with hive raised up, according to my experience.

MARTIN EMIGH, HOLBROOK, ONT.—I don't think there will be much moisture at 45 but would prefer them raised one inch.

DR. MILLER, MARENGO, ILL.—I think the more open at the bottom the less moisture.

S. CORNEIL, LINDSAY.—If the querist means condensed moisture there will be less in the latter case.

ALLEN PRINGLE, SELBY ONT.—There will be less if the top is only fairly protected, but with porous material.

G. W. DEMAREE, CHRISTIANBURG, KY.—As you state the question it would require some experimenting in that line to decide the matter. According to a theory of mine the answer would be no. A wide entrance to a hive is generally favorable to dryness.

J. K. DARLING, ALMONTE, ONT.—That depends on the water in the air. If the repository is very damp there might be more moisture with the greater ventilation, but if the repository is dry there will be less moisture in the hives if raised off the bottom board.

JAMES HEDDON, DOWAGIAC, MICH.—No. There would be less moisture with the loose bottom boards, but you need not be a bit afraid of moisture or dampness or mould, provided you keep the temperature high enough; say 50 to 55 where great dampness exists.

H. D. CUTTING, CLINTON, MICH.—I think you will have less moisture when the hive is up from bottom board one or more inches. I used this winter a reversible bottom board giving 2in. space under frames and it worked to perfection.

J. E. POND, NORTH ATTLEBORO, MASS.—I don't think there will be much if any difference. Still there are other factors that enter into this problem, and therefore, all is guess work. As I find matters, I learn that each colony must be gauged by itself. I don't find any sure means of comparison; that is to say, of ten colonies that seem to be alike in the fall, great differences will be found in the spring.

Field Bees Dying off rapidly—what is the cause?

MY heart is heavy as I write, to give you my spring report. My bees came out of winter quarters in pretty fair condition. I put up 42 colonies last fall; lost one by starvation, the cellar being too warm, and the bees were very uneasy, consuming twice the stores they usually do. In former years the consumption averaged 5 to 9 lbs. In the cellar, this winter, this one colony

starved on 25 lbs. Those wintered out doors mostly came through strong, but they required to be fed. They seemed to be doing well, and were strong in bees the beginning of fruit bloom, but all at once in the middle of apple bloom, the field bees disappeared to such an extent that it is quite alarming. There are scarcely any flying, and all the drone brood has been pulled out. If the whole apiary were doubled up, none of the colonies would be too strong to gather the clover harvest which will soon be on. Has anyone experienced anything like this? I never did before, and I am at a loss to know what to do. Can any body help me out? I fear even worse consequences than I have stated. I find there is either starved or neglected brood in the hives that the bees don't seem to remove, and robbing is going on so bad that I cannot examine them closely. Things look dark and dreary at present, but after a cloud there is always a sunshine, so it may turn out better than it looks. I fear there has been Paris Green used somewhere in the neighborhood, though I have not as yet heard of any nearer than three miles.

A. BECHTEL.

Port Elgin, June 11, '90.

You are not alone with your experience in losing for want of stores, as we and many others frequently lose colonies by that means. As soon as the temperature goes above a certain point, breeding is commenced, and the consumption of stores goes on rapidly. At this time the greatest amount of watchfulness is required. The probabilities are that the great mortality in your colonies was through the dying off of the old and worn out bees. Such a thing as you mention is not an infrequent occurrence—that a colony which is strong in old bees will lose most of the working force in a very short period. If the young brood is cared for, it will soon hatch out, and your colonies will again become populous. We would not advise "doubling" as that would have the tendency to give them the swarming fever, and you would thus be working for nothing as it were—together with the loss of every other queen. Use dummies to adjust each hive to suit the proportions of each colony, so that those remaining may be able to care for the brood. From what you have stated, we do not think that the loss was caused by Paris Green, but for the reason given.

SELECTIONS.

Bees Dying off—What is The Cause ?

I. N. F.—We have a colony that seems to have some disease. It is the one in which we introduced the Italian queen that we got from the O. B. K. A. two years ago. They have not done anything since. They are quite strong now, and the queen seems to be a fine looking queen, but we notice the bees are taking out a great many bees that seem sick they are very dark color and a great many seem to be dying off. Have removed them away from the apiary. Have 40 colonies. Some are in splendid condition. I was talking to a beekeeper from the country some ten miles from here and he tells me he has a colony with the same disease. Will you kindly let me know if you know the cause, or the trouble, and if we can do anything to cure or to prevent it spreading.

From the slight description you give of the disease, I am unable to say just what it is. If you find any dead bees in the cells, and will cut out the pieces of comb containing it, and forward it to us, we will try and determine what it is. It may be that the bees have been poisoned by Paris green having been sprinkled on fruit trees, but this can hardly be the case, else other colonies would also be affected. If the colony is strong and you do not find any dead brood in the larvae in the hive, we do not think you need have any cause for alarm. Before sending the samples of comb, please turn to page 153 and read the instructions for putting it up, to go safely by mail.

WHO CAN BEAT IT ?

J. E. FRITH.—Mr. D. Beamer, of this place, bought a colony of common bees this spring. They swarmed on May 18th, again on May 27th, and yet again, on May 29th. Trot out your early swarms.
Princeton, June 15, 1890.

LARVAE DEAD BY POISON, VS. FOUL BROOD.

J. E. FRITH.—Some have complained of losing bees from poisoning by Paris green sprayed on plum trees while in bloom. Young larvae dying from this cause can, in a certain stage, be easily mistaken for foul brood. The dead larvae is whiter than that from foul brood. It lies back downward, head pointing toward the back of cell generally. If not too alimy can be drawn out in a mass with a pin. In all other respects it resembles foul brood, and all the attendant symptoms are the same.
Princeton, June 15th, 1890.

WINTERED THREE FRAME NEUCLES.

ROBERT SHAW.—Three years ago this spring I bought two colonies at a cost of \$16.00, I have

not worked for increase, but I have now 42 colonies on summer stands, in well-made tongued-and-grooved boxes, with shingled roofs on them, and everything made comfortable. I have yet to lose the first colony in wintering, though two got away from me in swarming, through not attending to them, I have been experimenting with some such—I put away last fall—four in one hive, on three frames each, with a division between them. I packed them in a box, two feet of chaff all around them, and lots of honey. They bred all winter, and are in good condition at this date, with more bees in them than in the fall.

Rosemont, Ont., March 27, 1890.

A SERIES OF SHORT REPORTS.

J. R. WASON.—Bees have not done well this spring. A few spring-dwindled on account of cold, wet weather, but are picking up the last two weeks from apple and plum blossoms. No swarms yet.

Hawksbury, June 16, 2890.

WHY THE BEES VISITED THE STRAW STACK.

CHAS. L. GOUGH.—As perhaps some of your readers would like to hear how bees are doing in Missouri, I will say that this has been the worst I have ever seen, continuous rains and cool weather have wrought mightily against them. I have lost three out of fourteen, and fully half of the bees in the rest of the colonies have died since the first of April. Most of them are picking up now; have had two swarms. Very little is being gathered from white or alsike clover, and I have not seen any bees on horse-mint. I have got no surplus honey yet to amount to anything.

I want to say to that new beginner that guess that straw stack his bees visited had ~~been~~ salted when put up. If so, that accounts for it
Rock Spring, Wis., June 12, 1890.

The last paragraph of friend Gough's report refers to the straw stack problem mentioned in "Our Own Apiary," page 115. His suggestion shows thought, but we are afraid that he will have to make another guess, because farmers as a rule in this country, seldom salt their straw stacks—though they do often throw a pail of salt water on the loose straw thrown down for the cattle, and it is *just possible* that this may be the case in the present instance. It would be interesting to know.

FIVE BANDED GOLDEN ITALIANS.

JNO. S. DENT.—What is your opinion of five banded golden Italians? Can a strain be bred which will take premiums for their fine appearance, and yet be as good honey-gatherers as any ?

Cowansville, Que., June 12, 1890.

It is possible, but not probable, *as a rule*. Bees bred for beauty are generally

ly neglected in the more important respect of utility. We have had handsome bees which were good honey gatherers, but when we continued reproducing the beauty in future breedings, we had to resort to in-and-in breeding to such an extent that the utility was lost to a certain degree.

VERY LITTLE HONEY IN FRUIT BLOOM.

J. W. WHEALY.—This has been a peculiar season. Fruit bloom gave almost nothing, and the fruit crop itself is a failure owing to the blight of the bloom. Although there is more white clover in bloom at the present time than there has been in the last five years, still there does not seem to be much honey in it.

Kintore, June 23, 1890.

OUR OWN APIARY.

Beautiful Bees.

FROM Jacob B. Timpe, Grand Ledge, Mich., we have received a cage containing as pretty a sample of golden-colored Italians, as it has been our good pleasure to see. We let them out on the window pane in front of us and they looked most beautiful. The drones were golden right down to the very point of their abdomens, and for beauty they could not well be surpassed. We are so much predisposed in their favor that we are going to ask Mr. T. to forward a couple of his nicest queens for our own apiary.

QUEENS FROM ARKANSAS.

We have just received four Italian queens—very nice ones too—from W. H. Laws, Seb. Co., Arkansas. They arrived in good condition, all the bees and the queens being alive and fresh. Of eighteen queens sent to Canada in the month of May, only one failed to arrive in good condition, they tell us.

ITALIAN IMPORTED QUEENS.

From Sunny Italy, we have just received at the hands of Chas. Bianconci & Co., Bologna, two Italian queens—one of them in good condition, the other dead on arrival, with all the bees, but one, in a like condition. The trouble was that the food was too soft, and the bees and queen were all stuck up. The cage used was a modification of the Beeton cage which has been described

in former issues of the CANADIAN BEE JOURNAL. This was an advance shipment of a number of Italian queens, we have coming from the firm above mentioned.

GOOD PROSPECTS FOR A GOOD YIELD.

I think the silver cloud has come at last; those who have waited patiently are in the fair way now of receiving their reward. It is years since the yield was like the present. Even our smallest colonies, simply nuclei that we have for mating queens, are storing honey. The abundance of rain that we have had with the warm weather that followed seems to have caused all the flowers to yield abundantly, and everybody seems to be in good spirits that we meet in the business. Strong colonies, especially those in field bees, are actually narrowing down the brooding space, the queen not being allowed to lay eggs as the bees hatch out.

As the brood hatches out the cells are being filled with honey and the queens are forced to be content with the lower story for brooding purposes. The level white comb and capping, where it has been drawn out on the dark, to make room for the honey from the brood chamber is one of the best signs of prosperity. A great many complained this year about their old bees dying off so suddenly and leaving the hives with only young bees. This occurred early in fruit bloom; some thought that their bees must have been poisoned, so sudden and great was the loss of field bees. This loss of old bees we think is largely attributive to their vitality being exhausted, and the little extra labor in the fruit bloom season, and the high winds and unfavorable weather for flying out, seemed to use them up rapidly. In fact, we saw many that had gathered their loads of honey and pollen return exhausted and fall in front of the hive, unable to go further, late in the evening, and numbers of them remained outside and died. This seems to me to be a good lesson and a noble example that should be followed by some of ourselves. How many of us are willing, and do, remain at the helm until the last moment. Oh! that more of us would take a lesson from these busy workers

and make greater efforts to appreciate and save the precious gifts bestowed upon us. We know of some who seem to "have been born tired," and with a disposition to put everything off till the last moment. Those who succeed best are those who do everything in season, and by the way, I guess some of our customers think we do not do everything in season, because, in spite of our efforts, the extraordinary demand for supplies has taxed our energies almost beyond their capacity; so much so that we have been forced to neglect our apiary more than we should.

FERTILE WORKERS.

One hive that we had sold the queen out from, and forgot to introduce another, we opened this morning to show a friend some nice bees and a beautiful queen, as it was marked A. 1. The first comb we raised told the tale that fertile workers, instead of the queen, were depositing eggs.

Our friend, who was standing looking on, remarked: "That is a fine card of brood."

I said, "No, it is worthless."

"Why," said he, "it is very full, and nearly all capped over."

"Yes, friend, but do you see that while it is worker comb, the brood, instead of being capped like ordinary worker brood, is capped over conically shape, giving the surface and the capping a very lumpy appearance."

"Yes," he says, "I observe that, but I supposed that the bees do that."

"Certainly, it is the bees that do it, but it is also the bees that are laying the eggs, instead of the queen, which are producing little drones, and not one cell of these so capped is worker brood."

"Well," he remarked, "that is the first time I ever saw fertile-workers; show me, please, some of them."

"That is a very difficult thing to do; but if we watch them carefully perhaps some of them will start to lay."

So I slipped the comb back into the hive for a few minutes and lifted it out carefully again but I did not observe any fertile workers laying, but on examination of the second comb I observed one just crawling out of the cell. Keeping my eye on her and catching her by the wings, I remarked.

"Here is one just crawling out of the cell where she has been depositing eggs."

It was an easy matter to find cells with from three to ten eggs in some of them.

"Well," he says, "how do you know that that is one of the fertile workers?"

"Because I saw her coming out of the cell with her body half way down."

He remarked, "I thought all bees went into their cells that way."

"They do, but they go into the cell head foremost, while this one backed into the cell just while we were watching."

We found another one backing down into the cell, and catching her and opening her abdomen the small ovary was plain to be seen, and the eggs were visible.

"Well," he said, "I am well repaid for my day and railroad fare coming here. I never dreamed of seeing such a sight. I have learned what I never knew before that worker bees could become mothers, and deposit eggs."

THE CANADIAN BEE JOURNAL

ISSUED 1ST AND 15TH OF EACH MONTH.

D. A. JONES, EDITOR-IN-CHIEF.

F. H. MACDONALD, ASSOCIATE EDITOR.

LEETON, ONTARIO, JULY 1, 1890.

We have only a couple more job ripening cans left in stock, price \$3.50 while they last.

We expect to have the most of our orders for foundation, hives and sections filled within a few days of the time this issue of the JOURNAL reaches its readers. Some of our customers losing all patience, have demanded their money back, and where the goods have not been packed, or in process of packing, we have invariably returned it.

The papers read at the late Woodstock convention are in our hands, but not before there was sufficient matter in hand for the present issue. These articles: "Foul Brood," by J. E. Frith, Princeton; and "Preparing and Marketing Comb Honey," by W. Couse, will appear in the JOURNAL of the 15th inst.

EXCHANGE AND MART

BEEES

25 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 Beekeepers 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 Nurse stock. Now is the time, write us at once for terms. MAY BROS., Nursemeymen, Rochester, N. Y.

25 SWARMS in single board 14 story Fives \$4 and \$4.50, 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 BURKHOLDER, 1238 Chene St., Detroit, Mich.

STUDENT.—We want a young man, with a little experience, who wishes in re 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 1/4 x 7 1/2 at Aultsville, 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 want d. Will pay 35 cents in cash for 33 cts in trade for any quantity of pure beeswax. Comb foundation for sale to suit any size frame or section. Was worked on shelves 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, Su, ers 5 cts each, reverser 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., Osnabruck Centre, Ont.

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.

Lawn Mowers.

AT REDUCED PRICES.

We can furnish the Gowdy Lawn Mowers (Philadelphia pattern) at the following prices, shipped direct from the factory:

10 in. 12 in. 14 in. 16 in.
\$4 00. \$4.25. \$4 50. \$5 00.

THE D. A. JONES CO.,
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EGGS for sale, Silver Wyandottes \$2 per sitting. Silver Spangled Hamburgs \$1 50 per sitting. M B HAGUE, Ingleswood Chicks for sale in fall

6 LIGHT Brahams hens and 1 cock, all fair stock. I will take \$12 00 for the pen, are worth more. R. E. BINGHAM, Stayner, Ont.

COOPS.—We have on hand ready to ship quick, a large number of coops, sizes and prices as mentioned in advertisement in another column. The D. A. JONES CO., Ltd., Beeton.

FOR SALE CHEAP.—Eight black Minorca hens one year old, scored by J. Y. Bicknell 96 1/2, 96 1/2, 96, 95, 94 1/2, 94 1/2, 94. \$15 for the eight birds. 1 cock 95 1/2, he is the best bird in Canada. W. COLE, Brampton.

FOR SALE.—One Black Carrier cost \$9, and Homers going fit for training, Silver White Blue C. & Red from a 1 birds. Birds at all times. Enclose stamp. Address: J. A. EDGAR, Forest Ont.

HOUDANS.—Eggs one dollar per setting, three settings \$2. Won at Kingston, Sept., 1889: Houdans 1st on fowls, 2nd on chicks; Light Brahams 2nd on fowls; Red Caps 2nd on fowls; Houdan eggs only for sale. Chicks to sell in the fall. WM. LAMBERT, Williamsville, Kingston, Ont.

FOR SALE.—The finest Black Red Games in Canada as follows: First and second hens 94 94, first and second Pullets 94 1/2, 93 1/2, Owen Sound, second Pullet 94 Ottawa, two pullets 94 1/2, 92 1/2, two hens 94, 92 1/2, the whole lot for \$30 00, or offers singly. Imported cock Sum \$30 00. Having got burned out in Owen Sound I have now to place to keep my poultry so they must be sold, until sold will sell eggs from above birds for \$2 per setting. R. B. SMITH, care Brignall & Thompson, Belleville.

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

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BLACK LEGHORNS AND WHITE WYANDOTTES

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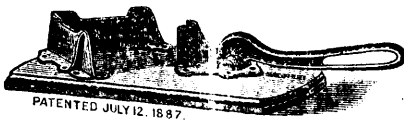
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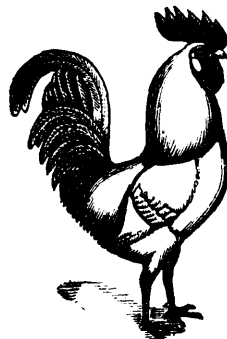
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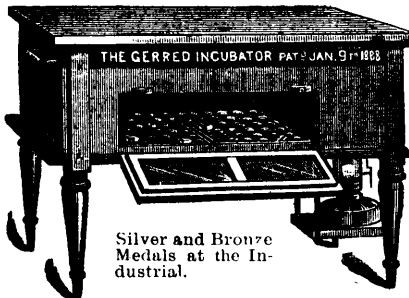
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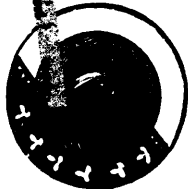
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