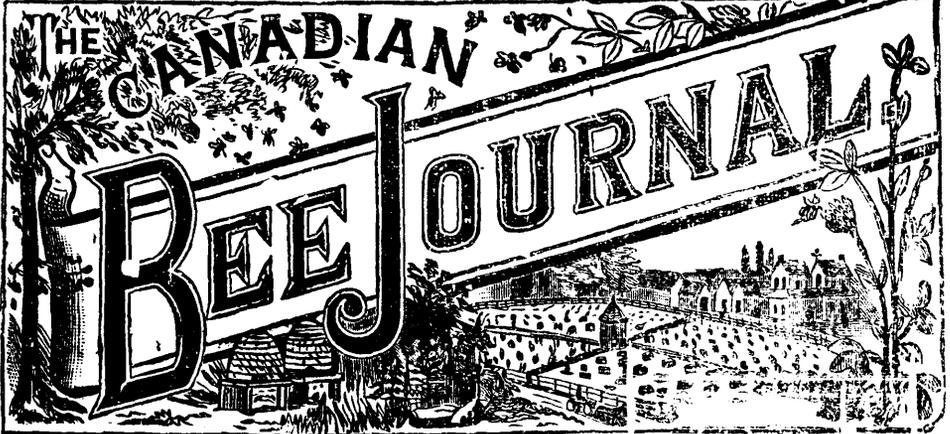


Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for scanning. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of scanning are checked below.

L'Institut a numérisé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de numérisation sont indiqués ci-dessous.

- | | | | |
|-------------------------------------|---|-------------------------------------|---|
| <input type="checkbox"/> | Coloured covers /
Couverture de couleur | <input type="checkbox"/> | Coloured pages / Pages de couleur |
| <input type="checkbox"/> | Covers damaged /
Couverture endommagée | <input type="checkbox"/> | Pages damaged / Pages endommagées |
| <input type="checkbox"/> | Covers restored and/or laminated /
Couverture restaurée et/ou pelliculée | <input type="checkbox"/> | Pages restored and/or laminated /
Pages restaurées et/ou pelliculées |
| <input type="checkbox"/> | Cover title missing /
Le titre de couverture manque | <input checked="" type="checkbox"/> | Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées |
| <input type="checkbox"/> | Coloured maps /
Cartes géographiques en couleur | <input type="checkbox"/> | Pages detached / Pages détachées |
| <input type="checkbox"/> | Coloured ink (i.e. other than blue or black) /
Encre de couleur (i.e. autre que bleue ou noire) | <input checked="" type="checkbox"/> | Showthrough / Transparence |
| <input type="checkbox"/> | Coloured plates and/or illustrations /
Planches et/ou illustrations en couleur | <input checked="" type="checkbox"/> | Quality of print varies /
Qualité inégale de l'impression |
| <input checked="" type="checkbox"/> | Bound with other material /
Relié avec d'autres documents | <input type="checkbox"/> | Includes supplementary materials /
Comprend du matériel supplémentaire |
| <input type="checkbox"/> | Only edition available /
Seule édition disponible | <input type="checkbox"/> | Blank leaves added during restorations may
appear within the text. Whenever possible, these
have been omitted from scanning / Il se peut que
certaines pages blanches ajoutées lors d'une
restauration apparaissent dans le texte, mais,
lorsque cela était possible, ces pages n'ont pas
été numérisées. |
| <input checked="" type="checkbox"/> | Tight binding may cause shadows or distortion
along interior margin / La reliure serrée peut
causer de l'ombre ou de la distorsion le long de la
marge intérieure. | | |
| <input checked="" type="checkbox"/> | Additional comments /
Commentaires supplémentaires: | | Continuous pagination. |



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

VOL. VI, No. 18. BEETON, ONT., DEC. 15, 1890. WHOLE No. 278

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
6 months.....	6 00	9 00	12 00	15 00	21 00	40 00
12 months.....	10 00	15 00	20 00	25 00	40 00	75 00

Breeders' Illustrated Directory.

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

Condensed Directory.

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

Transient Advertisements.

10 cents per line 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 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.

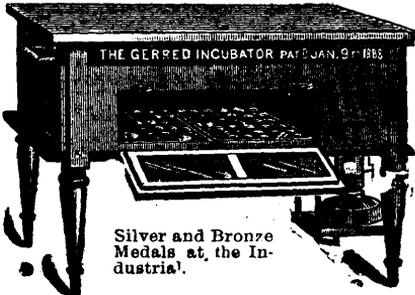
THE CANADIAN BEE JOURNAL and	
THE CANADIAN POULTRY JOURNAL	\$1 00
THE CANADIAN BEE JOURNAL and premium queen	1 60
Both JOURNALS and premium queen.....	1 25

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.

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.



Silver and Bronze Medals at the Industrial.

All sizes 50, 100 and 200 egg machines. Send for descriptive list. MENTION THIS JOURNAL.

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

EAST END POULTRY YARD, SARNIA, ONT.

FOR SALE—A number of fine cockerels and pullets of the following breed. Barred Mouth Rocks, Silver Wyandottes; S. S. Hamburgs, W. C. B. Polish and W. F. Blk Spanish at \$1.50 to \$2.00 each.

MAMMOTH BROWN TURKEYS
Hatched in May, 1890, from stock imported from McClave of Ohio, and Freeman Michigan, at \$2.50 each.

E. A. VIDL
P. Box 346, Sarnia, Ont.

Poultry Netting & Fencing.

We 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.			72 in.
2.	30 in.	36 in.	48 in.		
\$3 10	4 0	4 85	6 00		9 5
		18 GAUGE.			
	25	4 00	5 00	6 30	9 90

less than full roll lots the price will be 1/4 c sq ft

D. H. JONES CO. LD.
BEETON, ONT

GOLDFEN
WYANDOTTES !



White Wyandottes, Knapp & Croffets strain, Rose C. Brown Leghorns, Croffets & Eckers strain Pekin Ducks, Rankin's strain. Stock for sale at all times. My stock is choice.

JOHN A. NOBLE, Norval, Ont

W. T. TAPSCOTT

Has some fine young stock of the following varieties, now ready for shipment,

Golden and Silver Laced Wyandottes,
Black and White Minorcas,
Black, White and Brown Leghorns,
Barred Plym. Rocks,
Park and Light Brahmas,

WITH A FEW OF OTHER VARIETIES.

This Year's Breeding Stock For Sale, Cheap.

Prices greatly reduced between now and November 1st.



Will give full particulars in answer to correspondents. State plainly what you want. It will facilitate business. Send for Circular.

W. T. TAPSCOTT,
MENTION THIS JOURNAL. BRAMPTON, ONT.

EGGS, \$1.00 for 13.

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

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

E. H. MOORE, Melrose, Mass.

MENTION THIS JOURNAL



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 25
Per 20, Birds for sale. ANGUS, Ont.

Muth's Honey Extractor.

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

CHAS. F. MUTH & SON

Cor. Freeman & Central Avenues, Cincinnati

PATENTS!

Patents, Caveats, and Trade-marks procured. Rejected Applications Received and prosecuted. All business before the U. S. Patent Office promptly attended to for moderate fees and no charge made unless Patent is secured. Send for "INVENTOR'S GUIDE."

FRANKLIN H. HOUGH Washington, DC

BARNES' FOOT-POWER MACHINERY



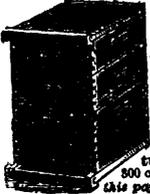
Read what J. J. PARENT, Charlton, N. Y., says—"We cut with one of your Combined Machines last winter 50 chaff hives with 1 inch caps, 100 honey racks, 500 brood frames, 2,000 honey boxes and a great deal of other work. This winter we have double the number of bee hives, etc. to make, and we expect to do it all with this saw. It will do all you say it will." Catalogue and Price List free. Ad resale W. F. &

JOHN BARNES, 544 Ruby St. Rockford, Ill. 21

THE SWARM HIVER

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

BEES AND HONEY



The Dovesailed 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 Cleanings in Bee Culture (a full illustrated semi-monthly), and a 44 p. illustrated catalogue of Bee-keepers' Supplies. Our A B C of Bee Culture is a cyclopedic of 460 pp., 6x10, and 500 cuts. Price in cloth, \$1.25. *or mention this paper.* A. I. ROOT, Medina, O.



This Space belongs to

C H McRae
PARK

Poultry Yards,

DUNVILLE, ONT.

We raise choice BLACK MINORCAS and S. C. B.

and W. LLGHORNS can be bought.

NOW READ THESE!

G. L. Strickland, Marysville, Mo., writes, on May 15th:—"Your Bees at hand. They are very nice."

Boyton Banton, Freedom, Me., writes, on July 19th, 1890:—"The two Queens I bought of you are excellent, very nice—enclosed find cash for same."

Now, Friends, if you will write me now, I will make you a special price for a few tested Queens. Enclose stamp, and pay when Queens arrive, for either the FIVE BANDED GOLDEN, or Root's strain of "HONEY" Italian QUEENS. Write now.

JACOB T. TIMPE, GRAND LEDGE, MICH.

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, Monkey, Rabbits, Bird Eyes, Goldfish, Song Restorer, Trap Cages, Distemper and Mange Cure. Wilson's Big Bird Store, Cleveland, Ohio.

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. 1890 pullets \$4.94, 94, 94, 90, 90, 96, cockerel 95, J. Y. Bicknell, Judge Eggs for hatching \$1.25 per 18. WM. 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.

1890 ITALIAN QUEENS from imported home bred honey gatherers. Each 75c. six \$4.00. Order now, pay when queens arrive. W. H. LAWS, Lava's, Setafian co. Ark.

FRIEND. Look here! Italian Queens for sale: untested 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, Hartwell, Hartwell co. Ga.

100 COLONIES of Italian bees for sale with young queens and plenty of stores; hives hold 8 frames chaff sides and 2 division boards making double ends. Write for prices stating quantity required. G. A. DEADMAN Druggist etc., Brusseis, Ontario.

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

POULTRY-MEN—Do not order your winter 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.

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



WHITE LEGHORNS

My mating this season gives me a fine lot of young Cockerels which I will sell cheap, also one two year old cock, a grand bird.

Write for prices and get the best in America.

R. H. MARSHALL, DUNNVILLE



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

VOL. VI, No. 18. BEETON, ONT., DEC. 15, 1890. WHOLE No. 278

THE CANADIAN BEE JOURNAL

ISSUED 1ST AND 15TH OF EACH MONTH.

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

EDITORIAL.

THE report of the proceedings of the twenty first annual convention of the North-American Beekeepers' Association, held at Keokuk, Iowa, on the 29 31 Oct., is just issued in pamphlet form, by Thos. G. Newman & Son, Chicago, of whom it may be obtained for 25c.

It is to be hoped that there will be a large turn-out at the coming annual meeting of the Ontario Beekeeper's Association, to be held at St. Catharines, January and . We expect to get some particulars before this issue of the JOURNAL goes to press.

As any word of improvement in the health of the Rev. L. L. Langstroth, is always gladly received by readers of THE CANADIAN BEE JOURNAL, we quote from his letter to E. R. Root, acknowledging the receipt of the N. A. B. K. A. donation, the following sentence: "I am still in a feeble and suffering condition, although much better than I have been for nearly two years."

This will be the last number of the CANADIAN BEE JOURNAL which we will issue before the Christmas season is upon us, and we take this opportunity of wishing our readers one and all, and to the fullest extent possible, A Merry Christmas and A Happy New Year.

* *

The British Bee Journal, under the heading "Eminent Beekeepers," gives a sketch and engraving of Mr. Thomas B. Blow, one of England's leading supply dealers. It will be remembered that Mr. B visited Canada a couple of years ago.

* *

Diagrams illustrating bee-culture and the relation of bees to flowering plants are advertised by the British Beekeepers' Association. These are printed in four colors, and are recommended by the Science and Art Department, South Kensington. They are drawn by Frank R. Cuthbert, the author of *Bees and Beekeeping*, and are published by the B. B. K. A. We can supply these charts with key for \$2.50 per set.

* *

There is every prospect of the North American (late International) Beekeepers' Association becoming an incorporated body under the laws of the State of Illinois, in which case, we do not see how it can well be called an International body. Is there no law by which its incorporation can be had in the hands of Congress, thus making it more what its name signifies.

GENERAL.

FOR THE CANADIAN BEE JOURNAL.

Contraction—Divisible Brood Chambers

REFERRING to the article of Dr. G. L. Tinker, on page 348 of your JOURNAL, in which article he gives a pretty clear outline of the special features of my invention secured to me by letters patent, dated Sept. 29, 1885, which patent you own in the British possessions of America, allow me to quote the following, giving citations, etc. At the time, Dr. Tinker had a patent hive called the "Victor," and in different numbers of the American Bee Journal for 1885, the following advertisement appears:

"The Victor hive is operated upon a new principle by which the sections are placed in vertical lines with the brood frames, continuous passages being affected in a practical manner. It may be arranged for any Langstroth frame, has been fairly tested and is the best hive made, for comb honey. May be used for extracted. Send for my 24 page catalogue and price list."

This was just before the issuing of my patent and the mailing of my books and circulars giving illustrations and descriptions of my new, patented, horizontally divisible, brood-chamber hive, which I had then secretly tested for three years. My book, mailed at about this time, contains, among many others, the following paragraph relative to the subject in question:

"The above cut will aid us in describing our new hive; a hive which in many features, as well as its system of management, differs from anything of which I have ever seen or heard, although I have read nearly all of the books devoted to bee culture, and have nearly every copy of all the periodicals ever published in the United States, upon the subject."

"In viewing the cut, you will notice that the brood-chamber, as well as the surplus department, is composed of two or more

HORIZONTAL SECTIONS,

or departments, each containing a full set of eight frames, each department being not only "reversible," but each part perfectly interchangeable with every other."

"After having enjoyed the immense advantages accruing from the Tiering system as applied to surplus cases, the idea came to my mind, that equal advantages could be realized from the application of the same principle, to the brood department."

"Be this as for all. In practicing the 'contraction method,' and trying to overcome its imperfections, while enjoying its many advantages, I was firmly impressed that it would give us

much more perfectly and completely, the results desired, if we could make the contraction by taking away the top of the brood-chamber, rather than its sides."

"Now we use in our brood department one case, or two cases, at the same time we are using five combs, or eight combs, with the old hive, when practicing contraction. The new hive and its system of management is a great improvement over the old, for the following reasons: "

"1st. When contracting the new brood-chamber we divide it horizontally instead of vertically, taking away its top, rather than sides, giving us all the advantage of a very shallow hive, with brood close up to the top bars, and directly under all parts of the surplus case. This extremely shallow brood department settles the brace-comb problem, as with it, the bees will build scarcely any of these braces, on the tops of the upper bars of such shallow frames."

"2nd. We make the capacity of the ten L. frame hive, to five L. frames, almost instantaneously, and without exposure to robbers should there be any abroad."

"If, however, others may differ with me, preferring hives other than the standard Langstroth, if they will use two brood cases they will have just such a hive; the bee-space between the two sets of frames serving as winter passage-ways through and among the combs. It becomes obvious that the brood department of this hive can be made in one story, of any length, breadth or depth, preferred; and while losing the advantages of tiering and interchanging in the brood department, the other advantages enumerated, may be enjoyed."

"The system of interchanging, admits of using two sets of the frames in the brood department, if any should so desire, and whatever number is used, it enables the bee-master to keep his surplus cases and honey-board, always next to his brood."

"After three years of careful experimenting, I much prefer to have my brood-chamber no larger than two cases at any time of year, and no larger than one case after the colony swarms, till up to the time the queen's capacity is equal to more room, the following spring; a time when the use of such capacity will give us strong colonies of surplus storing. I have found the advantages of contracted brood-chambers to be so great, that I much prefer to use them at all times when a greater laying capacity given the queen, is of no special value."

Father Langstroth, perhaps to-day the best posted bee-keeper in the world, regarding inventions in bee hives, both new and old, penned the following for the American Bee Journal of May 2, 1888.

"I am strongly impressed with the great ad-

advantages which seems to me must certainly be gained by one of the leading features of Mr. Heddon's inventions and system of management viz: The DIVISIBLE BROOD CHAMBER."

The above sentences prove conclusively that Father Langstroth recognized at once the originality and newness as well as the superiority of the divisible brood chamber. This is all.

JAMES HEDDON.

Dowagiac Mic.

Fixed Versus Hanging Frames.

READ AT THE A. B. K. CONVENTION.

ABOUT the time that Mr. Heddon's divisible brood-chamber was made public, and the merits and demerits were discussed through the papers, we ordered of the inventor one of his hives. Bees were gotten into it as soon as possible; and almost every time I had occasion to go into the apiary I would manipulate that hive, try the "shake-out function," handle the separate frames, etc. While I was not particularly struck with the advantages of the divisible brood-nest, or the shake-out function, I was greatly surprised at the rapidity and ease with which these little closed end-frames could be handled.

I have, through Gleanings, related some of my experiences in raising bees. Whenever it became time to move an apiary I always dreaded it. Frames had to be fixed up so that they could not be shaken about, or else, without fixing, such careful driving had to be resorted to, that it usually took three or four hours to make the trip back, when it ought not to have taken over two hours. And then there was all the time spent in fixing the frames. Indeed, our President, Hon. R. L. Taylor, in convention at Columbus, Ohio, before the association said something to this effect: "I do not see how any sane man (speaking of the hanging-frame hive), can tolerate such a rattle-box." The remark struck me at the time as being very caustic; but the more I thought of it the more I became impressed with the truth of the comparison. A hanging-frame hive is, to a certain extent, a rattle box.

Another thing: I had trouble in getting the boys in our yards to space the frames properly. Beginners would invariably space them too near together, or too far apart. The result would be, combs bulged, and others thinned down or scooped out, as it were on the side; and, worse than all, was the nuisance of interchanging them. Then, too, in buying up bees, a great many colonies had to be rejected because the farmer bee-keepers would not take the trouble to space their combs rightly. You may give them printed instructions, written books, and

when you visit them tell them how far to space, and yet, as a general thing, they will make poor work of it.

When I contrasted the smooth and even appearance of the little Heddon combs, and the often irregular ones of the average hanging-frames, and the inconvenience of the latter in moving, I hardly rested easy. I was well aware that a great majority of the bee-keepers—at least of the West—were using and advocating the hanging style; and it seemed to me that I should be wasting time in experimenting, or even investigating into the subject. I know that Elwood, Hetherington, and those other mammoth bee-keepers, used closed-end frames, similar to the Heddon; that Elwood said he could handle the Quinby as rapidly as any one could the suspended Langstroth. Although I had great respect for anything coming from the pen of Mr. Elwood, the statement seemed to me utterly preposterous; and yet, when I came to handle the Heddon frames out in the yard, it did not seem so impossible after all.

I reasoned in this way: If what Mr. Elwood says is true—yes, and I might say almost all others who have used closed-end frames—is it not possible that those who are using frames not fixed are losing many advantages that might accrue immensely to their benefit by the use of fixed frames? The hanging style without fastening will not bear moving, except with careful driving, good roads, and steady horses. There are a few who have all these conditions under perfect control. What we want, then, is frames at fixed distances, that will give us true combs—no burr-combs—and, perhaps, most important of all, ease of manipulation.

Without any disposition to repeat what I have already said through the journals, I will simply state, in order to bring the matter more clearly before the reader, that I personally saw Mr. Elwood, Mr. Tunicliff, Mr. Hoffman, and several other bee-keepers using fixed frames, handle them just as rapidly, and perhaps more so than you or I can the old style suspended; and, along with that they have all the other advantages that come with their use.

I believe that the bee-keepers of the West have generally thought that Elwood and Hetherington, and all their colleagues, using fixed distances, were either greatly behind the times, or else so conservative that they would not change their frames even if facts and figures were against them.

But right here just take note of this: These men with their fixed distances somehow manage to handle large apiaries with less help than ourselves. If they had a cumbersome, awkward system, they could hardly do this. On

the other hand, as their method of raising honey differs only in the fact that they use fixed distances, while we do not, does not that fact point pretty strongly that in this lies the secret? Elwood manages over 1000 colonies with only two assistants in the height of the honey season. Mr. Hoffman manages 600 colonies almost alone, though I believe he has some one to help him in the height of the season. I may be mistaken, but I do not believe they could do this were they using the hanging frames.

Were I to attempt to show just how to economize in labor, I would fail; but with the reader's indulgence, perhaps I can give an inkling. Mr. Elwood and other gentlemen have propolis like all the rest of us, and the bees stick it to the uprights or closed ends, as one may call it, coming in contact together. But to reduce this to the lowest possible amount, some, like Mr. Heddon, use some form of compression. Mr. Elwood uses the loped cord drawn up in such a way as to squeeze the frames tightly together. Others use a sort of wedge in connection with a follower. To separate the frames they use a small screw-driver, or one of A. I. Root's small ten-cent knives; and the way they handle these implements is a marvel. Scarcely before you are aware of it, they have the frames all loose and possibly out of the brood-nest, and before you can recover from your surprise they will probably show you the queen.

Well, how do they do it? Mr. Elwood and Mr. Hoffman both did it, when circumstances called for it, picking out four or five frames at a time—that is, at one operation—setting them by the side of the hive, and they might then return them severally or collectively at one operation. The great point where they seemed to gain over us is, that they will handle their frames collectively; whereas we are obliged, as a rule, to handle them one by one. We, after putting the frames in the hives, are obliged, as a rule, to finger each one separately; and if we do not happen to space them right, we are obliged to space them again, to get in the last frame. With fixed distances you can set them in the hives promiscuously, push on the outside one, and crowd them all up together; and of course there is plenty of room to get the last frame in, and finally the follower.

Mr. Elwood uses no brood-nest proper. He has two panels, each covering the two outside frames. He simply removes one of the panels, and then pulls the frame which he does not wish to examine, towards himself, and then very quickly lifts out the frame he wants, with a space of two or three inches in which to pull it out.

Perhaps some one will say, "Oh, well if we

were in New York state we would show them that we could get along with hanging frames." In reply to this I would say that, were you to draw a load of bees on hanging frames over the New York state hills, and over rough and stony roads, a few miles, it would be a miracle if you had anything else on arriving at your destination than a mass of mangled and dead bees, and the combs all pushed up against each other. Remember, that locality, in the matter of frames, does make a big difference as to the kind used.

The question then arises, whether beekeepers in prairie sections of the country would gain anything by adopting fixed frames. I think they would. The recent discussion of the matter of burr-combs shows that exact spacing is an important factor; and I know from hundreds of combs that I saw in apiaries where fixed frames were used, that truer and better combs were the result.

I am aware now that what I have said argues pretty strongly for fixed frames. But we must not lose sight of the fact that what one beekeeper—yes, what hundreds of them like—we might, on careful trial, repudiate; and, taking things, all in all, it would be a very foolish thing to advise that all beekeepers at once abandon the old suspended frame, without its fixed distance, and adopt fixed frames. The probabilities are, that there will always be used as many of the one as of the other. Personal tests by beekeepers will decide the matter. Many beekeepers are of many minds. Many Christians are of different beliefs as to technical points. We cannot, very well, at least for the present, have them all in one church; neither can we, if we would, induce all beekeepers to use one style of frame. But it is wise for us, I think, to consider the matter, experiment on a small scale, and then draw our own conclusions afterward.

EARNEST R. ROOT.

FOR THE CANADIAN BEE JOURNAL.

December For 1889.

AS a means of comparison we give below a memorandum of the weather as it was recorded by a friend a short distance from Beeton for the month of December, 1889. We shall try to give the record for January, 1890, in our next issue so that the whole month will be available for comparison:

The month opened with good skimming and very cold weather, snow having fallen on the 27th, 28th and 29th of November, to the depth

of about a foot on the level, although drifted badly in many places.

1. Fine, good sleighing.
2. Thawing rapidly.
3. Rained heavily during the night, changing to frost and snow.
4. 3 degrees below zero, sleighing very rough.
5. Raining and snowing alternately.
6. Fine, mild weather.
7. Beautiful warm day, snow going fast.
8. Raining hard all day.
9. Fine day, snow gone.
10. Fine day with rain at night.
11. Fine and mild.
12. Fine, roads very muddy.
13. Fine, cold, ground frozen hard.
14. Hard frost, light fall of snow.
15. Fine mid day.
16. Been raining all day.
17. Raining, roads impassable.
18. Heavy fog and rain.
19. Fine, cloudy.
20. Raining hard all day.
21. Light frost during night, fine mild day.
22. About an inch of hail.
23. Fine bright day.
24. Raining hard all day.
25. Fine and warm as May.
26. Rain, turning to snow in evening.
27. Light frost and snow.
28. Fine, mild.
29. Heavy rain.
30. Cold, blustery.
31. Fine, very cold—no snow.

W. F. MOORE.

Cookstown, Dec. 8, 1890.

FOR THE CANADIAN BEE JOURNAL.

Observations.

I CAN'T for the life of me see why so much fuss is made over so many trival little things in bee-literature, and in the conduct of the journals which depend on the pursuit of bee-keeping for their living, such as *nom-de-plumes*, putting the names of the writer at the beginning of each article, etc. It would seem as if some of those who write in such a strain, have decided that they must know who writes an article before they will take the trouble to read it, and some articles they wouldn't read at any price, just because the right name wasn't at the head of the article. Away with such childishness.

Perhaps you will remember that I found fault with the "hole-and-corner" mode of electing officers at the Brantford meeting of the Inter-

national. I wonder if there was any improvement this year, so that every member could have a say as to whom the new officers are to be?

I observe that Dr. Miller has started a column of "stray swarms" in *Gleanings*. I venture the opinion that it will be an interesting page.

Earnest Root says that this last meeting of the U. A., B. K. A. was one of the best ever held, I must confess that from the report I have seen I did not think so. It seemed to me that there was too much time taken up with "Associations—Past and Present" and some other flowery nothing.

I wonder, in this connection, if it was money well spent for the O. B. K. A., to send a representative all the way to Keokuk. The Americans pay but little heed to anything Canadians want, and they gobble up all the offices and honors worth having.

If Bill McKinley continues to live till the World's Fair comes on, I should like to know what good it will do Canadians to go to the trouble and expense of making a big exhibit, but I tell you we could just teach our American cousins something in the way of putting up a honey show.

I was much interested in what was copied into the C. B. J. from the British Bee Journal, about flour as a pacifier in uniting bees. I intend to try it myself in the spring, and I fancy a good many others will, too. Wouldn't it do as a method of queen introduction? Why not open the hive, give the bees a good dose of flour down between the combs, and then drop the queen down in the hive. Somebody try it on a queen they don't value.

OBSERVER.

FOR THE CANADIAN BEE JOURNAL.

Sundry Comments.

SEND you herewith some items on which you may put any heading you choose, but I will try and make the remarks which some writers would spin out to a four-column article, as short as possible.

HONEY BOARDS.

First, I can consider honey-boards very useful, but very few use them properly. Since I need no more increase I keep them off until I strain queens powers of laying pretty well and I then shake the bees and queen down and put

the honey board over the top of the first storey so as to be rid of all brood before much extracting is done. I endeavor to have the brood all sealed at least.

BEEKEEPING ON PAPER.

Next comes beekeeping on paper, which advises the keeping of all kinds of honey separate. It takes all summer to get honey thick enough above honey boards, and Dr. Tinker is the only man I ever saw beat this. He will get there while some of us are sleeping.

THICK TOP-BARS.

There has been a great ado about thick and wide top-bars. I always used $\frac{3}{4}$ inch square and find them plenty wide enough. You will find a heavier top-bar very much in the way while uncapping. The bees also can run out of the way much more quickly. On the Langstroth frame I use a $\frac{1}{2}$ inch side-bar with one two-inch wire nail down through the top bar of the end; try one and see how strong they are corner ways. They are quick to nail, and I never saw a bit of comb built past them to the hive and you cannot split the frame while jerking off bees.

HEDDON HIVE FOR WINTERING.

Mr. Pringle says the Heddon hive would be a poor wintering hive on account of the joints in the centre. You said it would be too cold. Well, practice and theory do not chime. I have not lost a pint of bees in three or four years out doors, and it is the crack that does it. Mr. Corneil will score a point. You see how bees can close and expand light through the frames as it were. Mr. Heddon and I were corresponding seven years ago about a seven inch frame, when he made the fatal plunge of his new frame. I considered the hive and frames too small, but it would take a whole Bee Journal to state times and ways a seven inch frame has been before me, without sending for them; with eight frame hive I am using them—and winter out doors in two storeys. Mr. Dadant has been there, and I want at the least, 12 Langstroth frames for the queen; 10 is too small.

CONTRACTION FOR WINTER.

Talk about contracting for winter, Life is too short, and a hive like the above will go right through till June without unpacking or feeding, and give the queen room enough all summer. But Dr. Tinker slips in the honey board in the right place, I think. Now, Mr. Jones, you often tell us to crowd up the frames in the spring. Just wait till we look at the question. For two years I have taken one frame out of a hive and spaced the remaining seven to about $1\frac{1}{2}$ inches. When I got my first swarm I thought I would examine the hive, and found that it had been left all spring in that

state, so I do not go much on squeezing bees up stairs.

WINTERING OUTSIDE.

For many years I thought I would build a cellar or bee-house, but after an experience of ten years in a cellar, and wintering outside, I much prefer the latter, I will tell you a few things which I can back up here in our climate. If you are bound to winter in the cellar you must pack in the spring, as our springs are getting more windy, colder and drier, every season. Two years ago my outside hives were full of new honey and were sealed before we dare set the colonies out of the cellar and this was all on account of a few very fine days in April. Remember I can cellar bees as well as anyone I ever saw, but the change in setting out is too sudden and they cannot stand it.

NO WIRED FOUNDATION FOR ME.

Let me say that I never used wired foundation and much less need it, seven-inch frames. Manufacturers of foundation might just as well make it a little lighter. Many combs with a space below, and o'd thick drone comb can be done away with by cutting off $2\frac{1}{2}$ in. below and nail the bottom bar right on again, thus stopping that bee space, which is more bother to sweep bees out of than all the rest of comb.

If any one wants to object to anything I have said let them do it through the C. B. J. so that I may both feel it and see it.

CHARLES MITCHELL.

Molesworth, Dec. 8, 1890.

We tried the inch top bar, and found the same objection that you mention. For uncapping we decided long ago for our use, we would not want a top bar wider than the comb built by the bees; of course by having the side bars narrower, you can hold your hive down to side bar and uncap up even with the top bar, but with properly constructed honey boards, we think wide top bars will be found of no advantage. We are not troubled with bees building behind the side bars, and if the spacing is correct, no trouble need be anticipated from that. We think that where brace combs are built behind or between the side bars and sides of hives, as the case may be, it will be found on examination that the space is *too wide*. Bad workmanship in hive making often causes the bees to try and repair the difficulty by filling up the unnecessary space with brace combs or a few cells. Recognizing the bee space between the first and second bee chamber in the Heddon Hive, as to

wintering, we found it an advantage rather than a disadvantage, as the bees contract and expand along that crack, going between the various ranges of comb as they desired, and if the crack for winter was wider than this it would be no objection, as far as we can see. You make a good point when you mention the packing of bees in the spring after being wintered indoors. We believe that it will pay to pack them, taking one year with another, better than many other things that are done in the apiary, and considered absolutely necessary.

FOR THE CANADIAN BEE JOURNAL.
Brant Bee-Keepers' Association.

THE fifth annual meeting of the Brant Bee-Keepers' Association met in the County Council rooms, at the Court House, in the city of Brantford, on Saturday, Nov. 22nd. Present,—D. Anguish, J. R. Howell and wife, Thomas Burket and wife, Cyrus Kitchen and wife, Miss Bowers, Miss Ash, George Barber, C. Edmondson, G. Springsted, C. Flanders, A. McMeans, A. Malcolm, C. Ramey, S. Dickey, F. Pipe, C. Johnson, R. Taylor, T. Ivov, Miss E. Ramey, Miss Harley, W. Phillips, L. Petery, Mr. Steadman, R. Shellington, and Mr. Horseman.

After the report of the Secretary was read and adopted, the following officers were elected for the coming year: President, G. Barber; Vice-President Miss Ash; Secretary-Treasurer, D. Anguish.

The papers read were, Apian Exhibits, G. Barber. The Best Method of Wintering Bees, D. Anguish. Mr. C. Edmondson was to have read a paper on Which was the most Profitable, Comb or Extracted Honey, but not having prepared one he addressed the meeting, and told them what his experience had been.

It was brought out in the discussion, that the public locked upon and believed that honey, when candied, is adulterated with sugar; but it was a mistake, the majority of the members preferred it to become candied.

The meeting was a profitable one to those who were present. The attendance was greater than ever before, and many new ones enrolled themselves as members.

The retiring President, Mr. J. R. Howell, was appointed a delegate to the Ontario Association. He thanked the members for the honor conferred upon him, and gave the members some good, sound practical advice in regard to their Association.

D. ANGUIISH, Sec.

CHLOROFORM FOR QUIETING.

Will you be so kind as to advise me of your mode of administering chloroform and the results. My object is to bring the matter to the attention of a beekeepers' association which will shortly be held in this county.

F. TOEWS.

Old Town, Greene Co., Ohio.

We take a small barrelled smoker and place an ordinary sized sponge that will just fill the barrel; we then take another one of similar size and put on about a teaspoonful of chloroform, slip it in, then another sponge on top of it. Thus you see we have two sponges without chloroform one above and the other below. Ordinary rags would take the place of sponges, but would cause a waste of chloroform. We then give a little puff of the chloroform in at the entrance of the hive, squeezing the bellows from five to ten times, according to the strength and size of the colony, and the same in the top. This merely stupifies the bees and takes the fight out of them; we then shake them from the hive which we wished to take them from into the one they are to be united with. In short all the bees that were to be united are shook into the one hive, and as they rouse up in a few minutes we close up the hive and give them a few more puffs of chloroform. This will usually suffice, but if no honey is coming in, especially just after a failure of the honey harvest, we would recommend doubling the dose of chloroform, as they are sometimes inclined to quarrel a little after they come to or rather after the effects of the chloroform passes off. It is only necessary to give them sufficient to keep them stupified slightly, that they may have no disposition to fight. Keep them in this state for an hour or so. We have also used chloroform occasionally where bees were killing off the drones, to prevent it till we had time to remove the queen to stop them. This is usually done in colonies in which we keep our choicest drones, and sometimes much neglect our queens that were being fertilized in the hive till bees would commence driving out the drones. We found it especially valuable in mating fertile workers with other colonies, and in introducing queens to fertile worker colonies.

CAPPINGS.

CUT FROM A VARIETY OF COMBS.

Close Spacing

H. R. BOARDMAN, of East Townsend, O., has experimented a good deal in the direction of close spacing to prevent burr combs, and he sums up the result of his experience, in a late issue of *Gleanings*, as follows:

1. It prevents, or very much reduces, the tendency to build burr combs above the frames. In some colonies, tested where a close bee-space was preserved above the top bars, as well as between them, no burr combs were built at all; but where a wide space was allowed above the frames, more or less combs were built.
2. It secures the combs built of uniform thickness, smooth and even with the frames; consequently,
3. It makes them available for brood to their extreme edges.
4. It increases the capacity of the hive without enlarging it, in my case, one comb.
5. While the capacity of the hive is increased for brood, it is diminished for bees, and, therefore, crowds them out into the surplus apartment; and for the same reason,
6. It enables the bees to cover and protect more comb surface, and consequently to rear more brood and to build up faster.
7. Where natural comb is built it prevents the building of drone comb to a great extent. It will be seen that, in close spacing, the building of natural comb has some decided advantage, as the bees adjust or space their comb centres throughout all their slightest undulations, in a more perfect manner than it is possible to do by any artificial means. The great importance of this is apparent.

One important test yet remains—that of bees building burr combs, and I have set about trying to discover some reasonable answer.

One dollar will give anybody who wants them two papers, which, if taken singly, are worth 75¢ each—THE CANADIAN BEE JOURNAL and CANADIAN POULTRY JOURNAL.

MANUM'S BEE CANDY.

While at A. E. Manum's, Ernest Root saw some bee candy, that is so soft that it meets with the approval of the bees. As Ernest says, one trouble with the Good candy is, that it hardens when sent to a colder climate. Mr. Manum adds glycerine, which keeps it soft and pliable under any and all circumstances. The formula for making is:

Eight spoonful of coffee A sugar; one of wheat flour; one of glycerine; two of granulat-

ed honey. First mix the flour with the sugar, then add the glycerine and honey. Let it simmer on the stove until the sugar is dissolved, and then remove to cool.

Could you make a nicer present to a beekeeping friend than a copy of THE CANADIAN BEE JOURNAL for a year? See in another paragraph how you can do it for 25¢.

OUR FOUL BROOD INSPECTOR AS VIEWED BY AN ENGLISHMAN.

How small we should all feel to think that the opinion of "X-tractor" who lives "in the hut" in the British Bee Journal was not asked as to whether it would be safe for us to allow our Inspector to run around the Province inspecting—bees spreading the disease, as that worthy insinuates. For the information of our friend we may say, that we do what *we do* and what they do over there in England too,—send the leaflet and the Inspector as well. But why pay more attention to the item. Any reasonable man knows that for one hive to which he *might* carry the disease, he will cure one hundred. And if Ontario bee-keepers are not troubled with any more foul brood than the Inspector carries them, they will never lose much from the disease.

They are progressing at a rapid rate with foul brood in Canada, I notice by your extract from the C. B. J., and ominously enough the article is headed "The Inspector's Work." Yes I think a great deal of it will be his work, performed of course in all innocence and meaning well. He examines eighty one apiaries and finds foul brood in 350 stocks, and then, to use his own words, rushes on to other places. Let us fancy here a Government Inspector finding 350 cases of small pox in eighty-one families, and then rushing off, visiting every house he can find and inspecting them! He would surely carry about spores of the disease (his clothing being fomites), and those who were free would probably not be long so. In this old and backward(!) county we have long ago stopped the expert thus spreading the pest. He is the County Inspector. They may well find yard after yard fairly rotten with disease. Well, I suppose I oughtn't to find fault without suggesting a remedy! Why not ask them to take a lesson from our custom as practiced by the Eds. B. B. J.—let their Inspector stay at home and report on pieces of comb sent him from suspected apiaries, burning the infected bits, and enclosing a leaflet of printed instructions as to treatment. As far advanced as we consider ourselves in medical science in the fin de siècle, I thoroughly believe our medical men's visits contribute in no small degree to the spread of zymotic diseases; the precautions they take are paltry in the eyes of—X Tractor.

TAKING AWAY THE HONEY AFTER THE HARVEST.

Dr. Miller thinks that the experiment we have been trying to a small extent may lead to something. In Gleanings he says:

The C. B. J. reports two cases in which a cluster of bees without combs or stores has hung a good many days in the fall "without visible means of support," but bright and lively. It raises the question as to whether it may not be a good plan to keep bees in this condition "between the close of the surplus honey harvest and the putting of the bees into winter quarters."

H. Alley and E. L. Pratt agree that colonies heavy with stores at the close of the honey season consume these stores, and are no better off in the fall than those that were light. Alley says, "We have come to the conclusion, that, at the end of the honey flow another season, we shall remove nearly all the honey from the brood combs, and thus compel the bees to make their own living from day to day It strikes me that this plan for retarding brood-rearing and also in economizing the consumption of stores will be successful. If necessary to feed back in the fall, the honey will be on hand for this purpose." This is close in line with D. A. Jones' swarm hanging with no combs. It may lead to something.

If you are a friend to THE CANADIAN BEE JOURNAL, now is the time to prove it. Read the offers.

KEROSENE FOR PROPOLIS.

A writer in Gleanings says, that the handiest way he has found of getting propolis off the hands is to have a small cup of kerosene handy. A few drops will "cut" the gum very satisfactorily.

We are opposed to giving away silver spoons and regags as premiums. We want the CANADIAN BEE JOURNAL to sell itself. If it isn't worth the money without having to throw in a silver thimble, why, we'll, reduce the price, instead of giving the thimble.

WHICH WILL DO THE BEST WORK—A COLONY ALLOWED TO SWARM (INCLUDING THE WORK OF THE SWARM), OR ONE KEPT FROM SWARMING BY HAVING THE QUEEN CAGED OR REMOVED.

The above question was asked through the Question Box of Gleanings, and the answers are extremely varied, the majority believing, that all things considered, the best results will be obtained if the colony be allowed to swarm. Of course the length of the honey season

has much to do with the matter. Mr. P. H. Elwood says:

"This will depend on circumstances—principally on the honey harvest, whether early or late, and whether you remove and return the queen at the proper time. Caging the queen in the hive is a lazy substitution, and will not kill the swarming fever. I have said that a swarm without a queen would work with greater energy than one with a queen, but having a desire to swarm."

Ernest Root comments on the replies as follows:

"These answers are interesting, and I believe P. H. Elwood hits the nail on the head when he says that a swarm without a queen will work with greater energy than one with a queen having a desire to swarm. Granting that bees will work more energetically after they have swarmed, and are in their new home, it is very possible that the same bees have lost time just preparatory to swarming, and while the swarming impulse was upon them; and Mr. Elwood's point is, that, if it should be taken away from them entirely, they will average better. This is an exceedingly interesting and practical question, and if swarming can be controlled in some such way in our out apiaries, as Mr. Elwood and Hetherington do, it means that we can dispense with hired help to watch them, or, in the absence of such help, the loss from runaway swarms."

Does 25c. look big for THE CANADIAN BEE JOURNAL for six months? and yet new subscribers may have a trial trip at that rate. You can send two or three names as well as not.

CRYSTAL HONEY.

This is the heading of a recipe which came into our hands the other day, and we publish it for the edification and amusement of all:

Take ten pounds of good moist (brown) sugar, three pounds soft water two and a half pounds of bee bread honey, forty grams of cream of tartar, twelve drops of the oil of peppermint, half an ounce of gum arabic, ten drops of the essence of wintergreen. Put them into a brass or copper kettle, and let them boil for five minutes. Then take two teaspoonful of pulverized slippery elm bark and mix with one pound of water, then strain it and mix into the kettle. Take it off and beat up the white of two eggs and stir them in, let stand two minutes. then skim it well, and when nearly cold add one pound of pure bee honey, and so on for larger quantities. By adding more slippery elm bark to a proportionate quantity of water, the manufacturer can make it as cheap as he pleases, as a small quantity of slippery elm bark will thicken a pailful of water to the consistency of honey.

N. B.—What we mean by bee bread honey is that made by the bees in the fall of the year to subsist on during the winter, it being much stronger than that made in the spring. If that cannot be procured, honey in the comb will an-

swer the same purpose by putting in one-half pound more than there is given in the recipe but it makes considerable difference in the price.

Did you ever see any unfair comments in the CANADIAN BEE JOURNAL on other supply dealer's goods?

UNITING BEE IN FALL.

G. M. Doolittle gives minute directions in the above matter in a late issue of Gleanings. Though methods have been often given before in the C. B. J., there may be some points in the following which will be of interest:

"I have just been uniting up some weak colonies of bees, or, rather, large nuclei, as they would be more appropriately termed; and I like the way I did it so well that I thought the readers of Gleanings might wish to know how it was done. In the first place, the queens in a part of the colonies were taken away to fill late orders: but if I did not wish to use the queens not needed in the united colonies, I killed the poorer ones, as I considered them; for, so far as I have practiced this plan, I find that queenless bees are less inclined to quarrel, and are more disposed to stay where put, than are those having queens. Having the queens disposed of from the colonies which are to be united wait three days to a week (three days in any event, so the colonies may realize their queenlessness) for some cool cloudy day when it is from five to ten degrees colder than is required for the bees to fly, when you will find the bees are clustered compactly, something the way they are in winter. When taking the queens away, take all the combs from the hives but three (the three which contain the most honey), and spread these combs about three-fourths of an inch apart, setting them about two inches from the side of the hive so that the bees may be all clustered on these combs instead of hanging to the sides or any part of the hive. The hive which is to receive these bees and combs is to be also prepared beforehand, by taking all the combs but three or four, those being left being the ones having the most honey in them, said combs being placed close to one side of the hive.

When the right day arrives, light your smoker and put on your veil, for in following the plan described you may not be able to use the hands to get a stinging bee off the face as you otherwise would; for doing a part of the operation both hands will be so employed that you cannot use them at anything else. Now go to the hive having the queen, and uncover it giving the bees a little smoke to keep them quiet, and leaving the hive open so that you can set the other frames right in without any hindrance. Next go to ones of those that you took the queen from blowing plenty of smoke in at the entrance while uncovering the hive. Blow a few puffs of smoke around the combs and over them, when the smoker is to be laid down the two front fingers placed between the two first frames near their ends, the large fingers between the second and last frames, while the third and little fingers are placed beyond the third frame. Now close

up with the thumbs and all of the fingers, thus lifting the frames and cluster of bees all out of the hive at once, when they are carried to the open hive, where they are to stay, and sit down in it all together, close up to the frames of bees that are in this hive. Go back and get the smoker, and blow smoke enough on the bees to keep them down, when you can arrange the frames, division board and hive, as you like without very many, if any, bees flying, should a few bees stick to the hive that you took the frames out of, bring the hive to the one having the united colony in it, and brush them out on top of the frames, as they will be pretty well chilled by this time. In doing this you will have to smoke those in the united colony pretty well, or many will fly at you, for these partly chilled bees will throw their poison out on their stings so that the scent of it will anger the bees in the united hive. If you fixed all as it should be, when taking the queens away and preparing for uniting, and smoked the bees as I have told you, there will be only now and then one that will require this last operation, as all will be snugly clustered on the combs. Close the hive as soon as you have things fixed to suit you, when you are to remove every thing from the stand of the colony that was united with the other, so that when the bees come to fly on the first warm day they will find that all that looks like their old home is gone. Some bee will fly or hover over the old spot where home was, but not finding it, will return to the united colony. In this way I never have had any quarrelling of bees, or any queens killed; and it is so simple and easy that I like it much the best of any plan of uniting bees late in the fall.

Reader, look here! you can get THE CANADIAN BEE JOURNAL a whole year for twenty-five cents. Get a new subscriber for 75c., then put 25c. more to it, and send the \$1 to us. We will enter the new subscription, and extend your own time both for one year.

CARBOLIC ACID TO PREVENT ROBBING.

At the last International Mrs. L. C. Axtell stated that she used carbolic acid to stop bees from robbing weak colonies. Sometimes, says she, when working with bees when no honey is coming in, it will start robbing quite lively. If we take a bunch of grass and wet it, then take the cork out of the bottle of acid, turn it up a time or two against the grass, then mix the grass through and through to even it up, then place it round the entrance of the hive—the robbers will disappear. Rub the combs and around the top with the grass.

If every present subscriber will do as we ask in another paragraph, our subscription list will be doubled. By the plan mentioned you can get your own paper for twenty-five cents. But why not go snooks with your neighbor and each chip in a half dollar.

FOUL BROOD.

Read at the A. B. K. Convention.

The Ontario Bee-Keepers' Association has, I believe, two or three accredited representatives at this Convention, though but one with portfolio. But as the present membership of our Society would entitle us to a dozen or more delegates, this communication from me will not, I hope, be any encroachment on the time, business, or patience of the meeting. At any rate the paramount importance of the subject I wish to bring before you must be at once my justification and apology.

On looking over the programme for this International Convention of beekeepers, I am not a little surprised to find that the question most vital to them to-day has no place there. I therefore propose to step it under cover of "Volunteer Contributions," and fill the gap thus left open.

The question I refer to as being the most serious and difficult one confronting the apiarist to-day is the "Foul Brood" question.

The other prime difficulties in bee-culture have been removed—the largest obstacles surmounted. The winter problem has been solved; the "spring-swindling" problem is solved; the evolution of the "best bee" is well under way; while a host of other minor matters have been resolved into a multitude of solutions to suit this bee-keeper, that one, and the other one.

The foul brood problem has stood the longest—a defiance to our heads and a menace to our pockets. But it too, has been practically solved, though still hot in theoretical dispute. But one good fact rightly interpreted, ought to kill a dozen dubious, opposing theories. I remember writing when at school from this copy: "Theory is worth but little unless it can explain its own phenomena"—and the idea has been useful to me. Whatever the theories of foul-brood presented, and whatever the drugopathic remedies proposed and predicated thereon, I undertake to say here, that we in Canada, have practically solved the problem of cure, during the past season.

As soon as I became satisfied of this, I sought to convince our big cousin over there of the important fact, but apparently with poor success—that is so far as the periodicals and professionals are concerned. I wrote to the two leading American bee-periodicals on the subject, sending a copy of our "Foul-Brood Bulletin" to each, and suggesting that they give their readers the benefit of its contents. The contents, however did not appear, though, of course my own letters did.

Our inspector (before his appointment, however), wrote out this method of successfully treating foul-brood, and sent it to another American periodical, that number of which was to be wholly taken up with the foul-brood subject. This communication did not appear, it contained a great truth, and perhaps more valuable information for those scourged with the foul-brood, than all else that appeared in that number.

Now, "brethering," (I mean ye three editors, and doubtless all present), please bear in mind that this is not meant for an attack on you or

your periodicals. I attack brother "Jonathan," for I suspect he is to blame. That tremendously big brother of ours, armed with the McKinley Bill, is just now straightening himself up in our presence, and giving us a withering glance—"on the slant" The "sovereign" citizens of his have no doubt caught the infection, and naturally enough imagine that "no good thing can come of Nazareth," or Canada.

Be that as it may, I repeat and reiterate for the benefit of whom it may concern, that we have practically solved the foul-brood question in Canada—that is, so far as its successful treatment is concerned, and that, of course, is the main point; and we shall charge you nothing for the information of how it was done. Though you may be unwilling to import the "furrin" article without a tariff or McKinley-tax, we shall nevertheless smuggle it in to you by "Her Majesty's mail" and "Uncle Sam's post."

By this little digression we mean nothing amiss. It is only a friendly return of harmless banter which I sometimes observe coming over here, from down there. Nor do we mean to boast over our achievement in apicultural therapeutics. Our determination to give you this information how to cure foul brood does not arise from that motive. On the other hand the motive may not be wholly benevolent or disinterested. There may be a trifle of selfishness about it, but of a kind beneficial to you as well as ourselves.

The matter stands thus: Foul-brood has been and is scourging bee-keepers everywhere in the Eastern Continent as well as this, and to an extent not generally known. We, in Ontario, have undertaken to grapple with it, and overcome it. We are successfully accomplishing the task, and we want our nearest neighbors "over there" to do the same, not only for their benefit, but that they may not injure us. You will now perceive that our motive is both egotistic and altruistic, but for the ultimate good of both countries. In view of the fact that there is considerable interchange of bees and honey between the two countries, our solicitude is not unnatural or unreasonable.

We intend to stamp out the pest here, and we offer you the advice to do the same there, and the instructions how to do it. Though the "great guns" and the tribunes may be too high to look toward Nazareth, the poor sufferers are not, of which fact I have had ample evidence lately; and this is the chief reason why I write this letter to the International Convention of bee-keepers. Since my letters, above referred to, appeared in the American Journal and Gleanings, I have had many inquiries from the different States of the Union, and applications for our foul-brood pamphlet. I responded to all though the work was considerable.

To cover this ground, and meet this want, I shall here give in concise form the desired information—how to cure foul-brood among the bees—in a simple hygienic manner, without the aid of drug or druggist, and outside of, as well as during the honey season. Of course, during a honey flow is the best time for operating.

In the evening remove the bees and queen from the deceased colony, and place them in a clean hive, with four days' starters. Four days

afterwards take away all combs and starters from them, and give them full sheets of foundation, or empty comb which you know to be free from the taint of disease. The colony is now cured, and will rear brood, healthy and free from the disease, until contracted again through the ingathering of diseased honey, or otherwise. The honey is the chief, if not the only medium of the contagion, and one drop of affected honey brought into a healthy colony, if used for larval food, is sufficient to start the disease. This is a very important fact, constantly to be borne in mind, in order to prevent the spread of the disease. The diseased honey may be rendered innocuous by boiling, and the combs by rendering into wax, the dross to be buried.

To save the healthy part of the brood taken from diseased colonies, fill empty hives from the frames of brood, and fill the entrances securely for two or three days, attending to warmth if the weather is cool, and to ventilation should it be hot. Then open the entrance; and as soon as the healthy brood is all hatched, put the young bees through exactly the same process as the old ones, described above, give them a queen or a cell, and they, too, are cured. All the honey taken from both the young and the old colony must be boiled before it is given to the bees, and all the combs melted into wax.

To cure a foul-broody colony in the fall, after the honey season is over, remove the bees and queen from their hive and place them in a clean hive, with as many frames of healthy, sealed honey or syrup, as may be required for winter. The combs must be completely filled and sealed so that the bees will retain the diseased honey they may bring with them, until it is digested, instead of depositing it in the combs, and so that the queen may have no place to deposit eggs until all the danger is past.

This is the simple plan of curing foul-brood followed by Mr. McEvoy, our inspector, and is invariably successful. He has treated hundreds of cases during the past season, without a single failure. Since he began his official work, in May last, under our Act, he has examined nearly a hundred apiaries and a thousand colonies. Many whole apiaries that were fairly rotten with the disease, are now perfectly sound and healthy.

By the method given, any and every form and stage of the disease, from the simplest to the most malignant, may be cured. The proof of this in its amplitude, is before us; and this is why I say, and say again, that so far as the cure of foul-brood is concerned, we have practically solved the problem here in Canada this year.

This is reason enough for my persistency in pressing the matter on your attention, for I have not the slightest doubt that when the truth becomes known to you, as it is now known to us, the disease will be found to be as prevalent there as it is, or was here. Little did I suspect its wide extent and fatal ravages, until the machinery of the law disclosed the facts.

We now ask you to follow our example in this wholesome remedial work. What did we do and what have we done? At the risk of unduly lengthening this epistle to the modern Gentiles, I shall summarise that work, though

it may be a repetition of what I have previously written to the bee-periodicals.

At our last annual meeting, the fact was disclosed that foul-brood existed, and was making rapid headway in sections of this Province. We at once took steps to secure the requisite Legislation to aid us in its suppression. We went to work with a will, and within the short space of three months the fruit of our endeavor was an "Act for the Suppression of Foul-Brood among Bees," passed by our Provincial Legislature. The working of this Act goes to prove that is the best of its kind in existence, of which we have any knowledge.

Under its provisions, resisting the inspector in the discharge of his duties is a penal offence. Exposing diseased honey, comb, or other article, is a penal offence. Selling diseased bees is a penal offence; also other acts conducive to the spread of the disease and inimical to the public interests.

We have also a pamphlet on the subject, embracing a copy of the Act, modes of treatment, etc., which we induced the Government to issue as an official Bulletin, under the Department of Agriculture. This pamphlet is printed in English and German, and has been distributed among seven to eight thousand Ontario bee-keepers. "Go thou and do likewise."

ALLEN PRINGLE.

Selby, Ont.

The Review is a Review.

Like your correspondent "Observer," I have been out of print for some time. Mayhap your readers would be just as well pleased if we remained out, because we belong to that class at which some people turn up their nose and say "they are a pack of shoysters who have not the manliness to come out into the daylight, but be hid behind the bush and shoot off their pop-gun with the hope of annoying some one." Such I believe is not the intention of either Observer or myself. If unpalatable things are said they are said with the intention of doing good; to remind people that things may not be as they appear to them is not necessarily unjust or discourteous.

According to expressed opinions there is an opening for Review and reviewers. There is but one paper on the list of Bee-keepers periodicals that makes any pretensions to be a Review, but you, and others as well as you, declare the Review is not a review, but a "topical paper." How very hyper-critical we are becoming. Even the mild spoken Dr. Miller tells Mr. Hutchinson to his face, his paper is not what its title implies. Granted it is not, most of the other bee papers are open to the same charge. If we work away from Flint to Medina, Chicago and Beeton, we will discover in the title of their papers the same inconsistency, and will be apt

to ask the oft repeated question "what's in a name." To "Gleanings," what its name implies, Does it confine itself to gathering up the stray heads that remain strewn over the agricultural harvest field after the reapers have carried off the crop. I fancy Mr. Root would be the first to repudiate the charge, that he allows his confederates to monopolize the rich grain and contents himself with gleaning the loose and broken heads that lie entangled in the stubble. Such work is right enough in its way, and has the dignity of age stamped upon it. But Mr. Root will not admit this is the sole work that Gleaning's does, nor would his patrons allow him to do so if it were his will. It is true that he has lately added force to such a charge by employing Dr. Miller to gather up the "stray straws" and bind them in the Editorial bundle, and by taking the reports of important meetings at second hand.

Are the American Bee Journal and the C. B. J. what their name implies?—a daily record of what happens, for I believe this to be what "Journal" means. They are frequently the records of a year, when they might as appropriately be called "Annuals." Witness their oft repeated "I commenced the season with so many, spring comb; increased to so many; took so much honey and put so many into winter quarters."

I venture the statement that the Review is more true to name than any other bee paper published in the country. I assert that the Review is a review. The word means "to look back again." It means a second view—a re-examination with a view to amendment and improvement. An examination of the respective numbers of Hutchinson's paper will show that the subject matter in each is a looking back upon—a re-examination of that which has already appeared, with recommendations and suggestions by the editor and his chosen critics, with a view to improvement. It is true extraneous matter sometimes creeps into its columns, but reviewing is its main feature. Is not the very last issue a review of our bee papers with a view to amendment. It will do good, too, if their editors do not consider themselves too clever to be taught—an error they are apt to fall into.

Well! well! when I commenced I did not know what I was going to say, and here I find myself running full tilt against some of our agricultural giants, and feebly attempting to pale the light of our greatest luminaries, and now that I feel somewhat aggressively inclined I would like to go for some more of them.

The doctrine taught by that man Hedlon is

something startling. He tells us it pays to be honest; it is the most selfish thing a man can do. Our children should be taught that honesty is the best policy; that virtue is its own reward; that they cannot afford to be dishonest.

All these things being taught from a purely selfish motive, wholly pertaining to the affairs of this world. That honesty is the best policy the thief only will deny. That we should be honored from no higher motive than selfishness is a damnable doctrine. A man that is honest only because it is policy to be honest is not a safe man to trust. I suppose W. H. is honest in the expression of his opinion, so is

No. 2.

A VISIT TO MR. ALLEN PRINGLE.

During the latter half of November I took a two-weeks respite from business, and journeyed eastward to the parental abode, situate in the town of Prescott, a place of some three thousand inhabitants. There I enjoyed a rest and at the same time did up some literary work which has been in arrears for months. Coming back I dropped off at Napanee, and was there met by Mr. Pringle, to whom I had sent word of my intention to spend a day with him, in response to former kind invitations. Getting into a comfortable covered buggy, which was drawn by a neat little iron gray pony, we drove about five miles to Mr. Pringle's residence, which is about three-quarters of a mile west of Selby, a small post village in the county of Lennox. The roads from Napanee were excellent for the time of year, being smooth and hard. I had rather dreaded the rough ride for I had anticipated that the roads were perhaps on a par with those around Beeton. We arrived at the Pringle homestead a little after six in the evening, and I was very cordially welcomed by Mrs. Pringle. The ride had been a cold one, but an excellent hot dinner and a good warm fire soon thawed us out. At the time of my visit the members of Mr. Pringle's household consisted of himself and wife, an only daughter, an intelligent young lady of eighteen summers, and her governess. After Mr. Pringle and I had discussed bee-matters for a while, the ladies joined us and the remainder of the evening was spent very pleasantly in conversation, music and song. Miss

Pringle is a thorough pianist, playing most difficult pieces correctly, and with an ease that made me envious of her skill. Mrs. Pringle and her daughter played several duetts very nicely, and Mrs. P. sang a good old Scotch song with much feeling. Altogether the evening was one which I thoroughly enjoyed, and I trust Mr. P. will excuse the liberty I have taken in giving this glimpse of his home life. Being after dark when we reached the house in the evening I did not have an opportunity to take a turn around the bee yard (or rather the spot where the bee-yard had been, for all the bees had been put into the cellar a couple of weeks previous) till the following morning. We however took a peep at the bees in the cellar. The portion which was partitioned off as a bee-repository was pretty well filled up, there being something over a hundred colonies in the place, but everything was quiet and comfortable. The hives were packed one above the other from floor to ceiling and very close together. There were all the necessary means for ventilation at hand; in one corner of the room a pipe led from the cellar to the outer air, while another pipe came down through the floor connecting with the pipe of the cooking range above, and extending down to the cellar floor. At the time of our visit the thermometer stood: at the top of cellar 48° and at the bottom 42°. Mr. Pringle keeps two thermometers, one near the floor and the other close to the ceiling of the cellar.

AN ACCURATELY ADJUSTABLE ENTRANCE.

Mr. Pringle uses a rather novel kind of entrance, which he says just suits his purpose. It certainly is easily adjustable, and nothing can change it very well when the entrance has been regulated to suit the requirements of the colony. The front board of the hive is cut off so that the entrance is fully two inches high and extends clear across the hive. Now instead of using entrance blocks a piece of tin or zinc is cut the length of the front of the hive and three or three-and-a-half inches wide, the top is turned over or rolled so as to admit of lifting up or down easily, and it works in slides on the front of the hive. Out of the bottom of the zinc is cut a strip $\frac{3}{8}$ x 2 in., midway between the two

ends. A second piece of tin or zinc is then cut $1\frac{1}{2}$ x 6 in. Through the centre of this last piece is cut a slot $\frac{1}{4}$ x 4 in. and out of one side and at the end of this piece is then cut a piece $\frac{5}{16}$ x 2 in., and out of the other corner a similar strip is cut $\frac{1}{8}$ x 2 in. A rivet is then used to fasten this piece to the larger one, so that it can be pushed backward and forward at pleasure, and it comes exactly even with the bottom of the large piece. When the sheet of tin is pushed close down to the bottom board, and the slide opened out to its fullest extent, the entrance is $\frac{5}{16}$ x 2 in., and by closing this up any width of entrance can be had, and maintained accurately. In case of robbing the slide is pushed clear to the other side, and an entrance $\frac{1}{8}$ x 2 in. is thus had, which admits of ventilation and prevents the ingress of robbers; while in case of very hot weather the whole front may be used as an entrance or for ventilation purposes, by simply lifting up the tin entrance arrangement. For wintering purposes it can also be lifted up and a full entrance given.

Mr. Pringle's bee yard is located close to the house in the orchard, and in the rear is his honey-extracting house and workshop. In this house everything is kept neat, clean and tidy, and everything about the place betokens the methodical man. Mr. P. is evidently a firm believer in the adage, "a place for everything and everything in its place," and I venture the opinion that no matter how dark the night, he could without a light, go and put his hand on almost anything about the place that might be asked for. There is no question but that Mr. P. is a great worker. Besides nearly all the work of the farm, (he keeps only a boy during the winter) to which he gives his personal attention, he has a large correspondence and does much writing for the press. I have often thought that but few people were kept much busier than myself, but I believe I can make one exception in favor of Mr. Pringle, who is constantly at work.

I have nearly forgotten to mention the little forest of basswood trees which Mr. Pringle has set during the past season, reference to which was made in one of Mr. Pringle's articles in the CANADIAN BEE JOURNAL. Besides those already set out, he has another large batch,

which he received from Mr. F. C. Matthews, of Hamilton late in the fall, bedded in the cellar for transplanting first thing in the spring. These are the most perfect young basswood trees he has ever seen, and he looks for great things from them.—F. H. M.

THE CANADIAN BEE JOURNAL

ISSUED 1ST AND 15TH OF EACH MONTH.

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

BEEON, ONTARIO, DECEMBER, 15 1890

The American Beekeeper, published by the W. T. Falconer, Mfg Co., Jamestown, N. Y., will make its appearance January 1st. Editorially it will be in charge of Mr. D. E. Merrill. Friend Newman's attention is called to the similarity of the first two words in the name of this paper, with the good old American Bee Journal.

We acknowledge the receipt of a copy of the Watertown Gazette, which contains a full description of the immense new buildings of G. B. Lewis & Co., which replace those burned last spring. It is the largest building in that city and more labor is employed by the Messrs. Lewis' than by any other firm in Watertown.

Along with two copies of the A. B. C. of Strawberry Culture, which came to hand a few days ago, was a letter of apology from our good friend A. I. Root, which, however, was entirely unnecessary. We know how easily oversights will occur in a large business. We have not had time to look into the book thoroughly, but a cursory glance reveals a mine of practical information regarding that most luscious of small fruits—the strawberry. There are little short cuts and conveniences mentioned in the book that are alone worth several times the price. Send for a copy; price by mail, 40c. Address, A. I. Root, Medina, O.

Visitors to Montreal find the printing establishment of the Family Herald and Weekly Star to be one of the most interesting sights of the town. On Publication days, Tuesday and Wednesdays, all day long there is the hum of the gigantic lightning presses turning out com-

plete copies of the Family Herald and Weekly Star at the rate of twenty-two thousand copies an hour, printed, cut and folded by automatic machinery without being touched by hand. Then there is an army of men and women operating the machines that put on the address labels, following which they are turned over to gangs of mailers preparing the papers for delivery to the post office by mammoth expresses. One of the busiest places in this country is the office of the family Herald and Weekly Star, Montreal.

Many customers are taking advantage of the big discount we are offering for present orders. The ten per cent. offer only lasts till January 1, so that order must soon be sent in to meet that date. Let us say that with the exception of foundation, all orders will be filled immediately on receipt; we are running every day and there need be no delay. Our facilities have been doubled, and we will be able to meet any reasonable demand made on us. Don't forget the date when the discount expires.

Just as we go to press we are advised by the Secretary of the O. B. K. A. that the Court House, St. Catharines, has been placed at the disposal of the Association for their use at the annual meeting January 7-8, 1891. The G. T. R. and C. P. R. will both give the usual reduced rates. A number of papers will be read, particulars of all of which have not come to hand. Dr. A. E. Harvey, of Wyoming, will present an essay on "the various kinds of bees and their respective values." Messrs. C. W. Post, D. A. Jones and others will also read papers. The foul-brood Inspector's report will be presented and will be full of interest; we hope to give a full programme in next issue.

There is great disappointment throughout the Dominion at the announcement that the publishers of the Montreal Star are too busy with their regular subscription and advertising business to allow of their completing a Christmas Star this year. These Christmas Stars are such gems that it is very generally hoped the publishers will see their way clear to continue their publication.

Catalogues Received.

A. I. Root, Medina, O.—Seventy-second edition catalogue and price list of everything in the apiary—revised to January, 1891.

E. H. Cook, Andover, Conn.—Bee-keepers' club list for 1890-1.

CONSUMPTION SURELY CURED

TO THE EDITOR—Please inform your readers that I have a positive remedy for the above named disease. By its timely use thousands of hopeless cases have been permanently cured. I shall be glad to send two bottles of my remedy **FREE** to any of your readers who have consumption if they will send me their Post Office Address. Respectfully, **T. A. SLOCUM, M. C., 188 West Adelaide St., Toronto, Ont.**

LONDON POULTRY YARDS, FOR SALE

The following Prize-winners at Detroit, Toronto and London:—

Buff Laced, Golden, Silver, White and W. C. B. Polands;

Golden Spangled, Silver Spangled, Golden Pencilled, Silver Pencilled, and Black Hamburgs;

Black African, Golden and Silver Sebrights, and Pekin Bantams.

Any one wanting show birds I can let them have winners, as I not going to exhibit at any show but the Ontario this winter. **WM. McNEILL.**

FANCIERS!

If you want to attend the best show in Canada attend

THE THIRD ANNUAL EXHIBITION
—of the—

Milton Poultry and Pet Stock
SOCIETY AT MILTON, ON

DEC. 30, 31 '90 & JAN. 1, '91

It pays \$1.00 first premium, 50 cts. second premium. It is run on Business Principles, only.

It pays its premiums in full on the last day of the show.

It has efficient and obliging officers.

It pleases its patrons. Send for premium list.

M. E. MITCHELL,

SECRETARY.

GUELPH P. AND P. S. A.

The Poultry and Pet Stock Association of Guelph have fixed the dates for their exhibition on the 2nd, 3rd, 4th and 5th of February, 1891, in the City Hall, Guelph.

HONEY.

We are prepared to accept all the No. 1 Extra Honey that is offered in exchange for supplies at regular catalogue prices, on the following terms:

Put up in 60 lb. square tins. . . . per lb. 10½c.

" " other styles of tin. . . . " 09½c.

" " barrels. " 08½c.

Freight in all cases to be prepaid to Beeton. We will allow 30 cents each for 60 lb. square tins. No allowance for any other style of package. Dark honey will be quoted for on submission of samples.

The D. A. Jones Co. Ltd.
BEETON ONT.

BEESWAX WANTED

We will pay 30 cts cash or 35 cts in trade for good pure Beeswax delivered at Stratford (sediment deducted, if any).

The best packed hives made for wintering bees outdoors. 60 lb. tins neatly boxed. Shipping Crates for Comb Honey or anything required by Bee-keepers.

A few colonies of Hybrid Bees for Sale at \$5.00 per colony.

Send for prices, Address,

J. & E. H. MYERS,

MENTION THIS JOURNAL

Box 94, Stratford, Ont.

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

* * Whenever any item of interest to the poultry fraternity occurs in your vicinity, jot it down and send it to us. An envelope marked "Printers Copy" will carry it for one cent.

I CURE FITS! THOUSANDS OF BOTTLES GIVEN AWAY YEARLY.

When I say **Cure** I do not mean merely to stop them for a time, and then have them return again. I MEAN A RADICAL CURE. I have made the disease of **Fits, Epilepsy or Falling Sickness** a life-long study. I warrant my remedy to **Cure** the worst cases. Because others have failed is no reason for not now receiving a cure. Send at once for a treatise and a **Free Bottle of my Infallible Remedy.** Give Express and Post Office. It costs you nothing for a trial, and it will cure you. Address:—**H. G. ROOT, M.C., Branch Office, 188 WEST ADELAIDE STREET, TORONTO.**

EXCHANGE AND MART

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

BEES

WANTED.—A 1 Extracted and Comb Honey. State how put up, if ready for shipment, quantity and lowest cash price per pound delivered. J. D. LUND J. BERRY, Brome Corners, Que.

GOING TO MANITOBA—79 colonies, chaff hives, frames 13 1/2 x 10 deep, 59 empty hives, 600 frames of comb, empty frames, extractor bands, etc. \$500 cash here. Also brooder plant for 600 chickens, heater large enough for 2000 chickens \$60 cash here. POSTMASTER, Cumminsville, Ont.

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

2,500 LBS. HONEY for sale, good quality, light color, from 10c per lb. down to 8c, according to quantity. Also about 300 lbs. comb honey, quality first-class, for which I would like an offer. GEO. WOOD, Monticello P. O., Dufferin Co., Ont.

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

A GOOD CHANCE FOR

A LIVE POULTRY MAN

St. George Poultry Yard!
ANGUS, - - ONT.

My connection with the Canadian Poultry Journal makes it necessary for me to offer my well known Poultry Yards and entire stock and tool with for sale, consisting of Breeding pens of A 1 quality in K. Brahmas, Barred P. Rocks, and L. Wyandottes, Black Minorcas, White P. Rocks, S. C. W. Leghorns, R. C. W. Leghorns, R. O. B. L. horns, Golden Wyandottes, B. B. R. & G. Bantams. 200 capacity incubator, Brooder, and all necessary appliances, for carrying on a first class Poultry Farm; also 9 hives of Bees, hives frames and other necessary things for the apiary Good Dwelling House, 6 rooms, Summer kitchen and woodshed, good water under cover, milk house, dry and frost proof cellar, first class poultry house and pens complete and in the best of condition; tools and garden implements, good young orchard, soil splendid for poultry raising, excellent for small fruits and strawberries; very abundant bee pasture continuing until fall. 3 minutes walk from station. For particulars address

W. C. G. PETER,
Angus, Ont.

FOR SALE or EXCHANGE—10 Simplicity Langstroth hive bodies in use one season, B. space at the top. Will exchange for 10 framed L. hives, or sell very cheap. PHILIP H. H. MILTON, Paris, Ont.

GRAND clearing sale of Breeding Pens, Light Brahmas, Dark Brahmas, Buff Cochins, P. Rocks, White Leghorns, Langshans and P. R. Games; also three pairs of S. B. Polish Cockerels, two L. Brahma Cocks, two P. Rock Cocks, two P. Rock Cockerels, two Langshang Co. ks. one Dark Brahma Cock, one B. Minorca Cock, two B. A. Bantams, trio Asesbury Ducks, two Pekin Drakes, Wilson Bone Hill, Webster Clover Cutter, Hot water incubator, 50 exhibition coops, B. W. B. S. ALL, Belkirk, Ont.

POULTRY

A F. W. Silver Laced Wyandotte Cockerels for sale from American prize winning birds. Eg hatching in season. W. J. O'NEAL, Paris, On

FOR SALE—A few Fine Huff Cochins Cockerels hens and pullets, cheap to make room. Write quick and procure the best. Address C. D. FLEMING, Chatham

FOR SALE—A few very fine, early hatched, well grown Light Brahmas, Cockerels from \$3 to \$5 each, and pairs from \$5 to \$7. All O. K. stock. These are bargains. W. C. G. PETERS, Angus, Ont.

FOR SALE—We have mated, but must sell for the want of room one S. C. Brown Leghorn Cockerel, 3 hens and 3 pullets, good ones, and will produce good stock. Price \$6, half value. DEWAR & MITCHELL, Milton, Ont

FOR SALE—My entire stock of Black Minorcas, 13 pullets and 2 Cockerels. Guarantee every pullet to score from 94 to 96; if one Cockerel will score 95, he took 1st at Toronto Exhibition. Pullets are all laying. \$95 will buy the lot. W. COLE, Brampton.

FOR SALE—Thirty Mammoth Bronze Turkeys bred from stock imported this season. Mammoth Light and Dark Cochins, Silver Grey and White Dorkings, bred from imported stock. Come and judge for yourselves. JOSEPH KINSEY, Doon, Ont.

FOR SALE—4 Light Brahma Cocks and Hens, (yearlings), 25 Cockerels and Pullets; a lot of Pekin Ducks in pairs and trios, Brown and White Leghorns, old and young, cheap if taken at once. Also a pair of leoparded rabbits. JOHN COLE, 151 Hughson st. Hamilton,

GREAT CHANCE.—A pen of Black Javas, Cock, three Hens, the same I exhibited at Toronto. Five dollars buys them. Cock and six Houdan Hens all first-class, for eight dollars. A few Pullets and Cockerels for sale. A. HOBBS, Bowmanville.

BLACK LEGHORNS—cock and three hens—scored at Owen Sound 1890, J. Y. Bicknell, judge; cock 93, hen 91 hen 93 1/2, pullet 95 1/2. Took all the premiums and specials at the Industrial, 1890. Her first cock W. H. C. Price, \$12. E. J. Otter, 90 De Grassi street, Toronto.

R. C. W. LEGHORNS—two trios—scored at Owen Sound, 1890, J. Y. Bicknell, judge; cockerel 93, pullet 94, pullet 93 1/2, on 93 1/2. Was first on pullet and second on hen. The other cock I have never had score, but he is good. Price per trio, \$5. E. J. Otter 90 De Grassi street, Toronto.

FOR SALE—One breeding pen Light Brahma cock sire by imported "Fidelity," pronounced by Felch at Owen Sound show, 1888, to be the best bird in Canada; 2 Hens "Victoria" and "Strain," both winners; 12 Pullets, good ones. Price \$10 or would exchange for equally a good Dark Brahma breeding pen. DEWAR & MITCHELL, Milton, Ont.

FOR SALE.—A number of White, Black and Brown Leghorn, Cockerels, all of Black Minorca Cockerels and also Pullets of each kind. One White Leghorn Cock scored 95; as Cockerel two years old. Will sell single birds, pairs or trios, all A 1 birds. JOHN PLETTSCH, Box 26, Shake-pear, Ont.

AS I only intend in the future to breed Dark Brahmas and K. S. Comb White Leghorns cheap. See lists below with scores, &c. Parties wanting new blood in Dark Brahmas out of my grand imported cock and mates should write for prices. A few for sale now. E. J. Otter, 90 De Grassi street, Toronto.

SOME very fine Scotch Collie Pups, from one of I. K. Felch's litters cheap; also Light and Dark Brahmas, Plymouth Rocks, Houdans, Langshans, Cochins, Black Spanish, Leghorns, Wyandottes, Hamburg, Black Red Game Bantams, Ducks, Geese, &c. I won 86 firsts, 97 second prizes at shows this fall. A. C. H. LUXTON, Hamilton P. O., Ont.

FOR SALE or exchange—Three grand White Minorca Cockerels, a year old cock, a id some splendid Pullets for sale cheap. Have won everywhere shown. Would exchange for some good Black Minorca hens or pullets. White and Black Minorca Eggs in season, \$3 per 12, \$5 per 26. Write for particulars, THOS. A. DUFF, 81 Fuller st, Toronto, Ont.

ADVERTISEMENTS.

ORGANIZED 1874.

INCORPORATED 1879.

POULTRY ASSOCIATION
OF ONTARIO

17th ANNUAL ♦ EXHIBITION 17th

AT BOWMANVILLE, CAN.

JAN. 5, 6, 7, 8 & 9, 1891

ENTRIES CLOSE JANUARY 3RD.

J. J. MASON, Pres.

J. M. HERN, Sec'y.

The oldest—holding the Largest Number of Annual Exhibitions of any Association in America. Experienced Officers. Liberal Premiums. Four Judges. The Government Grant enables us to hold one of the most successful exhibitions in America. For Premium Lists, etc., address the Secretary.

DO YOU KNOW THAT

The American Apiculturist

WILL BE MAILED FROM NOV. 1st, 1890, TILL JAN. 1st, 1892,

And our Book on "Queen Raising—Thirty Years Among the Bees," also the "Beekeepers' Directory," for the small sum of \$1.25? It is so, there are 350 pages of solid, practical facts on Bee Culture, at a cost of less than one third of a cent per page. Send me copy of Apiculturist free.

HENRY ALLEY, Wenhem, Ont



W. C. G. PETER,

IMPORTER AND BREEDER OF

WYANDOTTES

Rose Comb Brown, and White Leghorns,

Sing'e Comb White and Brown Leghorns, L' Brahmas, Plymouth Rocks, Pile Games, B. B. R. and S. D. W. Game Bantams.

EGGS \$3 PER SITTING, OR 2 SITTINGS FOR \$5.

Send for Circular.

ST GEORGE POULTRY YARDS, ANGUS, ONT.

CARNOLIAN -- QUEENS.

W. A. CHRYSLER,

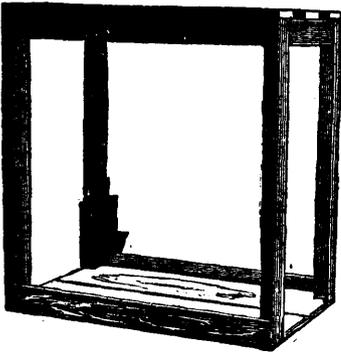
MANUFACTURER OF

BEE SUPPLIES.

Single and Double Walled Hives, Sections, Shipping Crates, Feeders Etc. Price-lists free. Box 450, CHATHAM, ONT.

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

* * * Whenever any item of interest to the poultry fraternity occurs in your vicinity, for it down and send it to us. An envelope marked "Printers Copy" will carry it for one cent.



SHIPPING - COOPS.

For Exhibition and Sale Purposes.

Save money in express charges by buying light, we made coops—weigh only 5½ lbs.

We keep in stock one size only, 20 in. x 13 in. x 20 in for pairs or light trios.

PRICES MADE UP.

	Each	10	25	100
Skeletons, only,	30c.	\$2.75	\$4.2	\$22.50
With Canvas,	40c.	3.75	8.5	30.00

PRICE IN FLAT.

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

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

OTHER SIZES.

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

DRINKING FOUNTAINS.

For shipping and exhibition coops, to hold one pint water.	Each	10	25	100
Price,	15c.	\$1.40	\$5.25	\$12.00

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



MAKE YOUR HENS

Earn their living by scratching for it.

—TRY—

Christie's Improved Feeder

It gives the fowl constant exercise and saves you the trouble of feeding them—they feed themselves automatically.

	1 qt.	2 qt.
Each, by mail,	\$.50	\$.60
Per doz.,	4.00	4.80

The D. A. JONES CO, Ld.
BEETON, ONT.

Niagara River and Grand River POULTRY YARD.

Mammoth Lt. Brahmas & Barred P. Rocks.

STILL to the Front, always winning first place in the sharpest competition, beating the birds that won at Toronto, London, Barrie, Detroit, Brantford, Markham. So buy your eggs and stock from where the prize winners spring from. Eggs from our prize winners \$2.50 per 13, \$4 per 26. Send for our Club circular.

AKERLY & CLARK.
DUNNVILLE

ATTENTION FANCIERS!

I shall soon import from England a large number of

BUFF LEGHORNS

—AND—

Indian Games.

Orders received until Nov. 20th for imported birds. Buff Leghorns are all the rage. Send for prices. I have some fine BLACK LEGHORNS for sale.

A. W. GARDNER.
Box 1293, Springfield, Mass.

Prices to suit the Times.

A FEW pairs of Silver Laced Wyandottes and a few White and Black Leghorns 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 or \$

WM. MOORE,

MENTION THIS JOURNAL Box 462 LONDON, ONT

GLEN VILLA POULTRY YARDS.

A. R. MCKINLAY

IMPORTER AND BREEDER OF

HIGH-CLASS POULTRY.

Autocrat strain of Light Brahmas, White Cochins, White Plymouth Rocks, Single and Pea-comb Barred Plymouth Rocks, W. F. Black Spanish, Black Minorcas and Buff Pekin Bantams. Eggs, \$3.00 per 13, & 5.00 per 26. BOX 18, DEER PARK, ONT.

BROWN LEGHORNS AND BLACK MINORCAS.

Will sell a few sittings of Eggs from my grand breeding pens this spring. My Brown Leghorns are second to none in Canada. At the Owen Sound Show I won every first and second prize given, winning eight first and second prizes, making a clean sweep. I have kept the honors at Owen Sound for 5 years in succession on Brown Leghorns. My Minorcas are grand birds. In looking over the prize lists this winter I find I had the highest scoring Minorcas in Canada (93 to 98). Eggs from each variety at \$2 per 15 or \$3 per 30 and will give satisfaction. Brown Leghorns, Benner's strain. Black Minorcas, Abbot Bros' strain from imported stock.

Address
J. C. BENNER, Owen Sound
Care Polson Iron Works MENTION THIS JOURNAL.

ADVERTISEMENTS.

WILL. A. LANE, FOR TRUE BLUE

Turnerville, --- --- Ont.

—BREEDER OF HIGHEST TYPE—

BRONZE TURKEYS

Write for prices of young birds in the fall.

CARNIOLAN - QUEENS,

From Pure and Genuine Mollers will be bred the remainder of the season at

SPECIAL PRICES.

Send for Special Circular to

JOHN ANDREWS,

Ju y 25th, 1900. Patten's Mill, Wash Co., N.Y.

:- CARNIOLANS :-

See our advertisement in Aug. 1 No., of this paper.

J. B. MASON
MECHANIC FALLS, ME.

THE "REVIEW."

SOME OF THE TOPICS IT HAS DISCUSSED.

"The Production of Comb Honey," was the special topic of the April number.
"How to Raise Extracted Honey," was discussed in the May issue.
"Comforts and Conveniences for the Apiary," were named and described in June.
"From the Hive to the Honey Market," was the topic of the July issue.
"Marketing," Will be the Special topic of the August number.
The "Review" is Published monthly, at 50 cts. a year. Send for samples (free) and see if you can afford to be without it.
Address **Bee-Keepers' Review,**
W. Z. HUTCHINSON, Ed. & Prop. Flint, Mich.

MARKETING DEPARTMENT.

Honey Tins.

We can ship with reasonable promptness all orders for honey tins, at the following prices:

No lbs.	Per 1000	Per 500	Per 100	Less each
10.....	\$100 00	\$55 00	\$11 50	.12
.....	65 00	34 00	7 00	.07½
.....	50 00	26 00	5 50	.06
.....	30 00	16 00	3 25	.03½
.....	26 00	13 50	2 75	.03
.....	12 50	6 50	1 40	.01½
.....	7 50	4 00	1 00	.01

Pressed screw tops and screw caps for the above tins:

No. lbs.	Per 100	Per 50	Per 100
5 and 2½	\$23 00	\$12 50	\$2 75
1 and ½	15 00	8 00	1 75

Most of the leading beekeepers admit that for shipping honey in bulk, the 60 pound tin, encased in wood, is the longest and best article to be obtained for the purpose. The prices are:

60 pound Tins, encased in wood, each...	\$ 50
" " " " " " " " " " " "	per 10.. 4 80
" " " " " " " " " " " "	per 25.. 11 25
" " " " " " " " " " " "	per 100.. 42 00

Lithographed Honey Labels.

Every honey producer knows the advantages obtainable from having his name on each package, and this series of honey labels are desirable, being handsome, bright and attractive. Directions for liquifying are given on a blank in which the vendor's name is to be printed. They are varnished, and a damp

sponge will remove all dirt. Samples of all our labels sent for 5 cts.

	Per 1000	Per 500	Per 100
5 pound labels.....	\$8 00	\$4 25	\$.85
2½ " " " " " " " " " " " "	5 00	2 75	.60
1 " " " " " " " " " " " "	3 50	2 00	.45
½ " " " " " " " " " " " "	1 75	1 15	.25
¼ " " " " " " " " " " " "	1 75	1 15	.25
Labels for tops of tins	90	55	.13
Printing name and address, first 100.....			.30
Each subsequent 100 up to 500.....			.12
Printing name and address, per 500.....			.75
" " " " " " " " " " " "			1 25

Shipping Crates for Sections.

Sample crates, glass included, made up holding 12 or 24 sections 3½x3½ or 4½x1½ each.....	\$ 20
Per 10.....	1 70
IN FLAT HOLDING 12 SECTIONS.	
Without glass, per 10.....	\$1 00
" " " " " " " " " " " "	2 25
" " " " " " " " " " " "	8 00
IN FLAT HOLDING 24 SECTIONS.	
Without glass, per 10.....	\$ 1 50
" " " " " " " " " " " "	3 25
" " " " " " " " " " " "	12 00
We keep in stock crates that hold	
12 Sections.....	3½x1½x8
12 " " " " " " " " " " " "	4½x1½x8
24 " " " " " " " " " " " "	3½x4½x8
24 " " " " " " " " " " " "	4½x1½x8

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