

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

VOL. IV, NO. 35

1888

NOVEMBER 21

PUBLISHED EXCLUSIVELY IN THE INTERESTS OF THE HONEY PRODUCER



JOURNAL

THE FIRST \$ WEEKLY IN THE WORLD

ONE DOLLAR PER YEAR

THE GREATEST POSSIBLE GOOD TO THE GREATEST POSSIBLE NUMBER

PUBLISHED BY  
The W. A. Jones & Co. Ltd  
MONTREAL, ONT.

ADVERTISEMENTS

WE CLUB

The Canadian Bee Journal and.....		
Cook's Manual, cloth.....	\$2 25	\$2 00
A B C in Bee Culture, cloth.....	2 25	2 00
Quinby's New Bee-Keeping (cloth)	2 50	2 25
Alley's Handy Book (cloth).....	2 50	2 25
Langstroth on the HoneyBee (clh)	3 00	2 75
Heddon's Success in Bee Culture	1 50	1 40
"A year among the Bees," by Dr		
C. C. Miller.....	1 75	1 60
A Bird's eye view of Bee-keeping		
by Rev. W. F. Clarke.....	1 25	1 15

Books for Bee-Keepers.

We have prepared a series of pamphlets on special subjects relating to bee-culture, containing the best thoughts of our most practical bee-keepers, which we offer at very low rates, as follows:

1. QUEENS, And How to Introduce Them .10
  2. BEE-HOUSES, and how to build them, .15
  3. WINTERING, and preparations therefor .15
  4. BEE-KEEPERS' DICTIONARY, containing the proper definition of the special terms used in Bee-Keeping... .25
  5. FOUL BROOD, its cause and cure..... .10
- Or the whole five books, post paid, for..... .50

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

BEE-KEEPERS' LIBRARY.

We keep in stock constantly and can send by mail post-paid the following:—

- "A YEAR AMONG THE BEES," by Dr. C. C. Miller Price, 75c.
- A. B. C. in BEE CULTURE by A. I. Root. Price, cloth, \$1.25; paper, \$1.00.
- QUINBY'S NEW BEEKEEPING, by L. C. Root, Price in cloth, \$1.50.
- BEE-KEEPERS' HANDY BOOK, by Henry Alley. Price in cloth, \$1.50.
- PRODUCTION OF COMB HONEY, by W Z Hutchinson. Paper, price, 25c.
- THE HIVE AND HONEY BEE, by Rev. L. L. Langs troth. Price, in cloth, \$2.00.
- A BIRD'S-EYE VIEW OF BEE-KEEPING, by Rev. W.F. Clarke. Price 25c
- SUCCESS IN BEE CULTURE as practised and advised by James Heddon—price in paper cover, 50 cents.
- BEEKEEPERS' GUIDE OR MANUAL OF THE APIARY, by Prof. A. J. Cook. Price, in cloth, \$1.25.
- FOUL BROOD, ITS MANAGEMENT AND CURE by D. A. Jones. Price, 11c. by mail; 10c. otherwise.
- A. B. C. IN CARP CULTURE, by A I. Root, in paper 50c.
- HONEY, some reasons why it should be eaten, by Allen Pringle. This is in the shape of a leaflet (4 pages) for free distribution amongst prospective customers Price, with name and address, per 1000, 3.25; per 500, \$2.00, per 250, \$1.25; per 100, 80c. With place for name and address left blank, per 1000, \$2.75; per 500, \$1.70; per 250, \$1.00; per 100, 50c.

The D. A. JONES Co., LD., Beeton.

Barnes' Foot Power Machinery

See advertisement on another page. We have just arranged for the sale of these machines, and we can quote a price F.O.B. cars at Toronto (duty and freight paid thereto). On application we will forward catalogue and pricelist free.

THE D. A. JONES Co., LTD. Beeton, Ont.

PUBLISHERS' NOTES.

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

Send us the names of three subscribers with \$3 in cash and receive as a premium one C. B. I. Binder. Send postal card for sample of leaflet, "Honey, some reasons why it should be eaten."

THE CANADIAN BEE 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.

ERRORS.—We make them: so does every one, and we will cheerfully correct them if you write us. Try to write us good naturedly, but if you cannot, then write to us anyway. Do not complain to any one else or let it pass. We want an early opportunity to make right any injustice we may do.

We can supply Binders for the JOURNAL 55 cents each, post paid, with name printed on the back in Gold letters.

Subscription Price, \$1.00 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, \$1.00.

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.

ADVERTISING RATES.

All advertisements will be inserted at the following rates

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.

	STANDING ADVERTISEMENTS.		
	3 MOS.	6 MOS.	12 MOS.
6 lines and under.....	2.50	4.00	\$10.00
One inch.....	\$4.00	\$6.00	15.00
Two inches.....	5.50	9.20	19.00
Three inches.....	7.00	12.00	25.00
Four inches.....	9.00	15.00	30.00
Six inches.....	12.00	19.00	40.00
Eight inches.....	15.00	25.00	

STRICTLY CASH IN ADVANCE

Contract advertisements may be changed to suit the seasons. Transient advertisements inserted till forbid and charged accordingly.

CLUBBING RATES

THE CANADIAN BEE JOURNAL		\$1.75
AND "Gleanings," semi-monthly.....		1.75
"American Bee Journal," weekly.....		1.75
"American Apiculturist," monthly.....		1.40
"Bee-Keepers' Magazine," monthly.....		1.40
"Bee-Keepers' Guide," monthly.....		1.00
"Rays of Light".....		1.25
"The Bee-tive".....		1.40
"Beekeepers' Review".....		1.40
"Beekeepers' Advance".....		1.80

TO CONTRIBUTORS

Communications on any subject of interest to the Bee-keeping fraternity are always welcome, and are solicited. Beginners will find our Query Department of much value. All questions will be answered by thorough practical men. Questions solicited.

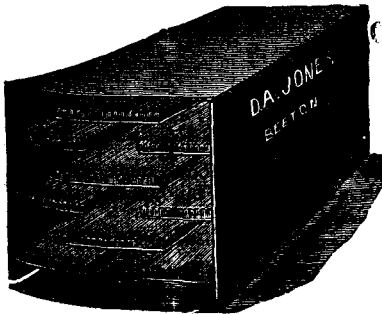
When sending in anything intended for the JOURNAL do not mix it up with a business communication. Use different sheets of paper. Both may, however be enclosed in the same envelope.

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.

# TABLE OF CONTENTS.

	PAGE.
Bee-keeping, Practical.....	688
Races of Bees.....	688
Albino.....	688
Black.....	688
Carniolans.....	689
Cyprians.....	689
Hybrids.....	690
Italians.....	688
Syrrians.....	689
The Bees to Buy.....	691
Candied Stores and Marketing Honey.....	692
Chatty Letter from Dr. Mason.....	686
Editorial.....	685
Hives, Straw.....	687
Mr. McFadden Again.....	691
Observations.....	685
Stores, Unsealed.....	694

## FEEDERS.



FOR PRICES SEE OUR CATALOGUE,  
WHICH WILL BE SENT FREE  
TO ANY ADDRESS.

THE D. A. JONES CO., LD.  
BEETON, ONT.

BUY ONLY THE  
GENUINE

# BELL

ORGANS - PIANOS

## Muth's Honey Extractor.

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

CHAS. F. MUTH & SON.

Cor., Freeman & Central Avenues, Cincinnati

## LOOK HERE !

Nickel plated pen and pencil stamp, with name  
30c.; Nickel plated stamp with name on, 15c.; Your name in rubber  
or any of the above sent post paid on receipt of price.  
Clubs amounting to \$1.20 sent for \$1. Boys and girls  
can make money canvassing for these stamps. Every  
school boy and girl should have a pen and pencil  
stamp. It contains a pen, lead pencil and stamp for  
printing your name on your books, etc. Write your  
name plainly. Remember you have no duty to pay  
on these stamps when you deal with us.

Gem Rubber Stamp Co.,  
MALAKOFF, ONT

## 9 Cords in 10 HOURS



**BY ONE MAN.** Greatly improved. Also **TOOL**  
for binding saws whereby those least experienced can-  
not make a mistake. Sent free with machine. To  
others, for common cross-cut saws, by Mail \$5.00. Hun-  
dreds have saved 5 to 9 CORDS daily. We want all who  
burn wood and all interested in the timber business to  
write for our Illustrated Free Catalogue. We have ex-  
actly what you want, the greatest labor-saver and best-  
selling tool now on earth. First order from your vicini-  
ty secures agency. No duty to pay. We manufacture  
in Canada, FOLDING SAWING MACHINE CO., 308 to 311  
So. Canal Street, Chicago, U. S. A.

## SALESMEN WANTED.

**SALARY AND EXPENSES PAID, OR LIBERAL**  
Commissions as representative chooses. Outfit  
free. Permanent positions guaranteed. Experience  
unnecessary. Special advantages to local men who  
devote part time.

L. P. THURSTON & CO.,  
Empire Nurseries, Rochester, N. Y.

## VENTILATION.

If you are in doubt as to whether your bee-cellar  
needs ventilation, or as to the kind or amount of ven-  
tilation needed, read

THE BEE-KEEPERS'  
**REVIEW.**

It gives the views and experience of the leading bee  
keepers.

The November number will discuss "Moisture in  
Bee-cellar." Correspondence upon this topic is  
solicited. All articles that we insert will be paid for.  
Please read the October number before writing upon  
"Moisture."

Price of the REVIEW 50 cents a year. Samples free.  
Back numbers can be furnished. The REVIEW and  
THE PRODUCTION OF COMB HONEY for 65 cents.  
Address

W. Z. HUTCHINSON;  
613 Wood Street, Flint, Mich.

BEE-KEEPERS'

# PRINTING.

We make a specialty of Apiarian Printing, and have unequalled facilities for Illustrated

## Catalogue and Label Work.

Note these figures, which include printing.

	500	1000
Note Heads, good quality.....	\$1 15	\$1 90
"    linen.....	1 25	2 00
Letter Heads, Superfine.....	1 75	2 50
"    Linen.....	2 00	3 25
Envelopes, business size, No. 7,		
white.....	1 15	2 00
"    Extra quality.....	1 35	2 25
Business Cards.....	1 50	2 50
Shipping Tags, 40c., 45c. and 50c. per 100.		

Our new book of labels contains nearly 100 specimens of elegant honey labels. Write for prices for any printing required.

THE CANADIAN BEE JOURNAL,

7

BEETON.

## 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 they will be inserted in our regular advertising columns. This column is **especially** intended for those who have bees or other goods for exchange for something else, and for the purpose of advertising bees, honey, etc. for sale. Cash must accompany advt.

**\$1.00** Will secure you by mail, post paid, 250 Noteheads and 250 Envelopes with your name, business and address printed on the corner of each. Send in your order now. **THE D. A. JONES CO.,** Beeton, Ont.

**HONEY.**—We can take all that offers in exchange for supplies, at prices found in another advertisement in this issue. **THE D. A. JONES CO.,** Beeton, Ont.

## SPLENDID OPPORTUNITY.

**FOR SALE** in Culloden, County of Oxford, a comfortable Dwelling, Outbuildings and four-fifths of an acre of splendid land, planted with the choicest fruit. In connection there are 60 Hives of Italian Bees with plenty of stores to winter, and everything else for carrying on Bee-keeping. All for Six Hundred Dollars (\$600). Owner leaving, and must sell. One of the finest districts for Bee-keeping in Ontario, situate two miles from Brownsville station, Michigan Central Railroad. Come and see, or apply to

**JOHN A. SAIRNE,**  
Culloden, Ont

# WINTERING

—AND—

## PREPARATIONS THEREFOR.

A small but exhaustive and practical treatise on this important subject.

**POSTPAID 15 CENTS.**

**THE D. A. JONES CO., Ld.**  
Beeton, Ont.

**WANTED**—all your loose magazines, periodicals, and journals to bind, at the **BINDERY,** BEETON, Ont.

## THE AMERICAN APICULTURIST

Will be mailed from Oct. 1 1888 to Jan 1 1890 for 75 cts. The editor has had 30 years experience in rearing Queens and practical Bee-keeping, and now proposes to give the result of that long experience in a series of articles in the **APICULTURIST**. The first Article will appear in the Nov. 1888 issue. The details of a new method of rearing Queens in full colonies, without making the colony queenless, will be given to each subscriber. Send for sample copy. Address **AMERICAN APICULTURIST, Wenham, Mass.**

## NEARLY 30 TONS OF DADANT'S FOUNDATION SOLD IN 1887.

IT IS KEPT FOR SALE BY MESSRS.

- T. G. NEWMAN, & SON, Chicago, Ill.
  - C. F. MUTH, Cincinnati, O.
  - JAMES HEDDON, Dowagiac, Mich.
  - F. L. DOUGHERTY, Indianapolis, Ind.
  - CHAS. H. GREEN, Berlin, Wis.
  - CHAS. HERTEL, Jr., Freeburg, Ill.
  - E. L. ARMSTRONG, Jerseyville, Ill.
  - E. KRETCHMER, Coburg, Iowa.
  - M. J. DICKASON, Hiawatha, Kans.
  - ED. R. NEWCOMB, Pleasant Valley, N.Y.
  - J. W. PORTER, Charlottesville, Va.
  - I. B. MASON & SONS, Mechanic Falls, Me.
  - Dr. G. L. TINKER, New Philadelphia, O.
  - D. A. FULLER, Cherry Valley, Ills.
  - JOS. NYSEWANDER, Des Moines, Iowa.
  - G. B. LEWIS & CO., Watertown, Wis.
  - PAUL L. VIALON, Bayou Goula, La.
  - B. J. MILLER & CO., Nappanee, Ind.
  - J. MATTOON and W. J. STRATTON, Atwater, Goodell and Woodworth Mfg. Co., Rock Falls, Ills.
  - J. A. ROBERTS, Edgar, Neb.
  - OLIVER FORSTER, Mt. Vernon, Iowa.
  - GEORGE E. HILTON, Fremont, Mich.
  - J. M. CLARK & CO., 1409 15th St., Denver, Col.
  - E. L. GOULD & Co., Brantford, Ont.
- and numbers of other dealers. Write for **SAMPLES FREE** and Price List of Bee Supplies. **We guarantee every inch of our Foundation equal to sample in every respect.** Everyone who buys it is pleased with it.

**CHAS. DADANT & SON,**  
HAMILTON, Hancock Co., Ill.



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

Vol. IV. No. 35

BEETON, ONT., NOV. 21, 1888.

WHOLE No. 191

EDITORIAL.

ANOTHER bee paper—the "Queen Breeders Journal" will make its appearance in January at Marlboro, Mass. Mr. E. L. Pratt is the publisher. The new journal is to be a 16 pp. monthly at 50 cents per annum.

Typhoid has laid low two of the children of Mr. G. A. Deadman, Brussels, and he and the entire household were stricken with the fever but have recovered. Our sympathy is with our brother in his affliction.

Dr. Miller writes:—In the last C.B.J. my "baby" is inquired about. I suppose that refers to the matter of legislation for bee-keepers. I may say that although making little noise the "baby" is alive and well, and if not making a rapid growth it is still making a healthy growth. Some of those who attempted to strangle it are now among its friends, and I know of no former friend who has gone over to the stranglers." *The baby* Observer spoke of was the footnote to articles showing the number put into and taken out of winter quarters with the total on hand at writing.

In return for the names of ten bee-keepers sent us on a postal, we will send the "Bee-Keepers' Dictionary" value 25 cents.

OBSERVATIONS.

IN running through the back numbers of the BEE JOURNAL, I find one article which I seem to have overlooked, or read carelessly when I was going over the issue of Oct. 17. I refer to the article of Dr. Miller headed "Buying A Location." I smiled a great broad-shouldered smile as I read it over the second time, and the thought came to my mind that the doctor's friend was not a resident of a Scott act county, or he would never have talked as he did. Local option in my estimation is a fraud of the worst kind. Just picture to yourself the happy bee-man, in a local option bee-keeping township! How happy he looks, watch him set down nights in the bosom of his family, with paper and pencil, and figure up the pounds of honey he will have to sell in the fall; how he gloats over the wealth he is going to accumulate out of the district he owns—because he paid for it. Spring time comes, and the dear little pets that are to garner in the monopoly controlled by our friend are taken to the centre of the district and shown the lines with which they must go to work and joyfully they set to work.

Peradventure our friend is located on the out edge of the local option township, and in the adjoining township is a man who is untrammelled by law, as to where his pets shall wander, and perhaps just over across the border may be found a lovely field of alsike—the property of our local option tax-paying friend. Some pleasant evening our "free" bee-keeper carries his hundred colonies over to the edge of the local-option district and calling out all his bees to the entrance of the hive thus addresses them, "my

pets, I have brought you here so that you may have a view of the promised land, the land flowing with milk and honey, but according to law you mustn't go into it. Now, work as close to the edge of it as possible, and if you should happen to make a mistake and get on the wrong side of the line, why just take what you gather and carry it to friend 'local option's' hives; you have no right to it. Now I leave it with you." And lo, when fall comes that man's hives are full, (because they are close to the good pasture) while the neighbors are tolerably light. And the bee-keeper didn't do any wrong who planted his bees close to the boundary line, and thus will "local option" work. But this is a rather extended observation.

OBSERVER.

For the Canadian Bee Journal.

#### A CHATTY LETTER FROM DR. MASON.

**M**R. EDITOR: If you could have seen me and heard me laugh when I read the first line on page 653 last C.B.J. you might have been sure I never had and am not likely to have dyspepsia. "Dr. C. C. Miller, Wagon Works, O.," is what the line says and now I can hardly tell what made me laugh, but I think I laughed at your "verdancy." Perhaps, though, it was my "ignorance" that I was laughing at, as our children sometimes say of each other. It may be possible that Dr. Miller has moved to Wagon Works and I have not found it out, but I don't believe it.

Now, let me tell you again—and don't you forget it—that our post-office is Auburndale, but our R.R. depots, express offices, telegraph offices and everything else in that line are known as Wagon Works; and anyone going from Detroit to Toledo on the Michigan Central or the Lake Shore & Michigan Southern, or going to Toledo on the Flint & Pere Marquette R.R.'s passes through Wagon Works and within a few rods of our post-office, Auburndale. It is six miles to the business part of Toledo and only two miles from Wagon Works by street car. The very idea of Dr. Miller moving to Wagon Works and you know it before I do. It would not be healthy for the Dr. to cut up any caper like that.

And now, while I am at it, I want to give you "free gratis and for nothing" some of my mind. I've been trying for months to get mad at you because I have to get out my knife to cut open some of the back leaves of the C.B.J. every week but I have held on and could stand it still longer, but someone borrowed my knife recently and I had to buy a new one, and it opens so hard that—that—that—well I hardly know what to say, but I have received an invitation from both the

President and the Secretary of the Michigan Bee-keeper's Society to attend the next meeting at Jackson and if you'll be there I will show you my knife, and then you'll see whether it is a funny job to have to open it every week. "So there now," how do you like that?

Another thing about the C.B.J., I don't like a bit. It has too many Amateur Experts, Observers, C.W.L.'s, R.W.C.'s, etc., etc., and we don't know where they live either. If your correspondents don't want us to know who they are what do they write for? Are they ashamed of their productions? They ought not to be, and it is lots more satisfaction to the reader to know who the writer is.

I am pleased to see you urging the O.B.K.A.—does that mean Ohio Bee-keeper's Association—and all county societies to make it a point to attend, in a body, the next meeting of the International Bee-Association, at Brantford. It has looked as though you Canucks were a little afraid of us Yanks. Law sakes, we won't hurt ye; and to show you that we are not afraid of you a goodly number of us will try and be on hand at Brantford next year. I am anticipating a grand, good meeting and a good deal of happiness in meeting and making the personal acquaintance of such Canadians as Messrs. McKnight, Corniel, Pringle and a host of others, and to meet again and renew the acquaintance of such men as Messrs. Pettit, Hall, Emigh, Clarke, Jones, Macpherson, Holterman and many on this side of the line, as well as some from the old countries. Your suggestions are not premature, and the officers of the Association are already at work and will try to do their share in making the gathering a success. Should any one accompany the aparian exhibit of the United States or Canada to the World's exposition at Paris next year, an effort will be made to secure some of the novelties, etc., used in bee-keeping in the old world and have them on exhibition at the Brantford meeting; and, being so near Niagara Falls, only 40 miles I believe, perhaps we shall want to take a look at the grand sight.

On page 625, in speaking of the report of the meeting of the Association at Columbus sent you by the editor of the *American Bee Journal*, you say, "The report is written by Bro. W. Z. Hutchinson, and had we been there in person we could not have done the work with the same justice." Well, I guess you are about right, for at every meeting where I have seen you, you have been too intent on some nonsensical mischief to attend strictly to business, but just remember who will be in the chair at Brantford and prepare yourself to behave as you ought to. Now, don't you dare talk back.

Although friend Hutchinson made such a good report, "the half is not told." The address of Mr. T. G. Newman on the Bee-keepers' Union, of which a brief but good synopsis is given, was worth going a long way to hear. He never does things by halves, and it was a rare treat to listen to Prof. Cook's talk on the work done and to be done at the Michigan college, by him, for the benefit of the bee-keeping world; and to hear Drs. Miller and Tinker, A. I. Root, Ernest, Mr. Calvert and others talk of the mysteries of bee-keeping, and relate their experience (as a Baptist would say), and to listen to the methods employed in far-off Florida as told by J. Z. Detwiler, cannot be classed with the small pleasures of attending such a gathering.

It would have done your laughable heart good to have heard Messrs. T. G. Newman, Dr. Miller the president and others go for friend Root for quoting "manufactured stock" in *Gleanings'* market reports, and hear him try to lay the blame on the boys. I never saw him so completely beaten before. The laugh was surely on him.

There are lots of things that the best reporters can't put down; the cordial greetings, the friendship making, the genial intercourse, etc., and if bee-keepers want to enjoy these, attend all these gatherings it is possible to attend. It may not pay in dollars and cents always, but what do we live for.

That you may not make a big blunder when you come to Ohio, and not be able to find Wagon Works, I send you a map of the state that shows you where it is, and if Ohio did, on last Tuesday, vote to protect "Mary's little lamb," you don't need to get mad about it, and for fear you may not know just the condition that "lamb" was in a few days ago, I will just give you a little campaign doggerel about it:

Mary sheared her little sheep,  
And took the wool to spin it,  
Grover took the tariff off,  
• And then she had to skin it.

But the little sheep that are left are in better shape to go into "winter quarters" than they were before the election.

Yours, as ever,

A. B. MASON.

P.S.—I have been trying for some time past to give you my experience on putting into winter quarters early, but my memoranda have been mislaid and I can't find it, and as I did not tax my memory with it, I must let it go till it is found.—A.B.M.

Auburndale, O., Nov. 10, 1888.

Read the grand array of premiums offered on page 696 of this issue.

FOR THE CANADIAN BEE JOURNAL.

### STRAW HIVES.

**I**N your issue of the 23rd May last you say you would be glad to know how my bees wintered in straw hives. A year ago we packed sixty-four stocks on their summer stands in outside cases. They had the same packing, the same quilts of wool over them, the same depth of rims to raise the hives from the bottom-boards and the same stores. Twelve of these were in straw hives having the combs running diagonally towards the centre. Every one of these twelve wintered perfectly, there being only two quarts of dead bees from the lot. Of the remaining 52 only 32 were alive on the 1st of June, and several of these were very weak. Each of the twelve in straw hives swarmed, and from them I took seven dozen sections, very little it is true, but it was the only surplus we had from 105 stocks put away last fall.

Dr. Dzierzon recommends straw hives "on account of the heat-retaining properties of their material."

Mr. Alfred Neighbor, in his work on "The Apiary," says:—"A very prevalent opinion exists that bees do better in hives of straw than any other, this material being warmer in winter and cooler in summer, and more equable in temperature at all times, slightly ventilating and allowing of absorption. Straw prevents dampness hanging about within, and tends to keep the inmates more healthy."

Allow me to correct your mistake in supposing that a person in London is the inventor of the machine for making straw hives. Neighbor says:—"The square straw hives and a machine for making them, exhibited in the Austrian department of the International Exhibition of 1862, suggested the idea of employing that material for English frame hives." Mr. Neighbor has kept them in stock ever since that time. I purpose changing my hives as soon as I can do so conveniently.

S. CORNELL.

Lindsay, 8th November, 1888.

### O. B. K. A. PROGRAM.

**D**EAR Sirs,—Please tell Observer that the program of annual meeting is under way and in the hands of a committee that will do everything in their power to make the annual meeting a success. In the meantime any suggestions from members to the secretary or President will be thankfully received. I second the motion of Observer to have the badges sent to members then when we all meet on the train for Owen Sound what a hum there'll be.

MARTIN EMIGH

Holbrook, Ont.

President O.B.K.A.



# PRACTICAL BEE-KEEPING.

BY D. A. JONES.

## PAPER II.

### RACES OF BEES.

**S**CIENTISTS and naturalists tell us of many varieties of honey-gathering bees, but I will only write of those kept by practical apiarists to-day. Students of the structural anatomy and the family history of the bee are referred to Cook's "Manual of the Apiary," and other works.

#### BLACK BEES.

There is no bee indigenous to the American continent but the Black or Brown bee which originally came from Germany is so very widely diffused as to be the common bee of the country. The Black or Brown bee varies in color due presumably to difference in climate and surroundings. Some apiarists claim to have a race of large brown bees, but these are I think the ordinary bee bred in localities favorably situated to assist the bee-keeper's efforts in breeding from selected stock. The Black was the only bee cultivated in this country until the importation of the Italians, and their several good qualities have enabled them still to maintain a hold as favorites with many. They especially excel in capping comb honey and no other race except the Carniolans cap honey as nicely.

#### THE ITALIAN BEE.

The Italian, or, as our English friends call it, the Ligurian, is the bee found in the majority of apiaries on this continent to-day. It was first imported from Italy and thus derived its name, being supposed by many to be a native of that sunny clime. On this point I differ, for from personal observation and otherwise I infer that the bee indigenous to Italy was a black or brown. Look at the native bees in all the countries contiguous to Italy and you will find them dark. On the east of the Adriatic Sea are the Carniolans; Austria, Germany, France, the Dalmatian coast and even Sicily at the south-west point of Italy all have dark bees. The country is, as it were, surrounded by dark bees. I believe that the original light-colored

racess came from Palestine and Syria. Parts of Egypt, Cyprus and some of the islands in the Grecian Archipelago have a bright race of bees, springing undoubtedly from admixture with the Palestine bees brought there by coasting traders in honey and wax of ancient times. All the bees of Palestine and Syria are a yellow race without any black blood, and were imported into Italy in similar manner to Cyprus and the hardy and vigorous Syrians crowded out the dark native. On the cessation of this trade in-and-in breeding was practised probably for hundreds of years, and this has produced the Italians of to-day and make them appear to be a fixed race, modified by climate, pasture and surroundings.

The distinguishing features of the Italian workers are the three yellow bands on the abdomen, visible when the bee is comfortably filled with honey. These three bands are viewed as a test of purity. But I have bred them so bright by selection of the lightest color that four yellow bands were visible on every bee in the hive, and an occasional one would show the fifth. At bee-keepers' conventions I have shown Syrians with five and six bands. Thus by careful selection of bright blood the Italians can be bred back to what I deem their origin—the Syrians—in so far as color is concerned.

#### ALBINO BEES.

This selection of bright-colored strains and in-and-in breeding therefrom is no doubt the origin of the so-called "Albinos," which may be looked upon merely as a bright strain of Italians. The Italians are more energetic than the common bee, and have become favored for their beauty and docility, and more particularly for their excellent honey-gathering qualities. It is urged as an objection by some that Italians will not work in supers as readily as the ordinary blacks, but with our improved methods of procuring comb honey this objection and others are overcome.

## THE SYRIAN BEE.

The Syrian bee is slightly smaller than the Italian and of lighter color. This race has four distinct gold bands and when they are well-filled with honey and sporting in the summer sunshine, have not unfrequently been termed "golden beauties." I have had them show two more smaller bands—six in all. The former admirers of the Syrian bee have, in a great measure, become disgusted with them on account of their exceedingly irritable disposition. They are great breeders, the queens being wonderfully prolific, but they frequently consume all their stores in brood rearing.

Their bodies are apparently more telescopic than those of the Blacks or Italians, and when not filled with honey appear very small. The Syrian drones are not so bright as the Italians or Cyprians and in looking down over a comb covered with them, the sunshine gives their wings a bluish bronze appearance, and many of their abdomens have a dark bluish cast similar to Black drones. The queens have the half-moon gold rings and, unlike the Cyprians, are not so black at point of abdomen. The underside of the abdomen is very light. On the thorax, immediately between the wings, is a slightly raised speck, about the size of a hayseed, termed a gold shield. The drones are very fine and vigorous and have long grey and bluish tinged hair on their abdomens.

## CYPRIANS.

The Cyprian bee is about the same size as the Italian and slightly larger than the Syrian. Like the latter they have the gold shield between the wings which is one distinctive feature of the race. Yet I have had well bred Italians without a suspicion of Cyprian blood in them, other than was introduced into Italy possibly a thousand years ago, which showed this same gold shield. The Cyprians have four or more yellow bands, a very black tipped abdomen and are brighter on the underside of abdomen than the Italians, are more irritable, greater brood rearers and consequently consume more stores.

On the whole I do not recommend the pure Syrian or Cyprian as bees adapted to the northern portion of America. In

the South, Texas or Florida, there may be localities to which they are suitable, but for more northern latitudes we have far more suitable bees.

## CARNIOLANS.

For the description of Carniolans I copy from "Bees," a leaflet by Frank Benton, than whom none other is better able to speak authoritatively:

The bees of Carniola are noted for their great gentleness. They only rarely resent manipulation, and need very little smoke to subjugate them. It might be thought that they were lacking in pronounced qualities, but on the other hand, they showed decided traits peculiar to themselves and accompanied by distinctive markings, and are therefore as justly entitled as any bees found in Europe to be called an established race.

The typical, select Carniolan queen has a deep copper or bronze-colored abdomen, thorax thickly set with gray fuzz, large, strong wings and a large, stout-looking body. Carniolan queens are larger, on the average, than those of any other race, having especially large abdomens. Some queens are quite dark, even attaining with age a shining jet color. Such queens, though themselves resembling queens of the common race, do not produce bees in any way inferior to other Carniolan queens. Also pure Carniolan queens are occasionally met with which are as yellow as Italians; yet they invariably produce workers and drones which are distinctively Carniolan.

In all parts of Carniola some queens are found which produce bees having the first, segment of the abdomen somewhat rusty-red in color, and they are as often seen among the finest and prolific queens as among those of any other grade. Nevertheless, variation in color and quality is less with Carniolans in their native land than with Italians in Italy. Yellow workers are not found in Carniola, while black bees—natives too, and not imported—exist in Italy. The remarkable size and general bronze color of Carniolan queens, in contrast with the grayness of their progeny, makes it easy to find them on the combs. They are exceedingly prolific, and herein lies one of the very valuable qualities of this race.

The drones are veritable "gray-coats," and stout, active fellows, having especially large wings.

Carniolan workers are silver-gray in color, large-bodied and strong-winged. The thick fuzz of the abdomen is disposed in light-colored bands; and as dark drab is the ground color of

the bee the effect is a decidedly ringed appearance.

The following are the good qualities of the Carniolans: 1. The race is a prolific, well-established one. 2. The workers are gentler than any other bees. 3. They submit more readily than any other bees upon the application of a small amount of smoke. 4. They are excellent comb-builders, and their sealed combs are of snowy whiteness. 5. They gather very little propolis. 6. Colonies in a normal condition are vigorous defenders of their hives. The workers are the largest bees of the species *Apis mellifica*, and their individual strength is greater than of other honey-bees. 7. Carniolans cluster very compactly and quietly, and winter remarkably well. 8. Queens, workers and drones are more beautiful than those of common bees.

Their faults are, so far as I know: 1. When made queenless they are thrown into great excitement and neglect at first to defend their hives well. 2. They are slightly more disposed to rob during honey-dearth, than are Italians, though far less troublesome in this respect than blacks, or Italians crossed with blacks.

Some might be disposed to bring up as a grave fault the disposition which Carniolans frequently show to cast numerous swarms. I believe this disposition in any race depends almost entirely upon the prolificness of the queen; in fact it is, with all races, greater in proportion as the queens are prolific. Prolificness in queens is the bee-keeper's corner-stone. Swarming is nature's escape for the surplus strength of the colony, and the bee-master has but to direct this force. Whoever cannot do this, is not a master of the art. This, to some, seemingly "bad trait" is preferable, therefore to one of the most indispensable qualities—prolificness of queens—and is implied and properly included under the seventh point above.

It has been objected by people who claimed to have some knowledge of bee-keeping, and even to know a good deal about foreign races, that "they could not tell Carniolans from common bees." Such persons will find there is still something for them to learn. A number of writers have said that they could not be distinguished from the black bees only by an expert. This is not true of the ones I have seen. There is very nearly as much difference between them and "blacks" as there is between them and the Italians, and we think any child twelve years old would be made to see this as soon as its attention was called to it.

Even if this objection were sustainable it could not be regarded as a very grave fault.

Color is quite a secondary matter as compared with qualities, and as regards the latter, I am satisfied the Carniolans are superior to all other European races of bees.

#### HYBRIDS OR CROSSES.

Bee-keepers of to-day desire to have their capital and labor yield them as good a return as possible, and for years the object of the practical man has been to secure a race or strain of bees conducive to that end. As yet none have been found possessing all the good qualities and none of the bad. I have tried crosses of the various races and feel convinced that hybrids will give better results than pure races. In a paper read at the North American Bee Convention in 1885 I advocated crosses between the Italians and Cyprians or Syrians, and between Carniolans and Cyprians or Syrians, as giving the best results. I do not now care to propagate Cyprian blood, as I find the Syrians possess all the desirable qualities of both, and the pure Cyprian is not a desirable bee, but with the Syrio-Italian and the Syrio-Carniolan we have achieved some splendid results.

Hybrids are sometimes irritable, but this trait we have not noticed in the Italo-Carniolans, whilst the Italo-Blacks are more irritable than the pure race.

It is not well to decide because a first cross is of extraordinary value that you have reached the goal, for they seldom duplicate themselves. First crosses are too often adopted as a standard, with the impression that breeding from them will give equally good results. Unless the mating of the queen can be placed more under our immediate control, we cannot hope to attain perfection. We can only take the various crosses irrespective of color, and breed from those only which give the best results for a number of years. The aim of apiarists should be to breed bees not for beauty but for general utility. The breeds of horses and animals over which man has complete control are being constantly improved through persistent efforts extending as far back as memory can cover. But bee-keepers do not act on the same principle as cattle men. The former introduces a queen of a superior race to a hive, whereas the horsemen rely more on the excellence of the male,

knowing that the male has more influence on the quality of the progeny. Too little attention is paid to the drones. I have taken drone brood to my islands in the Georgian Bay, the larvae have matured and been carefully fed until they looked much unlike the common drone of the country. They were plump, sturdy fellows, and queens mated with them gave grand progeny. Nature acts on this plan, and young queens are not hatched until after the honey flow has set in, and her future mate has an opportunity of coming to maturity on the new stimulative nectar.

#### KIND OF BEES TO BUY.

If I were going to buy bees again I should never think of the race or variety—my sole object would be to get bees that would prove good honey-gatherers, and I think that to get these one must steer clear of *pure* races. The fact is, we now breed for the quality I have mentioned above, keeping in view, as far as possible, "good looks" and other points. If the bee-keeper wishes to experiment in the direction of these good qualities he might as well commence with a colony of Black or German bees, see what they do for him the first season; next year let him Italianize if he wishes, by the introduction of a mated Italian queen. Later on other strains may be introduced until what you would think perfection is reached. If you prefer to get at the best bee for business the moment you assume the avocation, buy of some good dealer, whose success is established.

#### MR. McFADDEN AGAIN.

AN INGENIOUS YARN ACCOUNTING FOR THE WAX NOT COMING.

**M**Y dear George Watson:—It is with a heavy heart I write you this time. I told you the last time I wrote that we were going to supply another tribe with bees to start an apiary, and worst of all that we would have the wax at North Bay on or about the first of August last. With all our troubles, and the calamities that befel us, I am more sorry of that disappointment than all the rest; not that we care for the wax nor the price of it, but because of breaking our word, for not keeping good faith with our white friends, which, alas!

you will see was unavoidable when I tell you what befel us. Chief Ottomee and thirty of his strong men came for the bees, with ponies. We selected sixty good half-storey hives and fixed them up secure with ventilation holes covered with woven grass. They paid us in furs and deer skins. I may remark they brought us two moose hides cured with the fur on for quilts, and one moose head with horns, the largest I have ever seen; measured seven feet and eleven inches across; weighed two hundred and fifty-three pounds—but this is a digression. Ottomee and his men started home quite contented with their bees, satisfied with the bargain. They had about seventy-five miles to go, and it would take them four days to get home. The third day about noon the bees had gnawed the grass covering or netting over the holes and began to come out. They attacked the ponies, and there was a stampede. The shaking and bouncing knocked the hives together until every hive was broken loose. The ponies ran wild, and the Indians had to run into a swamp. About half of the ponies were either stung to death or staked on dead limbs in the woods. Some of the ponies got home ahead of the men, which made the Indians at home think there had been war, and fifty started out with ponies, armed, to revenge their people. They met the others next day in a sore condition both in body and mind. When they told what happened they exclaimed:—"Tricks! Tricks! White man with Muskegoon! We all go back, get many bees again, or fight." So back they came. We happened to get intelligence of their approach, and knew there was something seriously wrong. By what they said when here before I knew they had suspicion that on my account something bad might happen, so great was their superstition and prejudice against white men. So I wisely kept out of sight when they approached. They made a wild enough demonstration. Shouted for "White man you call Dan. He is linked with the spirits of rattlesnakes and wild cats. We kill him soon." To be brief, I had to hide in the woods two days before the old chief and our people could find out what had happened and what they wanted. They were so excited that they killed ten of our ponies. Spruce Top, who courageously tried to stop them to get an explanation, was knocked on the head, and no knowing what harm would have been done had they not attacked the bee-hives, knocking them over. It scattered them and brought them to their senses. So there was a parley, when all was explained. Then they were sorry, but wanted more bees. They got ten more. But poor Spruce Top, they could not restore him;

so they agreed to give ten ponies for him and restore the ten they had killed, and bring twenty-five beaver skins, ten otter skins, and fifteen buckskins (that is tanned deerskins for mocca-sins). Most of our bravest men were away hunting, or there would have been many lives lost. They set fire to several wigwams, but as they ran on, the women and children put them out. But when at the bees they set fire to the wax wigwam, there was no one to put it out, so it was all burnt up. When they saw it burn so long and so furious, they said:—"White man bad spirit in that wigwam." My wife was cunning enough to tell them I was hid in it, so their anger was appeased. Well, I must be brief. That was on the 16th of June. The old man took it to heart and grieved so much over it he died on the 13th of August. May he be happy for ever—he was a good old man. When Spruce Top was coming home last January after his leg got well in the bear's den, he said he saw bad tracks, tracks of wild spirits, and he was afraid something bad would happen before next snow. So there did, poor fellow; but I and some more of us have no faith in the track theory. But the coincidence has shaken their unbelief in spirit tracks. A grounded superstition is hard to remove. (I am digressing again.) How was it Beaver Tail did not come out, wax or no wax? you will think. Well, he got a cold fishing and was unable to go till now, besides, his pony was killed, and none of the rest would undertake the journey. That is the reason. I don't know how Ottomee and his tribe got on with the bees, or whether they recovered any of the first sixty that was scattered in the stam-pede. Our people told them they could likely gather up some of them. As they were bark hives likely most of them were burst to pieces, the comb and bees scattered so they could not be of much use. We let our bees swarm more than usual this year to recruit them. The ones the Ottomees knocked over were fixed up. They took away 70. We have two hundred now. It was a very good honey season. Our buck-wheat and corn is a good crop, potatoes were never better. Deer are fat this fall. Now I hope you will not be angry although you have been disappointed, seeing we could not help it. We would not have cared about the loss of the wax if we had not appointed to bring it out and notified you that we would for a certainty do so. I know old man Shawnobby will know something bad has happened, because he would risk his life on my word. He knew me before I came to Ravens' Peak. Oh, he will lament for our misfortune, and especially for our poor old chief, Eagle Muskegoon. Now I have done for this

time, and it is sorry news to have to write. I am much thankful for the paper you sent me. Our folks think it a great curiosity. You see I have used it in place of the bark this time. I expect Beaver Tail will have some letters from you when he gets back. I will be very glad to see them. We will soon put our bees away now. With best wishes, I remain,

Yours sincerely,

DANIEL MCFADDEN.

There are no rattlesnakes in this territory, but our tribes are a remnant of Hurons who used to go over to fight the Mohawks, where I believe rattlesnakes were very plentiful and very large and venomous. So the tradition of bad spirits entering rattlesnakes has followed them to the present day.

D. McF.

Ravens' Peak, North Nipissing Territory.  
Oct. 15th, 1888.

From Canadian Live Stock Journal.

Candied Stores, Marketing Honey, etc.

**A**FTER last month's writing I discovered that a portion of the honey gathered early in the summer during the drouth had granulated in the comb in the hives. It is a generally known fact that extracted honey of nearly all kinds will, after being duly ripened, granulate and become quite hard and "gritty." The fact that comb honey will also sometimes granulate sooner or later after removal from the hive is not so well known. Such, however, is the case, and sometimes, though rarely, comb honey will granulate in the hive in a few weeks after being gathered. This has happened the past summer in some localities. It has been doubtless due in part to the excessive drouth. The honey gathered at such time has much greater density or specific gravity than that gathered in wet weather, and hence granulates more readily.

Upon finding that a portion of the stores in the hives designed for winter was granulated, and, therefore, unfit for such purpose, I went over the yard removing all such, and replacing with suitable food. As the result of candied winter stores would be disastrous to the colonies possessing them, those bee-keepers who have neglected to look into this matter, had better do so at once. Better disturb the colony, even in November, than run the risk of losing it altogether. But the examination can be made without such disturbance. Generally the tests can be made at the tops of the frames with a penknife, without removing them or even loosening them. When the trouble is found to exist, and there is no

good comb honey in frames on hand to supply them, it would not be advisable to feed syrup so late in the season. Instead of that leave them alone until into winter quarters (a warm repository, for such is necessary for winter feeding) and then put on a Jones winter "Feeder" with sufficient stores to do till spring. Or supply them with the "Good Candy."

#### MARKETING.

The meagre proceeds of the apiary this season one would think, could be disposed of without any trouble; yet so unskilful are some people in this important branch of the business that we find them even in the scarcity going about seeking customers, and offering their diminutive stock at starvation prices. Such people have neither patience nor prudence, and they spoil the market till their stock is exhausted. The regular apiarist has these always to contend with, but the annoyance this time will be of short duration, as the small stock will not go far in the public market. Not that I am in favor of taking advantage of the scarcity to demand an exorbitant price for what we have. We only want a fair price. Considering the skill and labor required for the production of honey, and the risks involved in wintering, etc., the price has been hitherto too low for fair profit and remuneration. For this the bee-keepers themselves have been to blame—the small ones, and even some of the big ones. The prime cause is premature rushing of the crop on the market, whether it be large or small. Before the hot weather and fruit season are over, while there is yet little or no demand for it, it is hurried on, much of it unripe, and sold for what it will bring. Honey, being largely carbonaceous as food, is for autumn, winter and spring use, not specially adapted for summer food. In hot weather people want cooling fruits and vegetables, and not much honey. Hence the folly of rushing honey away from the hives in the summer to the market when it is not wanted. A chief reason for such action is no doubt the inability to properly preserve the honey. Extraced honey is easily preserved good for months and even years, but the comb honey, to preserve it good for any great length of time, requires very proper handling.

#### HOW TO PRESERVE HONEY.

If the extracted honey is properly cured before being taken from the hives, or evaporated afterwards, it will usually granulate when a few weeks old, and will then save almost anywhere. But with comb honey it is quite different. No matter how well cured and capped when taken from the hive, if not kept in a suitable place, it will greatly deteriorate in quality. And it will some-

times granulate no matter how kept. The granulation, however, is not essentially injurious, but the deterioration from low temperature and dampness is decidedly so. While we are not able always to guard against the former condition, we may against the latter. To preserve comb honey from deterioration, and in a measure from granulation, it must be kept in a *warm dry place*, duly ventilated. No matter where the place is so long as these conditions are subserved. When the time comes to market the honey, one half of the secret of success lies in the injunction, "Do it decently and in order."

I used to know a bee-keeper who would come to the market with a lot of "black strap," buckwheat, candied honey, in an old rusty milk can with no lid, and a dirty old pair of rusty scales to weigh it out on, and old black newspapers to match. That, in an old spring wagon with an unkempt, rickety horse, was his outfit. For an hour or two after he had left the market he could be seen delivering his sales here and there, from one to five or six pounds of honey in each hand on a piece of the aforesaid paper duly exposed to sun and dust. Fortunately, such specimens of bee-keepers are rare. The fraternity on the whole are characterized by cleanliness and taste as well as good judgment.

It is astonishing how far neatness of package and taste of get up will go in selling honey. Try it, ye who practically ignore these pre-requisites, and see for yourselves. Have a label for glasses, tins and pails advising purchaser that extracted honey will almost always granulate, and instructing him how to liquify it without injury to flavor or quality. Give your grocer packages and crates with which he will not be ashamed to adorn his shelves. Be sure your honey is ripe before you take it to market. Let the comb honey also be labelled with name and proper advice. Something like the following would answer for both. "Pure honey from John Smith's apiary. Almost all kinds of pure extracted honey will granulate and become quite solid in cool weather. To liquify without injuring it, melt slow in warm—not hot—water, by placing the tin or glass of honey in another vessel containing warm water. Comb honey, which must be kept in a warm, dry place, will also sometimes granulate, and must then be used in that condition, as a temperature sufficient to melt the honey would also melt the comb." Some such form may be neatly printed on a moderate sized label, and will always explain itself.

The next essential in marketing is to sell at home instead of looking abroad for a market. Sell to your neighbors round about and develop "home market." The consumption of honey

has enormously increased in the past ten years and can still be enormously increased. As soon as the people understand that honey is not only nutritious and wholesome food, but a cheap food, the consumption will be greatly increased. Having the advantage, in addition to the above qualities of being highly palatable, it must in time inevitably take its place on the tables of the land as a staple article of diet. As soon as the people understand that there is as much nutriment in a pound of honey at 12½ cts. as in a pound of butter at 25 cts., and as much in the pound of honey as in 3 or 4 lbs. of fat pork at 10 cts. per lb., as soon as they understand that more honey on their tables and less butter and meat, not only means economy but health, the change will be made. It remains for us to so educate them.

Selby, Ont.

ALLEN PRINGLE.

From the Bee-Keepers' Record.

#### UNSEALED STORES.

**A** CORRESPONDENT very timeously suggests that we should issue a warning regarding the danger of unsealed stores in winter and how it may best be averted or minimised.

There can be no question the danger is a real one—all past experience points in that direction. The immediate source of danger is not in the fact that the stores, whether of honey or syrup, are unsealed, but arises from the subsequent condition of these stores when contaminated by the vapors of the hive and impregnated with fermentative or putrefactive germs. There is no question but they are then frequently the source of so-called dysentery, or at least of bowel distension ending in the depopulation of the hive. A lesser degree of trouble may arise from the excess of water they contain; and which in the combs most distant from the cluster is an increasing quantity owing to the attraction these stores have for moisture in any form. To get rid of the excess of moisture in their food the bees must endeavor to keep up a higher temperature than usual, and in doing so consume an excess of food, which increases the amount of faeces and aggravates the symptoms referred to.

The season has been one peculiarly liable to issue in the evil brought under notice. Natural stores have not been coming in for months, and syrup as usually fed has an excess of water. Then the latter has in most cases had to be fed during weather so cold that the bees could do but little either in evaporating it or in secreting wax for capping. The later the feeding the greater the evil. It is now too late to adopt preventive measures, unless in cases where no great

quantity of food has yet been given. In such cases, and indeed in all cases where a little extra food might be desirable, we should advise feeding entirely with well made candy—no more syrup. The effect of candy, especially when put on the frames still warm, and cosily tucked up, is to temporarily raise the temperature, making it comfortable for the bees to travel over their outer combs and in doing so to sip the excess of moisture in the unsealed stores. They are under the necessity of drinking frequently in order to liquidate the candy, and the resultant will be a general thickening of the stores, and with favorable weather even a partial sealing of them. As enough candy may be given to keep the bees working on it for a week or more this thickening process will go on all the time. When it is believed that there are sufficient stores, and indeed in every case where unsealed stores are found in combs outside the cluster, the final arrangement of the stock for winter will give the opportunity of adopting such remedial measures as may still be desirable. In the first place the combs may be re-arranged so as to bring the unsealed ones inside the cluster, the sealed ones outside. No harm results we believe from fresh unsealed food so long as the bees cover it. They are continually causing its evaporation. In the next place and with the same end in view the hive should be contracted by division boards so as to get all or nearly all the store combs covered with bees. We have not practised much contracting for some years but then we always had plenty of natural sealed stores. In the present exceptional season, especially with stocks much below their normal strength, we advise it all round. And lastly, free ventilation should be provided below the combs either by leaving door-ways open the whole width or by introducing an eke or a spare storey as a nadir. At the same time secure the hive against upward sensible ventilation by warm yet porous coverings, flannel, chaff, etc. We do not use American leather cloth nor can we advise its use in cases of unsealed stores as it prevents the upward escape of the excess moisture we so much want to get rid of and is apt to cause a heavy condensation of contaminated vapors, increasing the evil. It need scarcely be added that a leaking or badly ventilated roof will also increase the evil.

W. RAITT.

## SUNDRY SELECTIONS.

#### CLIPPING QUEEN'S WINGS.

Mr. J. C. Black says on page 626 that clipping queens' wings is worse than useless when stocks are strong, weather warm and honey abundant in the fields. I may say from an experience of a good many years that I have found the practice eminently useful and satisfactory under exactly the circumstances he mentions.

C. C. MILLER.

#### CONVENTION NOTICE.

MICHIGAN STATE BEE-KEEPERS' ASSOCIATION.  
The 23rd annual meeting of the association will be held in the city of Jackson, Mich., on Dec. 12 and 13, 1888. Meetings will be held in

the city council room. Greatly reduced rates have been secured at the Hurd House, also at the Commercial house (near Mich. Central depot) at \$1.50 and \$1 per day. A program is being prepared and from the excellent papers already promised, we expect a very interesting meeting. Any bee-keeper having anything new and useful and finding it impossible to be present can send it by express it to Jackson in care of the Secretary who will place it on exhibition and return it as per orders. Plenty of room to exhibit. Please come and bring your bee-keeping friends with you. H. D. CUTTING, Sec.

# GOOD BOOKS

—FOR THE—

## Farm, Garden AND Household.

THE FOLLOWING VALUABLE BOOKS WILL BE SUPPLIED FROM THE OFFICE OF THE CANADIAN BEE JOURNAL. ANY ONE OR MORE OF THESE BOOKS WILL BE SENT POST-PAID DIRECT TO ANY OF OUR READERS ON RECEIPT OF THE REGULAR PRICE, WHICH IS NAMED AGAINST EACH BOOK.

### FARM AND GARDEN.

Allen's (R.L.&L.F.) New Am. Farm Book	\$2 50
Barry's Fruit Garden. New and revised	2 00
Beal's Grasses of North America.....	2 50
Brackett's Farm Talk, Paper, 50c. Cloth	75
Brill's Farm Gardening and Seed-Growing .....	1 00
Farm Appliances.....	1 00
Farm Conveniences.....	1 50
Farming for Profit.....	3 75
Fences, Gates and Bridges .....	1 00
Fuller's Practical Forestry.....	1 50
Gregory on Cabbages.....	30
Gregory on Onion Raising.....	30
Harris' Gardening for Young and Old	1 25
Henderson's Gardening for Pleasure...	2 00
Henderson's Gardening for Profit.....	2 00
Johnson's How Crops Feed.....	2 00
Johnson's How Crops Grow.....	2 00
Johnson's How to Plant.....Paper...	50
Long's Ornamental Gardening.....	2 00
Onions—How to raise them Profitably	20
Our Farm of Four Acres.....Paper...	30
Quinn's Money in the Garden.....	1 50
Silos and Ensilage.....	50
Starr's Farm Echoes.....	1 00
Stewart's irrigation for the Farm,	1 50
Garden and Orchard .....	1 00
Ten Acres Enough .....	1 00
The Soil of the Farm .....	1 00
Thomas's Farm Implements and Machinery .....	1 50
Treat's Injurious Insects of the Farm and Garden .....	2 00

Waring's draining for Profit and Health	1 50
Waring's Elements of Agriculture .....	1 00
Weld's and Others' A.B.C. of Agriculture .....	50

### FRUITS AND FLOWERS.

Bailey's Field Notes on Apple culture	75
Elliott's Hand Book for Fruit Growers	
Paper, 60c .....	1 00
Fuller's Grape Culturist .....	1 50
Fuller's Illus. Strawberry Culturist...	25
Fuller's The Propagation of Plants....	1 50
Fuller's Small Fruit Culturist, new ed.	1 50
Fulton's Peach Culture New ed.....	1 50
Henderson's Practical Floriculture....	1 50
Husmann's American Grape Growing & Wine Making.....	1 50
Parsons on the Rose.....	1 00
Saunders' Insects Injurious to Fruits.	3 00
Vick's Flower and Vegetable Garden.	1 25

### HORSES, RIDING, ETC.

Anderson's The Galop.....	1 00
Armatage's Horse Owner and Stableman's Companion .....	1 50
Battersby's The Bridle Bits. Valuable	1 00
Chawnet's Diseases of the Horse.....	1 25
Dadd's American Reformed Horse Book. 8vo .....	2 50
Dadd's Modern Horse Doctor. 12mo.	1 50
Day's The Race Horse in Training...	6 25
Du Hays' Percheron Horse. Revised and Enlarged.....	1 00
Heatley's Every man his own Veterinarian .....	2 50
Herbert's Hints to Horse Keepers.....	1 75
Howden's How to buy and sell a Horse	1 00
Jenning's Horse Training Made Easy.	1 00
Jennings on the horse and his diseases	1 25
Law's Farmers' Veterinary Adviser...	3 00
Manning's The Illus. Stock Doctor....	5 00
Rarey and Knowlson's Complete Horse Tamer.....	50
Riding and Driving.....	20
Saddle Horse, The; Complete Guide to Riding and Training.....	1 00

### CATTLE, SHEEP AND SWINE.

Armsby's Manual of Cattle Feeding...	2 50
Cattle, The Varieties, Breeding and Management .....	75
Clok's Diseases of Sheep.....Paper...	75
Coburn's Swine Husbandry. New ed.	1 75
Dadd's American Cattle Doctor. 12mo	1 50
Dadd's American Cattle Doctor. 8 vo.	2 50
Guenon on Milch Cows. New ed .....	1 00
Jennings on Sheep, Swine & Poultry.	1 25
Jersey, Alderney and Guernsey Cow.	1 50
Keeping One Cow. New edition.....	1 00
Martin's Hog Raising and Pork Making .....	40
Miles' Stock Breeding... ..	1 50
Powers' The American Merino for Wool and Mutton. A practical and valuable work.....	1 50
Stewart's The Dairyman's Manual....	2 00





# USEFUL GOODS.

The following is a partial list of small wares, tools and stationery, which we carry in stock. Additions are constantly being made. We buy in very large quantities, and are therefore able to quote rock bottom prices. There is always something in these lines you want and they can be enclosed with other goods or sent by mail. The amount of postage is marked opposite each article, except those excluded from the mail.

## 5 CENT ARTICLES.

Postage.	Per 10 lots.	Per 25 lots.
3		
Awls, brad, three assorted without handles.....		
1		
Blotting paper, 10 sheets note size.....	40	88
2		
Bag for school books.....	45	1 05
8		
Brush, round, for paint, paste or varnish.....	40	95
1		
Chisel handle.....	45	1 10
8		
Crayons, colored drawing.....	45	1 00
1		
Eraser combined ink and pencil		
Letter openers, nickle plated, very handy.....	40	
1		
Memo books, 32 pages, stiff cover.....	40	90
1		
Note paper, 1 quire, extra quality, ruled or plain.....	40	80
2		
Pad 100 sheets scribbling paper		
Pass books 3 "Railroad" 16 p. paper cover.....	45	1 00
1		
Pass books, 2 Steamboat 32 p p.		
Penholders 2, cherry, swell....	40	
1		
Ruler, hardwood, flat, graduated to $\frac{1}{8}$ , bevelled.....	45	1 05
1		
Ruler, for school children, three for 5c.....		
2		
Scribbling books, 200 pages....	40	90
Tacks, cut, 2 papers 1, 2 or 3 oz.	45	

## 8 CENT ARTICLES.

Butter stamps 3 or 4 inches....	\$ 75	\$ 1 75
File, 3 corner, 3 or 4 inches....	75	1 75
Ink-well, glass, safety, cannot spill.....	65	
Mucilage, good sized bottle....	70	
Oil cans, zinc.....	65	
1		
Pencil, automatic indelible....	75	1 75
6		
1 doz. Lead Pencils, No. 852, very good.....		
1		
Time books for week or month.	75	

## 10 CENT GOODS.

2		
Bill files, harpshape.....	\$ 90	2 10
2		
Book of 50 blank receipts with stub.....	85	2 00
2		
Book of 50 blank notes.....	85	2 00
3		
Brush, flat, for paint, paste or varnish.....	80	1 90
3		
Butter spades 9c. each.....	80	1 90
3		
Boxwood pocket 1 foot rule....	90	2 10
Chisel, firmer $\frac{1}{4}$ inch.....	90	

## Postage.

	Per 10 lots.	Per 25 lots.
2		
Clips for holding letters, etc... Due bills, 100 in book with stub	90	2 00
2		
Envelopes, 3 packages, white, good, business.....	95	
2		
Files, 3 cornered, 5 inch.....	90	2 10
3		
Lead pencils, 1 doz. plain cedar Fabers 581.....	90	
2		
Lead pencils 3 red and blue....	90	
2		
Note heads, pads of 100 sheets.. Paint brush, No. 7.....	90	
2		
Pocket note book, 3x5 in., 125 pages, stiff cover with band grand value.....	90	
1		
Rubber bands, five, large.....	80	
1		
Ruler, brass edged, flat, hardwood, bevelled, graduated to $\frac{1}{8}$ inch.....	95	2 25
4		
School bag, medium size.....	90	2 10
Tacks, cut, 3 packages, 4 oz....	90	

## 13 CENT ARTICLES.

2		
Belt punches, Nos. 2, 3, 4, and 5	1 25	\$ 3 00
File, 6 inches long, flat.....	1 25	2 90
" 5 " " round.....	1 25	2 90
Shoe knives, 4 inch blade.....	1 20	2 75

## 15 CENT ARTICLES.

12		
Chisel, firmer, $\frac{1}{2}$ and $\frac{3}{4}$ in.....	1 45	
Dextrine, $\frac{1}{2}$ lb. pkge. for pasting		
Glue, 1 lb. ordinary.....	1 30	
Hammer, iron, adze eye.....	1 45	
3		
Lead pencils, 1 doz., good quality, Faber's 971.....		
5		
Note paper, 5 quires, 3 lbs., extra value.....	1 40	3 35
Paint brush, No. 5.....		
6		
Rubber bands in gross boxes. For queen nursery.....	1 30	
4		
Rule, 2 foot, a splendid line....	1 40	3 40
Screw driver, 5 inch, round bit, hardwood handle.....	1 40	
2		
Statement heads in pads of 100	1 20	
Tack hammer magnetic.....	1 40	3 30
12		
Papeterie, 24 sheets fine note paper and 24 square envelopes in neat box.....	1 40	3 35

## 18 CENT ARTICLES.

Bit, best make, $\frac{1}{8}$ , $\frac{1}{4}$ , $\frac{3}{8}$ .....	1 65	4 00
Glue, LePage's liquid, with brush	1 65	
Oilers, automatic.....	1	

**20 CENT ARTICLES.**

	Per 10 lots.	Per 25 lots.
Postage.		
Bit, best make, 3/8, 7/16, 1/2, 9/16..	1 90	4 50
Brass traps.....	1 85	4 50
Brushes, flat, 2nd quality, 1 1/2 in. paste or varnish.....	1 80	4 25
Chisel, firmer, inch.....	1 90	
Ebony ruler, bevelled for book-keeper.....	1 90	4 50
File, 8 inch, flat, round or 3 corner.....	1 90	
Glue, 1 lb. light, broken.....	1 75	
3 Lead pencils, 1 doz. 201 good value, rubber tipped.....	1 80	
Paint brush, No. 3.....		
12 Papeterie, "Jubilee" containing 24 sheets, ivory notes, 24 square envelopes.....	1 80	
6 Pens, gross box "292 school"....	1 80	
1 Pocket memo book, indexed....	1 90	
Screw-driver, steel, 6 inch rd bit	1 90	
Square, iron, grad. to 1/2 one side	1 90	
Thermometer.....		

**25 CENT ARTICLES.**

6 Cards, 50, ladies' or gents' visiting. Piries' super ivory...	2 00	4 50
2 Duplicate order books, with black leaf.....	2 00	4 50
File, 10 inch, flat.....	2 25	
3 Lead pencils, 1 doz. Faber's H, H. B., B. or B. B.....	2 30	
Paint brush No 1.....	2 30	
Rule, 2 foot, boxwood.....	2 30	
Tape Lines, "Universal," 3 ft..	2 30	

**30 CENT ARTICLES.**

3 Bills payable and receivable....	2 85	6 90
Bits, best make, 10/16, 3/4, 7/8.....	2 85	6 90
250 Envelopes, Ladies', square	2 80	
5 Foolscap, 2 quires, extra quality	2 80	
4 " legal, in pads of 100 sheets.....	2 75	6 00
Inkwell, square, glass, bevelled edges.....	2 75	

**35 CENT ARTICLES.**

Bit, best make, inch.....	3 40	8 20
Hammer, steel face, for light work.....	3 30	
Square, grad. to 1/16 both sides	3 30	

**40 CENT ARTICLES.**

Foolscap, 5 quires, good quality	3 75	
Hammer, No. 50, 1/2 steel head, adze eye.....	3 60	
Pens, gross box, 'Bank of Eng.'	3 80	
" " Blackstone or J. S	3 80	
Ruler, 2 foot, boxwood, brass bound.....	3 60	

**50 CENT ARTICLES.**

Binders, CANADIAN BEE JOURNAL	4 80	
Blank books.....		
Day book, 200 p. p. good paper, well bound.....	4 25	
Cash " " " " " "	4 25	

Postage.

	Per 10 lots.	Per 25 lots.
Ledger " " " "	4 25	
Minute " " " "	4 25	
Complete set, Cash, Day and Ledger, \$1.25.....		
200 page Day Book, canvas cover good paper, exceptionally low		
Carpenter's brace, pat. grip, 8 in	4 85	12 00
Envelopes, good, business size, 250 in box.....	4 00	
250. Envelopes, Ladies' square, very goods.....		
Hand saws, 18 and 20 in., best make.....	4 50	
Hammer, No. 51, steel head, adze eye.....	4 50	
Hammer, smaller, frame nail'g	4 50	

**SUNDRIES.**

Automatic Fountain Pen, the finest thing out; holds enough ink to last a week; always ready; can use any style of pen that suits you, and can change it as often as you wish—a marvel of cheapness—by mail, post paid, each.....

Barnes' Foot Power Machinery—We are agents for these in Canada, and can furnish the Combined Machine delivered in Toronto, freight and duty paid for..... We will gladly forward descriptive Catalogue & price list on application.



Copying press, "The Simplex," is most rapid and the easiest handled. Folds like a book and weighs but 10 lbs. With lock, \$5, without..... Hammer, No. 47, steel head, adze eye a most substantial implement..... Hand saw, 26 inch, finest quality..... Hatchet, steel, with hammer and nail puller.....

Lawn Mowers—The new Philadelphia pattern, as made by the Gowdy Mfg. Co., Guelph, at prices as follows:—  
 10 inch cut.....  
 12 " ".....  
 14 " ".....  
 16 " ".....

We ship these direct from the factory at above figures.  
 Letter books, with index, bound in canvas, 500 pages.....  
 Letter books, with index, bound in canvass, 1000 pages.....  
 Plane, iron block.....  
 " wood smoothing.....  
 Post cards printed to order, 50 \$1, 100 Square, steel, grad. both sides, usual price, \$1.75.....  
 Soldering outfit, consisting of soldering iron, scraper, bar of powdered resin.....

D. A. JONES, Pres.

F. H. MACPHERSON, Sec.-Treas.

# THE D. A. JONES CO., LD.

## BELTON, ONT.

### Manufacturers of and Dealers in Apianian Supplies

OUR CIRCULAR SENT FREE ON APPLICATION.

Publishers Canadian Bee Journal.

Fine Book and Job Printers.

## DISCOUNT NOTICE.

As is our usual custom we now offer discounts for fall and winter orders. We desire it to be understood that we do this principally to avoid the crowding in the rush at springtime. We can always fill the orders to better advantage and take more pains when we are not crowded. This of itself is a good thing for the customer, and when to this is added the discount which we allow off catalogue prices, it will be well worth trying. Up to January 1st, 1889, our discounts will be as follows:

### 10 PER CENT.

Hives, Sections, Honey Extractors, Honey Boards, Section Frames, Section Cases, Frame Nailers, Wire for Frames & Rets, Smokers, Hive Clamps, Honey Knives, Wax Extractors, Bee Tents, Comb-carrying Buckets, Comb Baskets, Bee Guards, Ripening Cans, Uncapping arrangements, Bee Veils, Queen Nurseries, Labels, Anatomical Charts.

### 5 PER CENT.

Nails, Perforated Metal, Comb Foundation, Force Pumps, Feeders, Rubber Gloves, Introducing Cages, Tins, Shipping Crater, Honey Glasses, Sealers, Dextrine, Wire-Cloth, Mosquito Bar.

All other goods in our Catalogue are subject to the prices found therein. For January the Discounts will be 8 per cent. and 4 per cent. respectively; for February 6 per cent. and 3 per cent.; March 5 per cent. and 2 per cent. No discount after April 1st. These prices of course are for cash with order. We have a big stock of almost everything on hand, and can ship at short notice. Catalogue free on application.

## 1-LB. GLASS JARS. ADVANCE IN NAILS.

### SCREW TOP.



We are just advised of shipment from the factory of the first instalment of 50 gross of the above. They are put up in barrels and hogsheads, (the latter for our own local use), and to save breaking bulk when shipping, we append below a table, of the qualities of which the shipment consists, together with the prices per

barrel. In estimating the price, we have calculated the same as for full gross lots, an allowance of 20 cents being made for each barrel and packing (they cost us 85 cents).

No. of Barrels.	No. of Doz.	Prices.
1	8½	\$ 6 25
1	8½	6 45
4	9½	6 75
5	9½	6 95
4	9½	7 15
3	10	7 35
3	10½	7 55
2	10½	7 75
1	11½	8 45

Owing to a rise in the prices of nails, we are forced to advance our prices somewhat, as will be seen by the following list. All orders will be filled only at these prices.

#### PRICES OF WIRE NAILS.

Length of Nails.	No. in Pound	Size Wire	Price of 1 Pound	Price of 10 lbs.
¾ & ⅝ inch	7200	21	22	2 00
¾ inch...	5000	20	17	1 60
¾ inch...	3880	10	17	1 60
1 inch...	2069	18	12	1 05
1½ inch...	1247	17	11	1 00
1½ inch...	761	16	10	90
2 inch...	350	14	9	80
2½ inch...	214	13	9	75
3 inch...	137	12	8	70

#### PRICES OF BOX OR HIVE NAILS.

	Per lb.	Per 10 lbs.	Per 100 lbs.
1½ inch.....	7	65	6 00
2 inch.....	6½	60	5 50
2½ inch.....	6	55	5 25
3 inch.....	6	55	5 25

THE D. A. JONES CO. LD.,  
BELTON, ONT.

# APIARIAN SUPPLIES

MANUFACTURED BY

W. T. Falconer, - Jamestown, N.Y.

Are unsurpassed for Quality and fine Workmanship. A specialty made of all sizes of the **Simplicity hive**. The Falcon Comb Hive, with movable upper story continues to receive the highest recommendations as regards its superior advantages for wintering and handling bees at all seasons. Also manufacturer of **FALCON BRAND FOUNDATION**. Dealer in a full line of Bee-Keepers' Supplies.

Send for Illustrated Catalogue for 1888. Free.

W. T. FALCONER.

## Bee-Keepers Guide —OR— MANUAL OF THE APIARY.

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

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

260 ENVELOPES

—AND—

250 NOTE HEADS

FOR

\$1.

on a good paper, printed with name and address, not paid.

CANADIAN BEE JOURNAL OFFICE,  
BEETON ONT.

THE CANADIAN

## POULTRY REVIEW

IS THE ONLY PAPER PUBLISHED IN CANADA IN THE INTERESTS OF THE

Poultry, Pigeon and Pet Stock Fraternity. Circulation always on the increase. Subscription only \$1.00 a year. Address,

H. B. DONOVAN,  
30 Front St. East, Toronto.

FRIENDS. IF YOU ARE IN ANY WAY INTERESTED IN

## BEES AND HONEY

We will with pleasure send you a sample copy of our **SEMI-MONTHLY GAZETTE OF BEE-CULTURE**, with a descriptive Price-List of the latest improvements in Hives, Honey Extractors, Comb Foundation, Section Honey Boxes, all books and journals, and every thing pertaining to bee-culture. Nothing catered. Simply send your address on a postal card, written on a  
A. I. ROOT, Medina, Oh.

## Money Boxes for Sections.



These are of manilla and made to hold the 4 1/2 x 4 1/2 sections. When the comb honey labels A or B are used (as in illustration) an attractive and highly saleable package results. Price without tape handles, each 1 cent; 100, \$1.00; 1000, \$9.00.

The D. A. Jones Co., Ld.  
BEETON, ONT.

## SEND US \$2.50

And we will send you a good serviceable man or boy

## Nickle Keyless Watch,

And FOREST AND FARM for one year.

The liveliest and Best Weekly Paper published in the Dominion. Send your address for sample copy and full particulars. Special terms to bona fide canvassers.

FOREST AND FARM,  
CHAS. STARK, Publisher, 50 Church St., Toronto.

## BEES AND HONEY.

TO ALL that are interested in Bees and Honey, send for our Free and Illustrated Catalogue of Apianian Supplies. Address

M. RICHARDSON & SON,  
Port Colborne, Ont.

## BARNES' FOOT-POWER MACHINERY



Read what J. J. PARENT, of Charlton, N. Y., says—"We out with one of your Combined Machines last winter 50 chaff hives with 7 inch cap, 100 honey racks, 500 broad 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. Address W. F. & JOHN BARNES, 344 Buby St., Rockford, Ill.

## SECTIONS FOR THE MILLION.

We are turning out sections at the rate of 10,000 per day right along, in addition to our regular hive and supply trade, and we are prepared to furnish them in any regular size and style in large quantities at very low rates.

Our prices are as follows:—  
1000 ..... \$ 4 00  
3000 ..... 13 00  
5000 ..... 20 00  
8000 ..... 27 50  
10,000 .....  
All orders entered as received, and shipped with promptness. Order early to avoid the rush. These prices are spot cash.

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