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THE CANADIAN BEE JOURNAL

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

VOL. VII, No. 21. BEETON, ONT., FEB. 1, 1892. WHOLE No. 305

EXCHANGE AND MART.

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

FOR SALE.—A pair of black carriers, pair red barbs, pair trumpeters and homing pigeons, cheap or exchange for fowls JOHN GRAY, Todmorden. p 20 tf

FOR SALE.—About 500 pounds No. 1 extracted honey in Jones' 60 pound cans. F. O. B. cars at $5.00 each. THOS. STOKES, Minesing, Ont 21 1t.

FOR SALE.—Trio of Partridge Cochins, Cockerel very large, vigorous birds won 1st at Toronto and Ottawa last fall; pullets laying; also single comb Brown Leghorns. JOHN GRAY, Todmorden, p 20 tf

FOR SALE.—Silver Wyandottes, some very choice cockerels; prices right. Also pair Buff Cochins and four blue Andalusian hens and Indian Games. JOHN GRAY, Todmorden. p 20 tf

I HAVE 78 bound volumes of the CANADIAN BEE Journal—some in duplicate, some in triplicate, and a few odd. I will sell any or all for 50c. each. If ordered by mail 5c. extra. E. T. STRANGWAYS, Beeton, Ont.

D. C. TREW, Lindsay, Ont., Breeder and Importer of high class Houdans, Leghorns and Plymouth Rocks. Prize winners at the leading shows. Birds for sale at all times and eggs in season $2 per 13.
21 tf.

CARNOLIAN QUEENS

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

Until Further Notice

We offer 5 per cent. off list prices on all goods for next season's use. Our new price lists will be issued about the middle of January.

We pay 35 cents trade for good avarage beeswax delivered here.

MYERS BROS.,

MENTION THIS JOURNAL. Box 94 Stratford, Ont

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Is the most popular and widely read Magazine published. Each number contains

A COMPLETE NOVEL,

short stories, sketches, etc.

The January (1892) number will contain
The Passing of Major Kilgore,
By Young E. Allison.

The February (1892) number will contain
Roy the Royalist,
By William Westall.

The March (1892) number will contain
A Soldier's Secret
By Captain Charles King.

For sale by all booksellers and Newsdealers.

Single Copies 25c. **$3 PER YEAR**

THREE BACK NUMBERS OF THE

"Review"

FOR TEN CENTS.

One of the numbers is that of Dec., 1891, containing eight extra pages (36 in all), 7 half tone portraits of leading bee keepers, illustrated description of the best self-hiver known, choice bits of information gathered at the Chicago convention and a most instructive and interesting discussion of "Remedies for Poor Seasons." It is the largest and best number of the Review yet issued. These numbers are offered at this low price that bee-keepers may be induced to send for them and thus become acquainted with the Review; its editor knowing full well that such acquaintance will prove of mutual benefit. With the numbers will be sent a list of the special topics that have been discussed, the issues in which they appeared, and the price at which they may be obtained. The Review is $1 a year. The book, "Advanced Bee Culture," is 50c.; both for $1.25. The Review for 1892 will be better, brighter and more "crispy" than ever. All new subscribers for 1892 will receive the Dec., 1891, issue, free. Address, BEE KEEPERS' REVIEW, Flint, Michigan.

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THE

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

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SEND us fifty cents and get Hutchinson's "Advanced Bee Culture." C B J Beeton.

WE have several bound volumes of Clark's "Birds Eye View" of Bee-keeping will mail on receipt of 10c. CANADIAN BEE JOURNAL, Beeton, Ont. b-24-tf

COOK'S MANUAL OF THE APIARY.—Stock just to hand only $1.00, if by mail $1.12. Send orders to C.B.J., Beeton, Ont.

W. A. Chrysler is filling orders promptly. He is selling the nicest foundation you ever saw for 45 and 55 cts. per pound. 1½ story "L" hives in flat all complete, for 60 cts., 2 story 70 cts., and all other supplies at prices that cannot be beaton. Address—W. A. Chrysler, Box 450, Chatham, Ont. b-6 tf

CARNOLIAN QUEENS

I expect to continue the breeding of Choice Carniolan queens next season, and orders will be booked from date. No money sent until queens are ready to ship. JNO ANDREWS, Patten's Mills, Wash. Co. NY

Attention Bee-Keepers!

Tested Italian Queen in May, $1.50 each. Snow white sections $2.50 per thousand. Hoffman frames and a full line of Bee-Keepers' Supplies. Twenty page price list free. J. M. KINZIE, Rochester, Oakland Co. Mich. b4 1y.

JERSEY BULLS

FOR SALE.

I will sell cheap two Jersey Bulls. Their dam is an extra good cow and will give from 8,000 to 10,000 lbs. milk per annum. One of the above was dropped Oct. 1890, and the other March 1892.

G. A. DEADMAN.

Druggist and Apiarist.

b 24-1y. BRUSSELS, ONT.

—THE—

Canadian Poultry Journal

AND PIGEON FANCIER.

EDITED BY { **JNO. GRAY,** **CHAS. MASSEY.**

With other contributors, is issued twice each month at our office, Beeton.

It is brimful of crisp and valuable information for every fancier. The subscription price is only $1 dollar per annum.

Send for sample copy.

AGENTS WANTED.—Write for terms.

Beeton Publishing Co.,

BEETON, ONT.

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To get up Club Lists of New Subscribers for the

Canadian Bee Journal

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BEETON, ONT.

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GEORGE SPENCE, - - Executor.

b11 3t

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EIGHT miles west of Hamilton, and close to a good market, sixteen acres, with a small house and barn, abundance of wood for fuel, and good springs of water. There is upon the property a good peach and apple orchard with about 100 peach and apple trees, also 50 colonies of bees, 12 of which have produced 1600 pounds of honey. All in good working order. Price $2000, $200 down, balance secured. An intelligent man could make the price out of the honey and fruit in a few years. Address: BEE JOURNAL, Beeton, Ont. b11-tf

8 UNTESTED QUEENS

two months old,

75 cents each.

1000 pounds basswood honey at 7 cents, F.O.B.

R. F. WHITESIDE,

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SEND TO THE

ISLAND HOME

Queen & Drone rearing establishment

For a sample of the bees which are causing so much excitement among bee-keepers. No charge for sample; simply send your address on a post card, stating your wish, and return mail will give you a peep at the

Five-Banded Hustlers

which are warranted to work on red clover.

It is hardly necessary to say that our queens are superior to any reared in America, as our system of rearing and mating tells you that.

Don't forget to send for sample, even though you don't want a queen you'll say they are worth twenty five cents just to look at.

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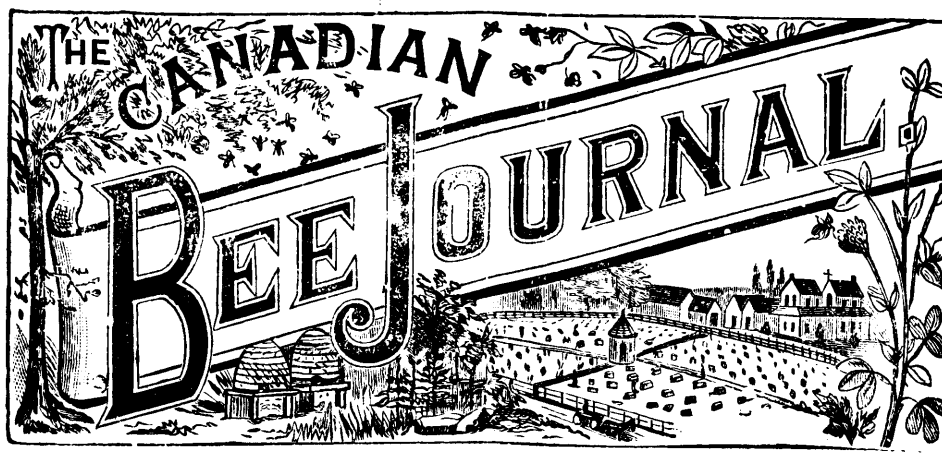

"THE GREATEST POSSIBLE GOOD TO THE GREATEST POSSIBLE NUMBER."

VOL. VII, No. 21. BEETON, ONT., FEB. 1, 1892. WHOLE No. 305

THE CANADIAN BEE JOURNAL.

ISSUED 1ST AND 15TH OF EACH MONTH

D. A. JONES - - - EDITOR.

EDITORIAL.

Gleanings says if sections become too dry put them in a cellar for a few days and they will become damp enough.

* * *

Mr. Smith, of Bracebridge, kindly presented us with an enlarged photo of his honey exhibit at the Toronto exhibition which was awarded the first prize.

* * *

The American Bee Journal for Jan. 1st, 1892, in its editorial remarks, speaks of its being started 31 years ago, and for the last eighteen years it has been under the management of the present editor, Mr. I. G. Newman.

* * *

Mr Corneil stated at the convention that he had secured and maintained a temperature in the sun wax extractor of 220°. The extractor was double glass and packed with saw-dust.

* * *

The Ohio State Bee-Keepers' association will hold its next annual meeting at the West-end Turner Hall, Freeman Ave., Cincinnati, Feb 10th, to 12th, 1892, beginning at 10 A. M. on the 10th. Mr. C. F. Muth is president.

* * *

The Minnesota Bee-Keepers' Association met in Owatonna, Minn., on the 20th and 21st of January, 1892. Free entertainments were provided for those attending, by the citizens.

* * *

The *Progressive Bee-Keeper* is now the name of E. F. Quigley's Journal lately known as the *Missouri Bee-Keeper*. Jan. issue is No 1 Vol 2. We envy one sentence in the salutatory, "Our list is a paid up one."

* * *

R. H. Smith's paper read on "Apiarian Exhibits," promised last week, appears elsewhere. After reading it, Mr. Smith received a cordial vote of thanks. It is needless to say it was well merited.

* * *

The C.B.J. is mailed from the office of publication to any post office address at 75c. per annum. Address—The CANADIAN BEE JOURNAL, Beeton, Ont.

* * *

We were unable to give in our last number all the minutes of the O.B.K.A. Annual meeting held in London for lack of space, and for the same reason we were prevented from publishing some Reports of Committees and some papers read. We have devoted a portion of this issue for a *resume*.

* * *

The 1892 Catalogue issued by Geo. E. Hilton of Freemont, Mich., U.S., is before us. As usual, it is neat and well compiled. On the last page we notice the following extract. It ought to be pasted in the hat of every manufacturer: "I should be pleased, friends, to give you credit if I could, but I have listed

everything as low as consistent; and invariably when I have given credit to a number in the past, I have lost more than the profits would amount to. So my rule in the future will be cash with order."

***

We have just received a very neatly printed illustrated catalogue from G. B. Lewis, of Watertown, Wisconsin. It contains thirty six pages. We notice that he not only exhibits various styles of hives, sections, supers &c., but he also illustrates his basket box or packing case which is meeting with so much favor from shippers.

***

Some of our Journals lose the address in the mail bag. They are sent back by the first mail clerk for better directions. The address being rubbed off we cannot re-direct. Now, we want our subscribers to send us either a card or letter stating that they have not received their Journal. On receipt of same we will mail another number. Any one, who during the year lost a number, can have it replaced if he will send the date.

***

We daily receive postal cards and closed letters from some of our cousins across the border, asking us to forward a sample copy of our journal. We do this cheerfully in every case, but remember, the United States is considerable of a farm, and the inhabitants thereof make no bones about appropriating such names as Jackson, Columbus, Washington, Lincoln or Springfield. There is not a State in the Union which has a monoply of names, and it is rather puzzling to our office staff to mail a BEE JOURNAL to Bro. Jonathan, Columbus. Sign your names legibly—put down your P. O., County and State—we will mail you a sample copy. The result will be a new subscriber.

***

In our issue of the 15th of January, we publish a full report of the Committee on Affiliation. Just as we go to press Mr. C. Dadant, Secretary, sends us a communication which appears in another column. Our report on the Committee on Affiliation is from the original. Mr. Dadant's communication conflicts somewhat with the said report. That committee was composed of men who are quite able to look after themselves as well as the interests of the Ontario Bee Keepers Association. We gladly throw open our columns for correspondence or comments on the friction which evidently exists between the Secretary of the International Association and the committee whose report forced Mr. Dadant to reply.

***

Those who are members of the O. B. K. A. will please look at their wrappers for this issue. What ever number appears after your name gives the expiring number of your subscription. Before the issue of the 15th, we will arrange our mailing list so as to extend each and every subscriber who is a member of the O. B. K. A. one year's subscription. Look at your wrapper for this issue. See if your number is correct. If not, drop us a card at once advising us of any error. Bee keepers who intend taking advantage of the O. B. K. A's. generous offer, are requested to communicate at once with the Secy, W. Couse, Streetsville. The O. B. K. A's. offer for every member to the Association at $1, the C. B. J. free for one year. Any subscriber to the BEE JOURNAL who will join the association will have his subscription extended one year on the C. B. J if he mails to the Secretary $1.

***

We are pleased to be able to announce that the Ontario Bee-Keepers Association at their last meeting decided to give each member of the Association the C. B. J. for one year, anticipating by this liberality on their part, that it will add a very large number to the present membership of the Association. In consideration of the favorable terms with the present owners of the Canadian Bee Journal, made with the Directors of the O. B. K. A. for the supplying of these Journals to all their members, they in return are to receive the cordial support, both financial and moral, of the association. This should very largely increase the circulation of the Journal. The improvements that are to be added to the Bee Journal will make it second to none. This, combined with the business ability, push and financial standing of the present owners, should place it on a basis that will enable all to give it their hearty support. Now,

it will be the duty of every one who can, to give us any news, that will be of interest to the bee keeping public. It must be remembered in order to make any Journal successful it requires the co-operation of all those who can assist in making the Journal what it should be. It matters not who is editor, it will be impossible for him without assistance, to have it all that can be desired. We trust that in future those who have so many good things will give them to our readers through the CANADIAN BEE JOURNAL.

***

Since the New Year we have mailed very polite invitations to some of our subscribers who are in arrears for their Journal. In response to our efforts to collect we have been deluged with postal cards, post-masters notices and papers returned marked "Refused." In some instances an envelope has been carefully wrapped around the Journal and addressed to the Publishers. We unwrap it. We cannot find anything to locate the party returning it. It might just as well have been sent from the moon or the planet Jupiter. Of course every subscriber is at perfect liberty to stop his Bee Journal, and if he writes to the office, enclosing arrearages and requesting his name to be taken from the list, his name is erased with the hope that he may return some day to his first love. Some subscribers have sent the Journal back at the end of the year because their subscription ran out. Our opinion and theirs may differ, but we admire their business like manner. Some have been taking the Bee Journal from the office for years. They have just discovered that "They never ordered it," "Never wanted it," and that they "Never got it." Two with guile almost sublime say, "They didn't know they had to pay for it." Others because we *dared* to dun for an account, send the needful with instructions "To stop the paper," if we have to be continually pushing them for a couple of dollars. The chances are, the Bee Journal will survive the shock and we will continue to publish a Journal that compares favorably with our contemporaries. What we do not know about apiculture we can ascertain for you from unquestionable authorities, and we will ventilate your grievances if you have any, in its columns, gladly publish anything of interest pertaining to bees, and endeavor to supply you with a volumn worth reading, worth keeping, and worth binding.

***

We found it impossible to be present at the opening of our Annual Convention, but intent on enjoying an apiculture feast, we were there on the 2nd and 3rd days. We were very much disappointed. Three or four parties had made up their mind to have a new bee journal started. There was too much time taken up in discussing it, and the persistency of some in bringing it before the meeting at different sessions deprived us of a great deal of valuable time which might have been spent in discussing apiculture. At the St. Catharines' Convention last year we decided to hold it for three days instead of two, in order that we might have a better opportunity for discussing the finer points in bee-keeping, but unfortunately it seemed as if a few fancied that their hobby, "a new bee journal," should exhaust all the time at the disposal of the Convention, and leave no opportunity for discussions on apiculture, which so many had gone there to hear. We were very sorry, indeed, to see a number who had come there for the sole purpose of learning something in bee-keeping, forced to leave without hearing a single word, and expressing their disgust at such a state of affairs, saying they would never attend a Bee-Keepers' Convention again. We hope they will reconsider their determination before our next Annual Meeting, and all be with us at the Convention to be held at Walkerton, as we bespeak for all who go there a great treat. We hope the good sense of the meetings in the future will not permit two or three to deprive the Convention and the world from reaping the benefits to be derived from the exchange of ideas, and the bringing out of important information regarding our fascinating pursuit. We did succeed in having a very valuable and instructive discussion a short time, Rendering of Wax. Now, if our Conventions are to be of interest to the public generally, some means must be devised by which we will be a able to devote more of our time to the disscussion of apiculture.

***

We have repeatedly been asked and

we have as often answered through our columns, the queries asked by correspondents of the B.B.J. Compare our replies given in the past with the replies given by journalists in the mother land:

"A friend of mine having bought two hundred weight of sugar, &c., the settings from golden syrup, and only having one stock of bees, wished me to buy some at a penny per pound but I prefer to have your advice on the subject first—Would it be in any way suitable for bee food, as I have eleven stocks all in bar frame hives, which will probably require feeding in spring, but do not believe in giving my bees rubbish.—A. DELBRIDGE, Parracombe."

"REPLY.—You will find it pays better to buy good sugar for bees than using cheap substitutes. The granulated portion of the golden syrup will contain too much treacle to be wholesome food for bees."

"Will you kindly answer the following question in your next number. Is the nectar or secretion of the flower which the bee collects of the same chemical composition as honey? Or is the nectar converted into honey by the bee by some process or by mixing it with another secretion of its own?—F.W.P."

"REPLY.—The nectar from flowers as gathered by the bee undergoes chemical changes before it is converted into honey. By means of a secretion produced by the salivary glands the cane sugar of nectar is converted into grape sugar of honey. Coagulated albumen is also found in honey, whereas it is not present in nectar. Moreover, formic acid is added to honey and acts as a powerful preservative."

***

Our old friend Mr. Benton, was unable to attend the Albany meeting as his letter given below, and which was crowded out of our last issue, shows:

PRESIDENT ELWOOD,

Dear Sir,—I very much regret that a serious illness makes it unsafe for me to think of going to Albany. My authorization as a delegate to represent the Department of Agriculture in the proceedings of the Association was made out and signed by the Secretary of Agriculture last week, and I had all other arrangements made to arrive in Albany to day. I am, of course, greatly disappointed, and it certainly is vexatious, after having been able to work all the year, to be sick at this particular juncture. However, there may be some Providence in the matter.

My essay was not finished when I was taken ill. I am sorry for this, as well as that I cannot be there to confer in reference to the discussion set down for 3:30 p.m. Thursday, which, by the way, I am quite surprised to see in the programme. But it is a good idea, since union on the part of the Association in regard to the work to be undertaken will surely result in benefit.

As the appropriation for this purpose is not large, and expenditures had been authorized at Lansing previous to my appointment, experimental work has not been undertaken here, this season especially, as the weather was well advanced when I came here. But besides correspondence, planning work, etc., my time had been utilized in making transactions and some general work for the division. The views of the Association in regard to the work to be undertaken, will doubtless be received with great consideration. FRANK BENTON.

***

At the North American Bee-Keepers' Convention held at Albany, the size of sections was discussed after an essay read by Dr. C. C. Miller on the subject. As we manufactured lately for the Bee-Keepers of Ontario, and at one time extensively for the British market, the discussion to us is of greater importance than to the majority of our customers, whom we once served. We would like the opinion of our readers on size of sections and also their opinion on what size or sizes ought to be a standard We clip the following from *Gleanings*.

Dr. C. C. Miller in an essay disc ussed the desirability and feasibility of having two sizes as standard. They necessarily cost the supply-dealer more, and therefore indirectly the bee-keeper. It would be desirable, he thought, to have only one standard, but in the present condition of things, that seemed impossible. He rather objected to $1\frac{1}{8}$ sections for one of the standards, because they hold less than a pound, and because the consumer buys it for an ostensible pound package, when it was not. He did not wish to be a party in any such business. In connection with the essay were read two letters, one from W. T. Falconer, and the other from the G. B. Lewis Manufacturing Co. Both held the ground that it was desirable to have a standard if it could be adopted. The $1\frac{1}{8}$x$2\frac{1}{4}$x$4\frac{1}{4}$ comes as near as any thing to being a standard; but besides these there are dozens of other sizes which they are obliged to keep in stock.

A number of commission men were present, and objected to the point made by the doctor on small-size or under-weight sections. The "under-weights" were accepted readily. Consumers would ask. "How much is honey a pound?" The reply would be, for instance, "Eighteen cents." The consumer would call for a section. When the change was made out he would be charged only 16 cents; but let there be an overweight section, and there would be complaint. Commission men seemed to prefer larger and thinner combs, of a trifle under a pound, and this is one reason why, perhaps, a $4\frac{1}{4}$x$4\frac{1}{4}$ section seven to the foot has been coming into prominence. H. R. Wright showed his under-weight tall section, a trifle taller than wide. The display was a little better, he said, and consumers readily took it.

***

The same question was discussed at the Caliafornia State Convention, as the minutes of that meeting reported by the American Bee Journal shows:

"What sized sections do you prefer?" was next asked.

Mr. Root said he was the first to introduce the 1-pound section, and was denounced by

New York bee-keepers, but afterwards they apologized to him and adopted the 1-pound sections—4¼x4¼x2 inches.

The point brought out was that comb honey sold in retail by the section.

To make combs straight, separators are now used.

Mr. Mellon thinks that the 1⅞ inch wide section sells better than the 7 to the foot section, because it weighs a full pound, while a smaller section is short weight.

Mr. Root said that Mr. Heddon originated the light weight section.

Mr. Hart sells his honey in 7 to foot sections, and when used without separators, they weigh a pound each.

Mr. Hunt used 7 to foot, used without separators, and thinks that honey should be sold by the section.

Mr. Root said they sold honey in Denver in sections at 15, 20, 25 and 30 cents per pound, and sold many tons from wagons which run as regular as a milk wagon.

Mr. Hillier used 7 to foot sections, and gets a pound in each. He stamps his name on the packages, and sells his honey before it is taken from the hive.

***

Apropos of the discussions which took place at Albany, N. Y., and at London, Ont., is the discussion which took place at the Caliafornia State Bee-Keepers' Association held Jan. 6th ult., at Los Angelos, on "Bees and Grapes," and "Spraying of Fruit Trees." We cull the following extracts from a report of the meeting contained in the American Bee Journal:

"The first topic for discussion was, 'Do bees bite through the skin of the grape?'

Prof. Cook led the question with remarks upon the mouth parts of insects, and was willing to stake his reputation as an entomologist upon the statement that the honey bee is structually unable to bite the smooth skin of the grape. The honey-bee, as a busy fertilizer, of the different fruit blossoms, is practically the fruit-growers best friend. Experiments at the Michigan Agricultural College has demonstrated this over and over again Thin cheese-cloth was tied over a limb of various fruit trees, upon which were a hundred or more blossoms, and being deprived of the visits of the bee, there was no fruit, while other positions to which the bees had access were loaded with fruit.

In the discussion which followed, it was shown that at least two-thirds of the bee-keepers present were also fruit growers, and where grapes or berries were picked in season, there was but little danger of damage. It was also demonstrated by Prof. Cook, Mr. Corey, and Mr. Keeney, that the California linnet and the yellow jacket would puncture the grape; after the puncture was made, the bees were ready to rush in in great numbers and suck the juice, and receive the cursing that was really due to the real mischief-makers.

In grape drying it was sometimes necessary to cover the grapes with cheese cloth, but even then it was only the imperfect grapes that were destroyed.

Mr. Root raised the question of priority of the occupation of the field by the bee-keepers, and claimed that this right should be respected by the fruit-men. Sometimes the question assumes a vexed tone between fruit-men and bee-keepers, but a little reasonable forbearance from both sides would result in great benefit.

It is very evident that a country destitute of bees to fertilize the fruit blossoms, would either be abandoned as a fruit country, or bees obtained to cause it to produce again.

The second subject taken up was the spraying of fruit trees for the destruction of the codling moth.

Prof. Cook gave the result of several interesting experiments. London purple or Paris green (1 pound to 200 gallons of water, and even so diluted as 400 gallons of water), when sprayed upon trees in full bloom, had the effect of killing bees, and even the young bees in the hive. It is also useless to spray trees while the tree is in full bloom, for the moth does not lay the egg in the embryo fruit until the blossom falls. The proper time for spraying is just as the fruit is forming. A rain or a strong wind upon the sprayed blossom will render the spraying inoperative.

The effect of diluted Paris green, as used for spraying trees, had been tried upon sheep, hogs and horses, and without bad results."

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Before the CANADIAN BEE JOURNAL was published we used the columns of the Beeton WORLD, to give a synopsis of our lectures and talks to our bee students. In going over some of the musty tomes of the attic above the sanctum we carelessly peeped into a few of them, and in some instances we were surprised to find how little we knew years ago about many points in apiculture, and how little we have learned since in many others. The old fyles are interesting. Questions are asked years ago that are asked today. Letters appear from old friends

who have long since died—from friends who were at one time enthusiasts in bee culture—from ladies propounding questions touching queen bees and colonies who are now the queen bees in domestic colonies of their own—from beginners who to-day are authorities on matters about which they once knew little or nothing, and from being the instructed have become our instructors. We reproduce an old article on introducing queens written twelve years ago. We may reproduce others from time to time:

"Success or failure in introducing queens depends very largely upon the amount of knowledge possessed by the operator; little time is required, and the danger of losses is small with those who understand the art thoroughly. Many bee-keepers appear to labor under the impression that because they are larger and stronger than a bee they can force the little creatures to do as they wish by "main strength and awkwardness." Everybody has a method of his own, and everybody's methods, of course, the best—because they have tried it once, or one season, and it has happened to work right. After numerous trials and many years of experience we find that the variations in season, temperature, flow of honey, and many other conditions, have much to do in the matter of successful introduction. We also find that queens very frequently cause their own destruction by their unwise movements. A queen just hatched may be introduced into a queenless colony at once, and she will be taken no more notice of than any young bee; the reason is readily explained. Her movements are natural, she is innocent, fearing no harm, and her actions do not cause any unusual excitement among the bees. Under these circumstances an older queen may be introduced in the same way, with no cause for fear as to her acceptance. Few apiarists have made this part of their profession a subject of close enough study, and few observe closely enough to be able to decide how to act under all the circumstances that may arise. We have no hesitation in saying, however, that we believe the time will come when almost any bee-keeper will be able to introduce any queen into any queenless colony at any time, and in the space of one minute, with perfect success. We shall continue experimenting, and hope ere long to be able to advise even novices how to introduce as above, but, in the meantime, we purpose explaining only one method, now which we practice very largely in our own apiaries, and which while it is very simple and will not lead to confusion, will be found in the majority of cases to succeed. It is intended only for beginners and all others who do not succeed in their own way, and are willing to receive a word of assistance.

Take a piece of wire cloth about four or five inches square, and out of the four corners cut other pieces about five-eights of an inch square. Bend sides down till corners meet, and you have a wire box having four sides and a bottom, but no top. Ravel out each edge of the wire cloth about ¼ of an inch, so that they will push readily into the comb. In this box or cage place the queen, and should her wings not be clipped, it will be better and safer to cover the top with a piece of pasteboard or a thin piece of wood; then take out the frame on which you wish to cage her and place the cage on a smooth part of the comb that contains some honey; and, if possible, some hatching brood. The queen will run on the wire cage in her attempts to escape, and while thus engaged slacken the cage and the pasteboard or wood that you have used as a cover will drop out; then press the wires into the comb, and there you have your queen caged, and right over honey and hatching brood. Examine the colony the following day, and if the queen is not liberated, you may raise one corner of the cage a little, and the bees will gnaw her out and accept her, as it is all done so quietly that the queen does not become frightened and run over the comb exciting the bees. The young bees that have hatched under the cage accompany the queen, and less danger is to be apprehended on that account as she acts more naturally. While caged, queens will often deposit eggs in all the empty cells.

It is better not to examine or disturb the hive for some time after the queen has been introduced and accepted, but if you should it must be done very carefully and quietly, as the queen is much more liable to be "balled" then than later.

Aside from freshly introduced queens "balling" is often caused by rough and careless handling, especially when the honey flow is irregular and, after having searched in vain for a cause, the verdict is arrived at that the queen died from natural causes, and the whole race must necessarily be a short lived one, and all through ignorance of the fact that the queen was killed by their own carelessness.

Exercise great care then while handling your bees, as they can be, and generally are, made cross or quiet by the way in which they are handled."

Sweating in Comb Honey. Its Cause and How to Apply a Remedy.

WE are in receipt of a letter from a friend who had a quantity of comb honey this season and who placed a portion of it in his summer kitchen,

which has become very damp, and very unfortunately for him at least, some of it was placed in his cellar which he claims is a dry one. He now asks how it is that his comb honey is sweating and leaking, and much of it that was bright and white in appearance when taken in, now looks dark and watery.

It is easily accounted for. The capping upon honey is porous, and admits the moisture. The damp fall weather and moisture of the cellar penetrated the porous cappings, and as honey is very susceptible to moisture, it absorbs or takes it up thus increasing the quantity in each cell until the cell is filled out against the capping. The swelling in appearance is the thin honey oozing out through the capping. This of course gives it the watery appearance, as the little air space between the capping and honey which the bees leave become filled with the liquid, and changes that white appearance of the cap to a more watery and dark color.

Now for the remedy. There is a bare probability that the trouble is gone so far that remedy is impossible; yet we would strongly urge the following plan: though it may not bring back the beautiful white appearance of the honey to its full extent, it will so improve the honey that it will be worth much more than the cost of doing it. You should take a warm room, your kitchen or any part of the house or outbuilding that could be heated up to a temperature of from 90 to 120 o will suit. If it could be kept at a temperature of 100 o or above, for say three days to a week, with a little ventilation in the ceiling to allow the moisture to escape, the water which had accumulated in the honey would be dried out. Keeping it in a room of this kind would ripen it very much, improve the quality, and add, we should say, at least from two to five cents a pound to its value, besides putting a good article on the market which would not be the case if you sold unripe comb honey. As soon as the sections are taken off the hive, always put them in a dry, warm room, with good ventilation sufficient to carry off the moisture. Keep the temperature in that room as high as possible—not to exceed 110 or 120 o, and as uniform as possible for days. This will so ripen the comb honey that should it be placed afterwards in a damp or more unfavorable room it will retain its lovely white appearance much longer, as the air space between the capping and the honey has increased as the moisture decreased; and although the sections may not weigh quite as much as they would in a damp state the quality will over balance the difference in weight.

A New Super or Hive. Chalmers to the Point.

WE are pleased to be able to give our readers a description of a new super or hive, as it may be used for either. It was invented by Mr. Chalmers, of Musselburg, one of our cleverest bee keepers, who is very ingenious and quite original in his ideas. It may be taken apart, or put together in five or ten seconds. It is exceedingly simple in its construction, yet, it combines many valuable points and important principles. Mr. Chalmers exhibited it at the annual meeting of the Ontario Bee-Keepers Association held at London, where it was examined by many, who pronounced it another step in the right direction. It is very simple, cheap and easily manipulated, and for a closed end frame hive we have not seen anything that we think would equal it. Right here let us say if some of the advocates of the closed end frame would test this as a hive around their frame we feel certain it would delight them. Besides it is admirably adapted for section supers for which it was originally intended. I will now try to describe how it is made, and should I fail to make you all thoroughly understand it, I shall be pleased to answer any further questions in reference to it:

Take two boards $\frac{7}{8}$ of an inch thick, $4\frac{1}{4}$ inches wide and 3 inches longer than is required for the inside measure of your super; then take two boards $\frac{7}{8}$x$4\frac{1}{4}$ inches, the exact length of the inside measure of super; then $\frac{7}{8}$ inch. from each end of this board put a saw cut across it $\frac{3}{8}$ and 1 1/16 of an inch deep; then cut from the end on an angle into the same cut. This makes a V shape on one side of the board. Do all four ends this way. Now, take four pieces $1\frac{1}{8}$ in. x$\frac{7}{8}$x$4\frac{1}{4}$ in., bevel one side from $1\frac{1}{8}$ down to $\frac{3}{4}$; then nail these four pieces on the ends of the four sides of the super with the bevelled edge in. Now, turn the

two bevelled edges of the end pieces out, and it just fits in the nitch like a dovetail. There is a saw cut made at each end of the side pieces $\frac{3}{8}$ of an inch deep and 1½ inches from each end when a T-rest is closed down that just fits tight up against the end board holding it in position. Now, the two ends are held in position by four T-rests which fits so tightly against them that it is impossible for them to move out of the dove-tail. Now, perhaps some of you may ask what holds the T-rest from falling out, especially the one on the under side, as we have heretofore stated? This super is just 4¼ inches, so you will observe in order to have a bee space he has a rim $\frac{7}{8}$ wide by 5/16 deep on which this super is placed. Now a second rim may be laid on top of the super. When you wish to reverse it just hold the two rims tight down to the T-rests, then reverse the super. When the sections are to be taken out of the super you simply remove the T-rest at the ends which allows the end board to slip out and the sections may be emptied out. Now, for closed end frames these section rests at the ends would be necessary, while there would be none in the centre. Another point is that the tin coming over the end of the frame would prevent it from being glued fast with propolis, as is sometimes the case.

Notes on the Annual Convention.

THE Bruce Bee-Keepers' Association appear to have some of the right material in it, and if it does not stand at the head of the list it will not be for want of energy and tact on the part of its principal members. Mr. A. Shorrington is the right man in the right place.

* * *

Mr. A. W. Humphries printed a reply post card On the inquiry side was written the address of the party from whom the report was solicited. On the reverse side the following appeared:—

"PARKHILL, Dec. 12th 1891.

DEAR FRIEND,—Please fill up the card attached and bring it with you to the bee-keepers' meeting in Lucan Town Hall, on Friday next, the 18th inst., or if you do not attend this, please drop it in your post office at once, as I have to report to the O.B.K.A. which meets in London this year on Jan 5, 6, 7 and 8, when we hope to meet you there. It is necessary to give the report to get the Government Grant to give prizes at the fairs, and as no name is mentioned publicly, and no other use is made of this information, please comply with our request.

A. W. HUMPHRIES,
Secretary."

On the reply card Mr. H. printed his name and address. On the reverse side was the following

REPORT OF BEES FOR 1891.

"Name—John Shoults. P.O. address—Parkhill. Spring Count—72. Fall Count - 100.—Pounds of Extracted Honey taken—3,500 lbs."

Mr. Humphries is a worker, and we hope his bee keeping friends will appreciate his efforts. Some refused to reply to the above card because they did not wish to report their success or failure. If they reported their success they feared others would move in and occupy the same field and thus give them opposition in field and market; others object to publication. Mr. Humphries designed the card to meet the wishes and objections of all, but in spite of the care he had taken some even then refused to report.

GENERAL.

Tunisian Bees.

AT the November meeting of the Entomological Society, Mr. W. F. Kirby exhibited a series of a dark-coloured form of *Apis* reared by Mr. J. Hewitt from bees stated to be imported from Tunis. We have had an opportunity of seeing these bees, and so far as we can judge from dried specimens they are no other than the ordinary Tunisian bees, which we have already described as being similar to those from Algeria and Morocco, and not a new species at all. Mr. Kirby stated that Mr. Hewitt proposed to call them 'Punic' bees, and that he stated they were different from the ordinary Tunisian bees. We fail to see any difference, and there will be some difficulty in persuading entomologists to adopt a new name for well-known bees. We were also told that these bees would not sting, which made us smile, more especially as we remembered what Mr. Benton had said about them. Here are his own words when he wrote from Tunis on March 20th 1885: 'They are also active, energetic workers. But, unlike Cyprians and Syrians, they are liable at times to fly at one and sting him when he approaches the apiary, and yet does not molest the hives.'

There is a great deal we could say about Tunisian bees; about the 'Kassartyrs' apiary, of forty hives; about a French gentleman (whose name, for obvious reasons, we at present withhold), whose apiary is not quite on the borders of the Sahara desert, who exports Tunisian bees to England, and upon whom (if not in Paris), amongst other bee-keepers we intend to call when we go to Tunis for the purpose of ascertaining why Tunisian bees, which are of the same race as those of Algeria and Morocco—and, we may add, of the Balearic Islands too—sometimes show yellow, which the bees of the last three places do not. Of course, we have our own theory on this matter, but we wish to verify it on the spot by personal observation. We hope, also, before long, to be able to show specimens of these bees from all the above places at a meeting of the Entomological Society, and also of the Linnean Society. We were much amused when Mr. Kirby told us that the importer wished these bees classified as *Apis niger*. As they are already classified as *Apis mellifica*, it is not likely that the name will be changed for Tunisian bees, which are only a variety of this species.—British Bee Journal.

The Importance of Separators.

SHALL WOODEN SEPARATORS BE THICK OR THIN? THE SERIOUS INCONVENIENCE AND AOST IN HAVING THEM WET WHEN PUT IN SECTION-CASES.

I HAVE always had quite an opinion as to the importance of separators, and latterly I have raised my opinion as to their importance. A good many imperfect sections I have traced to imperfect separators. That is, if a section is nearly finished, and then is moved to some other part of the super where the separator is not exactly like the one where it had been, then wherever the separator comes a little too close to the section the comb is likely to be gnawed away, and little bridges of wax built from the comb to the separator. I have seen a section, one side of which was entirely finished, have its finished side nearly all unsealed just because, when moved, the space between comb and separator was not as great as it had been in its first position. And although I am not sure of it, I think there have been cases where the warping of a separator made trouble with a section, although its position had never been changed.

I think it is pretty generally agreed that wood is better than tin for loose separators and as a large proportion of separators used are loose, it becomes an important matter to know just what is the best wood separator. I have seen separators a quarter of an inch thick, and it always seemed to me like a waste of lumber and super room. Still, I never used any of that thickness, and it is possible that they may have advantages of which I do not know. When wood came to be largely used for separators, and they consequently came down to a very moderate price, I decided that the labor of cleaning them of propolis after being used was worth more than the cost of new separators. So for several years I have used for kindlingwood most of my old separators.

Then the question arose: If they are to be used but once, is it not worth while to try very thin separators? So I have tried different thicknesses, from 1/30 of an inch to 1/16 or thicker. The very thin ones seemed to me more desirable because they would take up less room, make a little less chance for propolis in cracks, and especially because they were tougher. For it seems to be true that a very thin separator will be sliced off without breaking the grain of the wood as much as it is broken in one twice as thick. But upon trial I did not find the very thin separators desirable. Sometimes the bees would gnaw away a considerable

portion of one edge, and sometimes the separator would curl, as it appears to me, solely because it was so thin. On the whole, 1/16 may be the best.

A knot in the wood, no matter how small, is fatal to its fitness for a good separator. Sometimes a separator will be curled a quarter or half inch out of true where no knot can be seen; but the grain of the wood shows that it was in the neighborhood of a knot, and for some distance from a knot the grain in generally twisted enough to allow considerable warping in a very thin piece.

I don't know what is the best wood, but I am inclined to the belief that poplar or whitewood is not so likely to curl as linden. It is possible, however, that more knots were allowed in the linden that I tried, than in the poplar.

I once got a lot of separators that were not thoroughly seasoned. In fact, they were quite wet. You would hardly believe the damage those separators were to me. Being wet, they were too wide, so that I could not put in the little ¼-inch separators on top; and the curling! and the twisting! In some cases, in spite of their being pressed between the sections, they bent over fully half an inch out of place. And if a section had its place changed, or if a number of unfinished ones were put together in a super to be finished up, then there was fun. Many a one of those sections came out of the super more unfinished then when it went in. If I ever get any more wet separators I'll put them in the fire to dry, and I'll let them stay there till they've dried into ashes.

What should be the length of separators? I'm not sure about it, but I think about an eighth of an inch shorter than the inside of the super. That's the length I've used them, but possibly I might like better to have them only a sixteenth shorter. If the least bit longer than the space they are to fill, they are very troublesome to get in, and can be got in only by a bend somewhere in their length. If too short, one end gets inside of a section, and then the trouble is still worse.

A further trial, during the past season, in all my supers of the little separators on top, confirms me in my liking for them. Athough I had forgotten about it, I first saw them used by B. Taylor. My supers are 17⅜ inches long inside, and four 4¼ sections take up 17 inches of that, leaving a 3/8-inch play at top, for the T tins taken up the play at bottom. Now, that 3/8 at the top is entirely too convenient a place for bees to fill with propolis, and I want it entirely filled with something else. Three separators, each ¼x4¼, just exactly fill it. I suppose the fit would be so tight that it would be almost impossible to force these little separators into place; but in actual practice I find no great difficulty. Besides keeping out glue, they are useful in keeping sections perfectly square. I had a box of sections that made up so much out of square that I set them aside and stopped making them. Many of them were so much out of square that, when put in the super, one corner of the sections stood up a quarter of an inch or more higher than it ought. If pushed down into place, they would immediately spring up again. But with the little separators I found I could use those same sections. They were squeezed so tight that, when pressed down into place, they were held there. I heartily commend these little separators to every one who used the T supper.

C. C. MILLER.

Marengo, Ill., Dec. 15.

Bee Keeping in South Australia.

IT may be interesting to note that, according to Nature (December 24, 1891, p. 184) the bee-owners in South Australia roughly estimate that they had 25,383 hives in the colony last year, producing nearly 300 tons of honey, of which 80,793 pounds were exported.—British Bee Journal.

Poisoned Bees.

POSITIVE proof was given by Mr. C. P. Dadant, at the Albany convention, that Mr. Smith's 60 colonies of bees had been poisoned by working on the fruit-tree bloom which had been sprayed by Paris green. After this Prof. Lintner stated that he doubted "if bees were killed by the poison."

This reminds us of a story. A man was put into jail for debt. He sent for an attorney, who heard his statement, and said: "They can't put you in jail for being in debt." The man replied: "Thee talks like a fool. I'm in jail now, and thou hast come here and found me."

Talk as he may, the Professor cannot do away with the fact that the bees worked on the poisoned bloom, and they are dead! His doubts will never bring them to life again, even though he may continue to doubt forever?—A. B. J.

Occasionally a Journal will fail to reach its destination, owing to labels becoming detatched. Drop us a card and we will be pleased to forward missing numbers.

Clipping Queens' Wings: Self-Hivers.

COULD you give a paragraph in the Journal upon the subject of clipping queens' wings, with the object of preventing the loss of swarms? I ask this because I am a sufferer from this cause, and have lost several swarms last season, and am rather surprised that the article at page 332, July 23rd, 1891, has not received more attention from bee-keepers in the Journal than it has. Would not the present be the best time of the year for clipping the wings? I may mention that I keep my bees a mile away, and I have no facilities for watching them in swarming-time.—EXPERT, Blackheath Hill.

[The custom of mutilating queens by partially destroying their wings is a cruel practice, and one we do not care to advocate, because, though the removal of the wing of a bee may appear to us a painless operation, to the insect it is not so; in fact, it is only a short remove from cutting off their legs to prevent walking. Under the circumstances in which you are placed we would far rather try the 'self-hiver.' In an early number we shall be giving an illustration of a new and improved form of this contrivance, which seems likely to answer the intended purpose well. —EDS.]—British Bee Journal.

What is Hibernation?

THE BEST TEMPERATURE FOR BEE-CELLARS.

A CORRESPONDENT writes. "At what temperature should bees be kept so that they will hibernate?"

Well, that depends on what is meant by "hibernate." If that word is to be so turned from legitimate meaning that it means getting quiet, then experience, in my case, proves that a temperature of about 42 to 46° is as near as I can come to it. If it means a sinking into that torpid state into which ants, wasps, woodchucks, and such like things go, then if such a state were possible with the bees, which I can not accept, they would repuire a very low temperature, and said low temperature would not only be required outside of the cluster, but the same or nearly so would obtain inside of the cluster also. That I never found the temperature lower than 60° inside of any cluster of bees, in all my experience to ascertain the temperature of the cluster of bees in winter, even where the temperature was as low as 16° below zero outside, proves conclusively to my mind that bees never hibernate in the true sense of the word. Ants, wasps, and hornets, freeze up solid, and often stay so for months at a time, in which case they can be truly said to be hibernating; but all know that, if any colony of bees ever come to this point, even for a single day, they would never revive with the warming breath of spring.

The correspondent next asks, "Is it advisable to keep them at such a temperature that they will hibernate?" In the above he will see that, if true hibernation is meant, only loss can occur if the bees do hibernate, even if for only a short time. But if he means a state of quietude instead of hibernation, then I should say that it is advisable. The more quiet bees can be kept during winter, the better; and I find that the temperature as above given is the one in which bees are the most quiet; but under conditions different from those existing with me, a temperature varying from this might be the best. Actual observation in any case will be found of far greater value then set rules from a different locality. Try for yourself; and when you have found the temperature in which your bees are the most quiet; then stick to that till experience points out something better. Seasons sometimes vary, and you may find that the temperature of a previous winter will not work equally well the next. One thing is always to be borne in mind, which is, that bees are inclined toward an active state in the spring. Bees go into a state of rest in October, and remain more or less in this condition, in any temperature varying from 65° above to 30 below zero, until interrupted by some disturbance, or aroused to activity by the commencement of brood-bearing, which occurs anywhere from the first of January to the first of April, in all well-regulated colonies according to the climate they are in. After brood-bearing has commenced, more or less uneasiness will prevail from this time until the bees have the benefit of warm weather and frequent flights. A mild temperature in preserving animal vitality is to be desired, and a uniform temperature is the most congenial, the disturbance of sudden changes being avoided as much as possible.

That the reader may know a little more explicitly regarding the matter, I will say that, where a colony is wintering just as I should like, they will not be disturbed at once by the rays of light from a candle or lamp falling upon them. When I go into my bee-cellar and hold the candle so the rays of light fall upon the cluster where the bees are to be seen at the bottom of the combs all that is to be seen of the bees is a row of pointed abdomens standing out in all directions, all quiet and motionless, they remaining so for a moment or two, if no jar is made nor heat from the candle or my breath allowed to reach them. After a time, if the light is held steadily upon

them, a few will begin to stir slowly, and, if held long enough, the whole colony will raise an uproar. When viewed from the top, by lifting the covering over them a few will slowly stir, perhaps putting out their stings and giving off a buzzing sound, as much as to say. "We wish you would go off and leave us." When in this condition, I consider that colony wintering splendidly. If, on the contrary, I am greeted with bees flying to the light as soon as I enter the cellar, and upon looking at the cluster at the bottom of the combs they are found all uneasy, crawling about and ready to fly at the light, with the hives full of restless bees clear to the end of the frames at the top, I know that unless this colony can be gotten quiet, they will prove of little or no value in the spring, if this happens as early in the season as the middle of February, while the colony will be much damaged if as late as the middle of March.

Another correspondent writes, wishing to know whether his cellar is suitable for bees' saying, "It is frost-proof, with a dry earthen floor, well ventilated, but there is usually stored in it all the vegetables used by the family, and frequently from 30 to 100 bushels of apples. Are these injurious to the bees? If not, I should like to store my bees in this cellar in years to come."

I should consider the cellar suitable for wintering bees, and the presence of the apples and vegetables no objection, if the temperature can be controlled between 43 and 48°. If the temperature can not be thus controlled, I should prefer to winter the bees on their summer stands. If I had been successful, or even comparatively so, in the past, I would go slow on the cellar, trying only a few in it the first year, putting in more and more each winter, according as I was successful. Decaying vegetables should not be allowed in any cellar, whether there are bees in it or not; and the bees should not be disturbed, by jarring or otherwise, when entering the cellar after anything stored therein.

G. M. DOOLITTLE.

Borodino, N. Y.

President's Address

READ AT THE NORTH AMERICAN BEE-KEEPERS' CONVENTION, AT ALBANY N. Y.

THE labors and experiences of another season are ended, and its lessons largely learned. A bee-keeper of my acquaintance devotes this part of the year to a careful comparison of the main points in the season's experience with those of previous years. The facts are then still fresh in mind, and the conclusions are useful. In proof that he is eminently successful in his business, I might mention his name but for fear of his modest presence with us. So we, in convention assembled, may compare our varied experiences during the season just closed, and, on doubtful points, gather wisdom more rapidly and cheaply than to work it out in our own bee-yards.

With so large a crop in one part of our country that the markets are surfeited, while much of the remaining portion is begging for choice comb honey, it may be that we shall learn a useful lesson on the distribution of our products. What are the hindrances to a better distribution of honey?

1. Our method of marketing, which hurries it off to market without waiting to learn where it is needed.

2. Freight rates are too high, and, what is worse, honey is handled carelessly by railroad men, making it difficult to reach distant markets.

After signing a release and loading and unloading his own honey, the bee-keeper is charged double the rates he ought to pay, by these servants of the people.

A recent ruling, which compelled the shipper to cover the glass, that has been used for a score of years, chiefly to secure more careful handling, is a fair sample of the treatment we receive.

This association should vigorously protest against this unwarranted interference with our rights, and a committee should be appointed to work diligently until reduced rates and better treatment are secured. We have had such a committee in our State Association, but we need a united effort throughout the country.

3. Lack of uniformity of packages and grading is a barrier to a proper distribution. What is accepted in one market is not in another. Put up the honey to meet the demands of the markets to which it is sent, has been the advice. This sounds too much like the cry of the sensational or Sunday newspaper man, who says, "We publish what the people demand," and the paper gets down lower and lower all the time. The people are often not the best judges of their needs, and often have to be educated.

Starting with the two-pound box, glassed, we have successfully met and catered to the demand for one-pound sections, glassed and unglassed, full weights and light weights, paper cartons and pasteboard boxes, wood and mica sides, thick (2-inch) boxes and thin boxes, 1⅞, 1¾ down to 1½-inch, square boxes and tall boxes, until there is the greatest diversity in packages,

and it is difficult for a dealer to duplicate an order for any quality unless it is from the same consignment. The producer has wasted his substance in continual changes, and, like the sensational editor, has been but a puppet to a senseless demand.

We should adopt a stand; and if glassed honey looks better, and keeps better, why not gradually enlange the production of this kind, and, if possible, educate the consumer to buy honey in the standard box, or "section"?

I have this year had calls for glassed honey from the West, and yearly the demand for this kind is increasing in the East.

In the reduction of duty on sugar, no bee-keepers, to my knowledge, was consulted; and fearing that, in the contemplated treaty with Spain, we might again be overlooked, I thought it my duty, as an elected representative of the bee-keeping interests of this country, to address a protest early in the year to the State department against the free admission of honey from Cuba. A copy of the letter is here appended:

STARKVILLE, MAY 14, 1891.

Hon. James G. Blaine, State Department, Washington, D. C.

MR. SECRETARY:—Information reached me that this country and Spain will probably agree upon a treaty of reciprocity. With such probabilities ahead, I desire to be informed, as representative of the bee-keeping industry, whether honey is upon the free list. If so I wish at this early day to enter an emphatic protest against any change in the tariff.

The contemplated removal of the duty on honey in the Spanish-American treaty a few years since was met by a most emphatic protest from the 300,000 bee-keepers of the United States of America. Much better reason have they now for protesting, since the great reduction in the price of cane sugar, the chief competitor of liquid or strained honey.

The removal of the duty on foreign sugar was followed by a bounty to our domestic sugar producers, even to the producers of maple sugar, which is chiefly an article of luxury and not a competitor of cane sugar in the manufacture as is "strained" honey. Our legislators who so kindly remembered the sugar-growers, entirely forgot the honey-producers, whose product is but sugar under another name. In the manufacture of certain products, honey is superior to sugar, although not so much superior but that we shall have to lower present prices in many cases to avoid the substitution of the inferior and cheaper article.

Now, to permit Cuban honey to enter free, and still further reduce prices, would be an act of injustice that could hardly be forgiven. In fact, it is questionable whether our industry could survive, unless it should be that limited branch of it devoted to the production of comb and liquid honey for table use. Cuba is probably the finest honey-producing country in the world, and capable of producing an immense amount of honey. So superior is it in this respect that several of our most intelligent bee-keepers have left all the advantages of their native land to engage in the production of honey there.

Our industry is still in its infancy, and while we already produce many million pounds of honey, it is capable of an expansion so great as to wholly eclipse the present production of sugar from the sugar-cane. Four contiguous counties have produced in one season over four million pounds of honey, and this represents but a fractional part of what might have been gathered.

Knowing well the genuine interest you take in the welfare of the people of your country, I am confident that you will give this subject the attention its importance deserves. Should there be any points on which you desire additional information, command me at your pleasure.

Yours, etc., P. H. ELWOOD.

Read at the O.B.K.A., London.

Apiarian Exhibits.

DURING the past ten years bee-keeping as a specialty or side issue has increased in many parte of the Dominion, owing as much to increased knowledge of the subject as its attraction as a health-giving pursuit. It has a fascination peculiar to itself that few students or lovers of the busy little insect can resist.

Bee-Keepers have awakened to the fact that they have a good thing, and that it should be in every household not only to be used as a luxury, or medicine, but to take the place of less healthful syrups. &c.

Honey, although seen in most groceries, is not used so extensively as it onght to be. Now, how to educate the public as to the nature and uses of honey is clearly the duty of the bee-keeper, if he wishes his honey to find ready market. One way of doing this is by fitting exhibits of his goods. Now where is he to exhibit in the first place. I should say at home in the honey room, or, if more convenient, in the house. Let one spot be devoted to an exhibit of honey, comb honey, extracted honey, beeswax in small cakes, &c., and to every customer let him give as far as possible some instruction in the science. All may not understand—all may not appreciate, but some will.

After straightening up exhibit, and taking a complacent look at it, a customer comes—it may be a small boy accompanied by a few sisters—for five cents worth of honey, "because the baby has got a sore mouth;" he asks a few questions, not always to the point, but as you answer, you can set him right as to how the bees get the honey into the holes in the comb, and as to whether they made the boxes. Next time he asks more questions, and makes no secret of the knowledge he has acquired, set him right every time; he will understand you bye-and-bye, especially if the answers are illustrated by a taste of the honey, a little bit of capping, or a small piece of broken comb will enlighten wonderfully. When he has a house of his own he will see that honey is used in it, and some bee-keeper will have to supply it.

A lady comes for a pail of honey. Show her your samples—tell her how you get the different kinds of honey—extract a comb before her—likely she will want to turn the handle of the extractor—explain granulation—show her the sun wax extractor, &c.—she will go away a friend to you, and a customer in the future.

Let the home exhibit be supplemented by the grocery exhibit. By fair dealing, and neat and not sticky packages, you can get a place in a grocer's best window, and in a prominent place in the store put up the honey so that it is a credit to you, and in a way that will attract notice among the other goods. On special days make special exhibits with a frame of bees in an observatory hive in the window—a few special notices to draw attention to them—one who knows all about bees explains to his friends what the bees are doing—sometimes startling statements are made, but an interest is aroused, honey is sold, and some knowledge spread.

Then there are the Local Fairs, when the bee-keeper shows his wares in their holiday attire—put in packages to suit every customer. Many can remember the time when the Apiarian Department was represented by two or three bottles of strained honey, and a box or two of comb that were perhaps mixed up with the miscellaneous products of the farm, and passed with little notice; but of late years bee-keepers have taken more interest in the management of fairs, and have seen that their products were properly classed

The managers of these fairs see that it is to their interest to help the bee-keeper, by giving him a good stand, and making things convenient for him generally. The well-put-up displays reflect credit on them, and it is a decided contrast to much that is there.

Honey can be sold at fairs to those who would never see or taste it but for this occasion, and once tasted and told where it can be had, they often avail themselves of the chance of getting a supply.

Cull sections disappear like magic here in the much discussed "honey on a stick" form. The only comment being general approval.

Emboldened by success at home, the bee-keeper tries abroad. It may be at the great Industrial or Provincial Exhibitions, not that he expects to take prizes, oh, no! but only to see how his honey compares with others. A modest third is the highest he aspires to.

Then again, we have at our large Exhibitions displays of honey and supplies that create the wonder and astonishment of visiiors, not only our own people, but visitors from Great Britain and the United States; and the attendant often hears such remarks as—"What a splendid display!—doesn't it look lovely, etc.," and the visitor will stop and ask questions, and perhaps purchase.

One skeptical visitor pointing to my exhibit, put the question to me once at Toronto—"Did this honey come from Muskoka?" I said in reply "it did." "Now, did it, really?" he repeated I again assured him that "it certainly was gathered there by bees, and that it was as good a district for honey as any part of the Province." "Well, now!" he exclaimed, "I thought it was too rough;" but after I had explained that the uneven surface was no disadvantage—that we had a succession of bloom beginning with the many varieties of willow in early spring, followed by the soft and hard maple, elm, dandelion, cherries, berry bushes of various kinds, clovers, lindens, and the numerous fall flowers—how the bloom on the high ground gave honey in wet seasons, and low ground in dry seasons, he went away with a better opinion of Muskoka.

Not only do people get enlightened as to the source from which honey is derived—the mode of harvesting—its granulation, and manner of liquifying, but bee keepers themselves are likely to be benefitted—each sees what the other has done, and the practical eyes are open to all improvements. They will compare notes as to experiments with different implements, and will hear how others succeed with them, what the yields of honey have been in different sections of the country, and will discuss as to what are the favorable conditions for good crops, and how far they can be controlled and made the most of, and giving ideas for future thought and discussion. Therefore, Apiarian Exhibits are a benefit to the bee-keeper, and one of the best means of of educating the general public.

R. H. Smith.

Bracebridge, Jan., 1892.

South Australia wants Legislation

MR EDITOR:—As Bee-keeping has become an important industry in South Australia, Bee keepers feel that there ought to be some protection given to them in the shape of legislation. The South Australian Bee keepers Association had an act passed a few years ago, protecting them in a slight degree against foul brood, but they still feel that they have not sufficient protection. Our Association would feel greatly indebted to you, if you could supply us with copies of any acts which are in force in your country protecting the Bee Industry, or any suggestions you could make, so as to help us to obtain the legislation we are agitating for. We would feel greatly obliged with an early reply.

I remain

Yours sincerely

A. E. Nadelbaum

Hon. Sec. S. A. Beekeepers

Adelaide. Norwood 29. 11.91.

Chapter 66 page 149 of the statutes of Ontario assented to 7th April 1890 contains the Act for the Suppression of Foul Brood among Bees. It contains 13 sections dealing with the appointment of inspectors, his term of office and appointing of sub inspectors; inspection of infected *apiaries*; penalty for disposing of infected bees or appliances; selling bees after treatment; penalty for obstructing inspectors; and every thing possible to guard against the propagating of the disease. We have a copy of the reports of the committees appointed by the Ontario Legislature and also a copy of the act. We presume our friend wishes to know how this act was obtained. We are sorry we cannot mail him duplicates but we have asked our local member W. H. Hammell Esq. to supply them. He promises to attend to it. So our Australian friend will in all probability receive them.

Foul brood existed in Ontario. It threatened to annihilate apiculture. Individual bee keepers made reports and gathered information, and laid it before the Ontario house. A committee was appointed. The O. B. K. A. took an active part in laying before the house all the facts. Finally we got the act.

Since the above was in type Mr. W. H. Hammell M. L. A. for Simcoe has handed us a copy of the act, which we have mailed to you.

A Protest Against the Report of the Committee on Affiliation.

WOUSE, Dear Sir,—I read in the Canadian BEE JOURNAL the following sentence of the report of the Committee of your Association on Affiliation:

"We have reasons for believing that the official report of the Keokuk meeting in the matter of the protests made by your representatives there, is largely characterized by a *suppressio veri*."

As I was acting Secretary then, I protest against this statement. I did all I could to get in all the facts, and I assert that it is ungentlemanly to accuse me after over a year, of any omissions, when nothing was said to me before. The members of the committee assert that corrections were sent to two leading bee papers. To this I answer that if any complaints were made against the report they should have been sent to either the President or the Secretary of the Association.

I earnestly request that this protest be read at the next meeting of your Association. Whatever may be the feelings between Canada and the United States, I wish it understood that my intentions are, and have always been, for peace and harmony.

C. P. DADANT,
Former Secretary.

For THE CANADIAN BEE JOURNAL.

Shipping Honey.

I NEVER ship honey without realizing the necessity of an explanation regarding its granulating, and the best method to liquify it. Of course there are directions on the labels, but these if on a tub or large tin of honey, may never be read, and so I always feel it to my interest to explain mine fully. Now, this entails extra work which could be better and more easily performed by simply enclosing a printed slip giving full particulars. I want at least 500 of these, and I would suggest that they be kept in stock by the publisher. The name and address of sender can be added if desired.

The following I think would answer:

Almost all pure honey (unlike glucose and sugar syrup) will granulate and become hard This is one of the best tests of its purity. Not a few unprincipled dealers have taken advantage of the lack of general knowledge on this subject, and have palmed off glucose with honey, the unwary purchaser being easily led to believe that it was pure honey because always remaining liquid. Now, it is not economical to use it while it is in this hard granulated condition. To those who prefer to eat it granulated it is better to at least

partly liquify it as it can then be used with a spoon, as a matter of economy it should be thoroughly liquified, as it is not only easier handled, and less is required, but it presents a nicer appearance.

HOW TO LIQUIFY GRANULATED HONEY.

All that is necessary is to stand the vessels containing the honey in a pot or boiler of water and warm it, as soon as it is all dissolved remove it and allow it to cool before using. If the honey is granulated very hard, you can, when partly dissolved, take a knife and divide up the undissolved portion, so that it will be more easily acted upon by that which is hot.

CAUTION.

Be careful not to allow the honey to reach the boiling point, or it will be darkened in color, and the flavor spoiled, hence it is better to hasten the liquifying as stated above. The hotter it becomes, the slower it is to regranulate, but the danger of injuring it is increased. If sealed down while hot in air tight vessels, it will remain liquid for a long time, but this is not necessary.

HONEY IN TUBS OR TINS.

When the honey is granulated in tins or tubs encased in wood you can, by taking off the cover and turning the vessel upside down, lift off the wood casing. If it should stick give it a shake or loosen the sides of the case and the tin and honey will drop out. It can then be placed in a boiler or pot of hot water as previously directed, or if preferred you can with a strong knife take out a portion and put it into a tin vessel and liquify as small a quantity as required. If the whole, however, is done at once it is less trouble, and will not only remain liquid for a long time, but will never become so hard again.

G. A. DEADMAN,
Druggist, Apiarist, &c.

Brussels, Ont.

A Swarm of Punic Bees.

A DREAM BY A SUBSCRIBER.

A FEW days ago it was a surprise to us to see a swarm of bees passing over, headed to the south-east. They were flying rather slow and spilling a great deal of propolis. They were too high to bring them down with a Smith pump; someone suggested shooting into the crowd would bring them down. So a gun was discharged into their midst, but this had no effect in checking their course, only a few that we were fortunate in hitting. On examining these we found they were shiny black bees. One of the little workers was not quite dead, she revived for a short while and said: "Around the world in one summer, on our way back to Africa." The question was asked why not stay in America? "Oh!" said she, "next year they want to begin breeding us with yellow bands like they did our sisters of Carniola; this we will not stand." At this point the light of life flickered out. After a moment's thought it revealed to us that these were noted Punic bees trying to escape from being changed to another color. Question, where did these Punics' (?) come from?

[In a private note accompanying the above the writer remarks that America's climate has the wonderful power of turning black bees to yellow, and that he is expecting the "Yellow Punics" to make their appearance soon.—Ed.]—Progressive Bee-Keeper.

Simcoe Farmers Institute.

MR. R. F. Holterman who is "stumping" the counties in Northern Ontario with Professors from the Agricultural College, Guelph, and elsewhere, under the auspices of the Ontario Government, paid us a friendly visit and reported that the Simcoe Farmers' Institute met at Bond Head, Jan. 15th, a large number of farmers being present.

R. F. Holterman opened by an address upon "Bees in Relation to Plant Life." After explaining the parts of a flower, he went on to show the numerous devices of nature to secure cross fertilization. The portion of the various parts of the flower and the time of maturing assisted in this. As had been shown by careful experimentation that to secure the best fruits and vegetables it was advisable, and in fact necessary, to secure cross fertilization. It was not always necessary that bees should do this work, but the fruit blossom gave it a far more abundant flora early in the season than natural, and an artificial condition in plant life requires an artificial condition in insect life. The honey bee was not a native of the country, and bees winter over in great numbers and are able to fertilize many blossoms in fruit bloom. The bee had been originally intended for the fertilization of flowers, not primerily for honey gathering.

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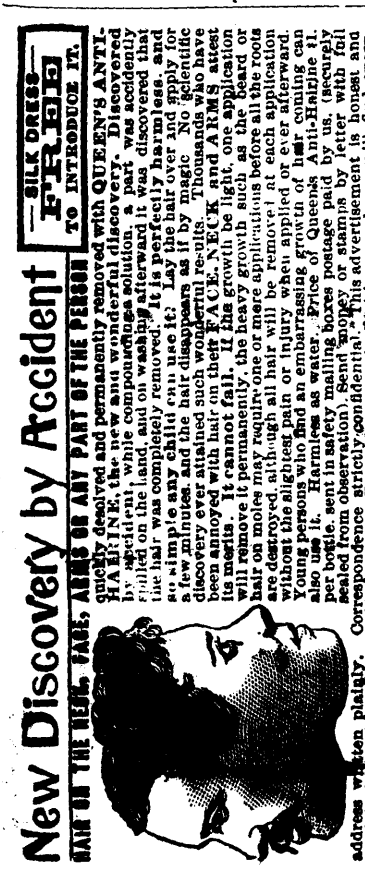

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