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CANADIAN BEE JOURNAL

PUBLISHED MONTHLY.

NEW SERIES
VOL. III, No. 9.

BRANTFORD, ONT., MARCH, 1896.

WHOLE
No. 373

Many of our friends will notice that the legislation which bee-keepers have so long sought in the Dominion Pure Honey. House, has passed with slight modifications. Sugar syrup fed to bees or any other substance such as glucose, is simply not recognized as anything more than it is, and only that gathered from flowers has a legal standing as honey. We feel proud of members on both side of the House who have given us their sympathy and support in this matter. As the above is an amendment to the Adulteration Act, those who claimed that the act did not require amending in this respect have evidently been in error. It is needless to add those who claim that such product is "sugar honey" have the bee-keepers of this country and its Legislators so against them. May the sentiment of the producers of food products and of our legislators long be what it is and the outcome will be confidence in Canadian Food products which will be of much assistance to our markets at home and abroad.

* * *

In the discussion re heavy or light comb foundation the argument was used that Mr. Hall's comb honey foundation in the World's Fair was Sections. very nice. The Gould, Shapley & Muir Co.'s also among the choicest, if not the best at the World's Fair. We, however, know that the question of amount of "bone" was never taken into consideration and that is the question taken up at

the Brantford Convention, to use the World's Fair award as an argument is then hardly in order.

* * *

In the discussion on the methods of packing and solar heat Mr. Frith made the statement that we were *Sunshiny Days* in a different section of the hemisphere. We get one *sunshiny day* in twenty from Dec 1st to Feb. 15th. In the vicinity of Dowagiac they got about one in seven. Surely, Mr. Frith is not right about this. Who can give us some information about the matter.

Death of Mrs. Lyman C. Root.

The sad intelligence reaches us of the death of Mrs Libbie Quinby Root, only daughter of Moses Quinby, and wife of Lyman C. Root, which occurred at their home in Stamford, Conn., Jan. 16 h, 1896. Mrs. Root was stricken with paralysis on the morning of the 15th, and died the following morning. She was a woman of rare intelligence and had she given her attention to literary pursuits would have gained celebrity. Bee-keepers knew her as literary editor of Quinby's *Bee-keeping* and later of the same as revised by her husband. She was a natural artist and in drawing or painting from nature displays genuine artistic talent. The drawings from which the engravings were made illustrating the above works were from her pencil. Her highest ambitions and greatest efforts centered in her home and in the education of their daughters. No matter how busy with household duties or in the entertainment of visiting bee-keepers, time was found for the daily lessons of the girls and also for reading and discussing with the family the best books and literature.

Thus in giving her life so largely to the improvement of others she herself became strengthened in those qualities of mind and heart that must endure forever. It is gratifying to be able to state that her husband and family fully appreciate her many excellent qualities. Her presence, her sympathy and her counsel will be sadly missed in the home circle. Bee-keepers everywhere in the English-speaking world will unite with me in extending heartfelt sympathy to Mr. Root, the two daughters and aged mother Quinby.

R. H. ELWOOD.

Starkville, N.Y., Jan. 22nd, 1896.

[The above sad intelligence was received as the February number went to press. Years ago, before Mr. L. C. Root moved to Stamford, Conn, we met Mr. Root several times. He is a man who had the respect and best wishes of all who knew him and in the affliction which has come upon him and his he will have heartfelt sympathy.—Ed]

Bleaching Wax.

—E. B. Weed.

While beeswax may be bleached by means of chemicals, the results are inferior to sun bleaching, and the latter process is, I believe, the only commercially successful one. To bleach wax by this method, it is first cleaned by the sulphuric acid process which, if properly done, will restore the blackest and dirtiest wax to its original color. To cleanse wax by this method, take a whiskey or alcohol barrel and put about 6 inches of water in it, adding to the water a small quantity of sulphuric acid, the quantity varying with the amount of dirt in the wax. Two pounds of acid to one hundred of wax would generally be sufficient. Then fill the barrel about two-thirds full of wax. Next turn a jet of steam into the bottom of the barrel, slowly at first, until the wax is all melted. Do not be afraid of getting the wax too hot, but keep the steam on until a froth rises to the top of the melted wax. Now watch the froth carefully, for this is the critical point of the operation. If you stop the steam too soon, you will not have cleaned the wax. If the steam is on too long, you will make a soapy mess of the whole thing. The time to shut off the steam is when the

bubbles in the froth begin to grow large—say about one-fourth of an inch in diameter. Having shut off the steam, wrap a carpet or anything else that will keep the heat in around the barrel, and let the wax settle until it is nearly cold, when it may be dipped out and all the dirt will be found at the bottom.

To prepare the wax for running, a little machinery is required. This consists of a tank to hold bees-wax, having near the bottom a row of holes about two inches apart. This tank stands over a trough of cold water, some ten or fifteen feet long. Revolving in one end of the trough, and about two thirds submerged, is a roller covered with felt, the tank of wax being directly over it. The melted wax flows from the holes in the tank upon the wax felt and is instantly chilled into the shape of ribbons about one eighth of an inch thick, the revolution of the roller at the same time moving the wax forward into the tank of water, thus making as many continuous strips of wax as there are holes in the bottom of the tank. From the tank the wax is taken to the bleaching ground and spread upon frames covered with white cloth. Here it is exposed to the action of the sun and air until the outside of the strips are bleached, when it is re-melted and again run into strips and sunned, the operation being repeated until satisfactory results are reached. It should be seen that not all wax is suitable for bleaching. Wax from southern countries with a reddish tinge generally proving very difficult to whiten.

Brantford, Ont.

Facts About Sweet Clover.

It is now more than twenty-five years ago, since I called attention to sweet clover as a honey plant, in an article in *Homer King's* bee paper, then published at Nevada, Ohio. My attention was first called to the plant by noticing the persistence with which bees visited a small patch by the roadside. During succeeding years I was a close observer of the plant, and found that it would grow almost anywhere, and not only hold its own but would also spread greatly by the seeds scattering in various ways. I also discovered that it was very hard to kill out, unless one knows how, then it is easy enough. I was one of the earliest advocates to sow it by the acre, honey alone, and have raised it extensively but in my immediate neighborhood land too valuable to make it pay.

I have been greatly interested in recent articles in the bee papers written by Dr. Miller, Wm. Stolley, M. M. Baldrige and others, and can endorse every word they write. Unlike basswood, white clover and almost all of our other honey plants, sweet clover never fails, and the honey produced from it is second to none.

It has surprised me that some have found it difficult to get it started, to get a good stand. With me it will grow almost anywhere it has some chance. I have found however, that it will not "catch" readily if the seed is scattered on grass sod, and that it will be entirely eradicated if many cattle or horses are pastured on it.

If sown with oats or other grain, it is apt to become choked out, before the plants get started, and should it be desirable to sow in this way, the grain should be put in very thin. It has always seemed to me that it would be a good plan for bee-keepers who are also farmers, to sow sweet clover quite extensively and show neighboring farmers that it is a valuable plant, quite worthy of their attention aside from bee-keeping. If sown at the first year in September it will produce a fine crop of hay, quite equal to alfalfa, and the plants will not be injured. Show farmers that it may be pastured for a month or more in early spring to great advantage the second year. It may then be plowed under to fertilize the land, but of course that would destroy it as a honey plant. At the present price of seed, I am surprised that farmers do not raise it for sale alone—it would surely pay better than any other crops. Farmers seem to be prejudiced against the plant and we should try to educate them and teach them that they are wrong, and that it is really one of their best friends.

Show them that if they want to get rid of it from the field, they have but to cultivate it thoroughly for two years, or turn plenty of stocks for a few years, and finally a plant will remain. If we but show farmers how this, and other honey producing plants can be profitably raised by them, the sooner we will hasten the time when the good years will come again."

C. H. DIBBORN.

Illan, Ill., Jan. 4th, 1896.

Ontario Bee-Keepers' Convention.

The annual meeting of the Ontario Beekeepers' Association convened in Brantford January 17th 18th and 17th. The absence of a honey crop has prevented a large attendance, and it

was noticeable that some of those present were not in the best of humor, which condition had an undesirable effect upon the harmony of the sessions—more sweetness needed. Notwithstanding the fact that a programme was prepared that might have brought out much valuable discussion, the time was so much occupied with personal differences that not only was the time lost but peaceable members became so much disgusted and annoyed with the proceedings that almost all the utility was taken out of the convention. It is a matter for regret that expert bee-keeping delegates should gather together from the very extremities of the Province and not have an opportunity of teaching and learning lessons from each other's experiences, to be disseminated through the press so that smaller bee-keepers may glean points whereby they may improve their methods. We would not be understood that the majority of the members who attend this convention from year to year are unreasonable cranks, but when a few men are allowed to break the peace of the whole gathering, the directors and other officers are more to blame than perhaps they allow themselves to believe. We have attended the last two annual meetings, and have come to the conclusion that unless the directors and officers combine against such dissensions as have characterized these two conventions, the money expended in holding such would be more productive if devoted to some better directed enterprise.

[The above comes from the Farmer's Advocate of Feb. 1st, 1896. We may try to hide the facts about our meetings, and try and condemn those in our own ranks who have the courage to express their views about our conventions, and in that way try and do better things, but the country at large has a right to pass criticism, and we are pleased that the Farmer's Advocate, of London, has had a representative at the Ontario Bee-keepers Association meeting for two years, and that in its criticism it has done no more than its duty.—ED.]

Those attending the annual meetings of the Ontario Bee-Keepers and others will be pleased to know that the decision of the department of Agriculture as to membership is as contended by the editor of the Canadian Bee Journal at the annual meeting. The membership fee must be paid before any one is entitled to vote, and any By-Law conflicting with the above is void and contrary to the Agriculture and Arts Act.

Annual Meeting

Ontario

Bee-Keepers' Association

HELD AT BRANTFORD, ONT.....

(Continued).

The Chairman.—The Hon. Mr. Hardy was to occupy this chair to-morrow evening, but for some cause or another he cannot be here to-morrow evening, and as he is here, we would like a few words from him.

Hon. A. S. Hardy.—Mr. Chairman and gentleman. You see how eager I was to take the chair by getting here twenty-four hours before time. I stopped over on my way from the North to-day, thinking it was the evening of Wednesday. I do not know how I made the mistake. Seeing you were in session, I came over, as it will be difficult for me to return to-morrow. I take this opportunity of being here to welcome you to our good city. I am pleased and delighted to see so many men who came expressly to take part in the discussion relating to this ever-growing and agreeable institution connected with bees and honey. I trust your meeting may be profitable to yourselves and that the time spent here may be pleasant and agreeable, and that you may go away with pleasant recollections of our good town. When passing through Switzerland some few years ago, I was surprised to find at breakfast Swiss honey, and it was looked upon as an article of diet, to which we took most kindly. It was always in use. I am glad to find it is coming more and more into general use in this province. I have no doubt that the industry established here to make apiary appliances has done a good deal to popularize the work which you yourselves are doing, while it has given to the firm, I believe, a name that is very complimentary to them and an advantage to our city and the province at large, and I see their trade is also extending to the United States. I do not fail to remember the magnificent display you made at the Industrial Exhibition last year; it was one that cause a great deal of comment in private conversation and in the press. It was very creditable to your organization, and showed your institution was a live institution. I also remarked the marked

superiority of the display at Chicago, and I believe you had an exhibit at the Colonial Exhibition, and we have taken the trouble to have samples sent over to the Imperial Institute. We have also voted enough money to pay for your Inspector's salary; and we have also paid for a course of lectures, under our esteemed and learned citizen, Mr. Holtermann, at the Agricultural College. These are steps, in the right direction. I believe you get a grant of, in some form or other, \$500. I suppose that is all you desire. If it is not, you can trust to Mr. Holtermann and your President and other officers to make known your many wants, and we will, at all events ourselves, hold an open ear to real wants in connection with any of these institutions in the form of agriculture, and do all we can to promote their well being. I shall not in my general talk, detain you from your more interesting discussions of the methods employed which lead to the prosperity and progress of your creditable and most interesting discussions. (Applause.)

Mr. Pettit.—I was just going to say that the Committee appointed to get over the difficulty of meeting the provisions of the new act, which confined us to nine members instead of thirteen. Our Secretary, Mr. Holmes, is prepared to read the report.

Mr. Holmes.—Your Committee appointed to map out a plan for the election of officers for this Association, would beg to report as follows:—We would recommend that for the present year this Association elect a President and two Vice-Presidents and nine Directors, as follows: One of the above officers from each of the following districts, viz: 1, 2, 3, 4, 5, 7, 8, 9, 10, 11 and 13, and that the Board of Directors so elected should name a Secretary from District No. 6. All of which is respectfully submitted.

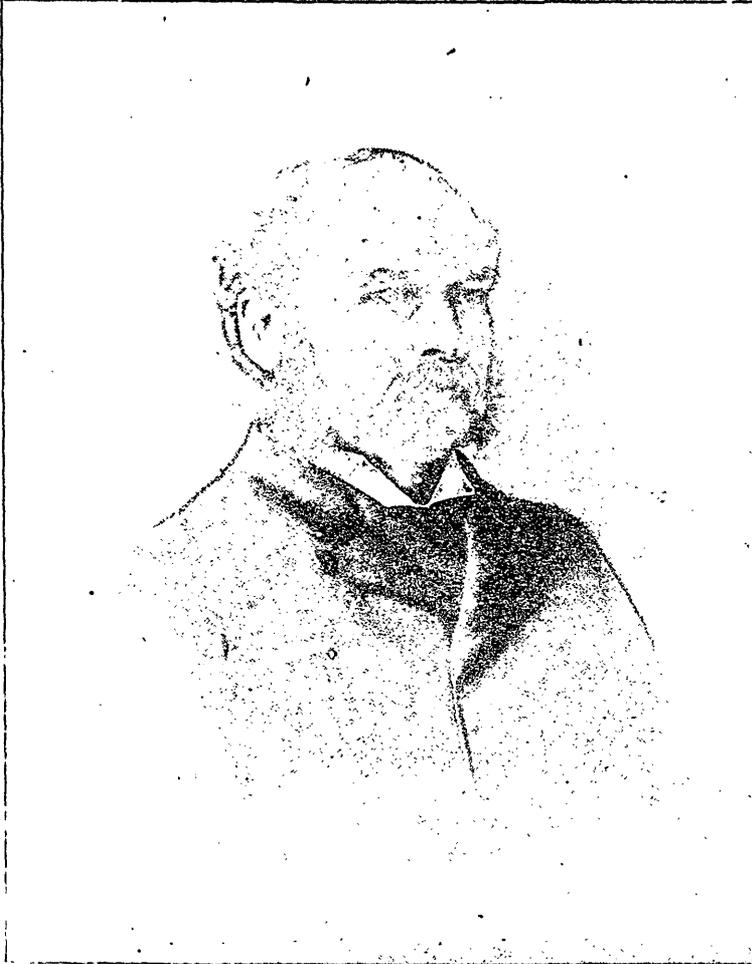
I beg to move the adoption of the report.

Mr. Pettit.—I have great pleasure in seconding the motion. (Report adopted.)

Mr. J. E. Frith.—We had a very able speech to-night from the Hon. Mr. Hardy, and as the business was resumed very abruptly, there was no chance to move a

vote of thanks. . We heard these few words upon the encouragement of the new industry. It is fast becoming established as one of the staple industries of this country. We have received a few words of encouragement from one outside our profession, and I think I voiced the sentiments of the members present when I move a vote of thanks to the Hon. Mr. Hardy.

keepers owe him a good deal. He has always been ready to assist the bee-keepers in every reasonable way. Last year when the Committee was sent down to Toronto to interview the Minister of Agriculture in connection with an increase of grant, we had the warm co-operation of the Hon. Mr. Hardy, and I take a great of pleasure in seconding the motion.—Carried.



HON. A. S. HARDY, Minister of Crown Lands.

Mr. Holtermann.—It affords me a great deal of pleasure in getting up at the present time to second the motion. I may say that though the Hon. Mr. Hardy is not the Minister of Agriculture, yet the bee-

The President.—I have great pleasure in tendering to the Hon. Mr. Hardy the thanks of this Association for his kind remarks this evening.—Applause.

SECRETARY'S REPORT.

W. Couse Dr. to Ontario Bee-keepers' Association :

Grants from 11 affiliated societies	
\$5 each	\$ 55 00
Membership fees O. B. K. A.	106 00
	<hr/>
	\$161 00

Ontario Bee-keepers Association Dr. to W. Couse for amount sent.
1895.

Mar. 8. Martin Emeigh, Treasurer to cash	\$ 56 00
Sept. 5. Martin Emeigh, Treas. to cash	36 50
Jan. 14. Martin Emeigh, Treas to cash.....	69 50
	<hr/>
	\$161 00

REPORT OF DIRECTORS.

Brantford, Jan. 15th, 1895.

To the Members of the Ontario Bee-keepers' Association :

GENTLEMEN:—Your Directors in presenting their twelfth annual report since incorporation, are pleased to report that the Association is in a prosperous condition, and that there continues to be a lively interest taken in all matters in connection with the Association.

The total receipts for the year just closed were \$890, derived from the following sources: For membership fees, \$175; from affiliation fees of thirteen societies, \$65; and Government grant, \$650, leaving a balance on hand of.....receipts over expenses, which, we feel, is satisfactory.

The total disbursements were itemised as in the report of the Treasurer.

It is with sorrow that we have to report the death of one of our members, the late F. A. Rose, who was a faithful member of our Board.

We regret that we have to report the lighter crop of honey during the existence of the Association.

The members have each been furnished with THE CANADIAN BEE JOURNAL as a bonus or a quid pro quo for their membership fees.

During the year there has been a special meeting of the Association in connection with the North American in Toronto last September. Also a board meeting at the beginning and ending of the year, and meeting of the Executive in Toronto in September.

All of which is respectfully submitted.

PRESIDENT HALL'S ADDRESS.

BROTHER AND SISTER APIARISTS,—I rejoice my heart that so many of us are

spared to meet in convention, and that so large a number are here, notwithstanding the discouragement of the past season, many of us having had a total failure in honey and had to feed our stocks to carry them through the winter. But truly the apiarist is a hopeful being, and most of us are nursing our pets with the hope of a harvest in the summer of 1896. I trust that our hopes may be realized.

I am sure that you, with me, feel and regret the loss and death, and miss the kindly face of our esteemed friend, the late F. A. Rose, of Balmoral, who has met with us so often at our annual meetings.

I would suggest for your consideration that By-law No. 1 be amended by adding hereto, that those opposed to the interests of its welfare, be rejected or expelled, by a majority vote of the meeting or members.

I think you will see the need of this change in said By-law, as the association has no means of refusing membership to those who may oppose its best interests through the press or otherwise, whom, as member of the Association, use said membership to give force to the statements, the reverse of the unanimous vote of the Association.

Also that some stated time be made with a stenographer for the delivery of the written report, as in the past the revising Committee No. 1 has been very much troubled by delay. Also that some practical apiarist be present when the report is being re-written, to give the stenographer his assistance where he has caught any sound incorrectly.

I also think you will do well by choosing at a full meeting the revising committee. I feel that as bee-keepers and as an Association we are greatly indebted to our representatives and Parliament of Ontario for their generous and kindly feeling to the apiarist of Ontario, and especially for giving the Province an efficient foul brood inspector, whose services are put at our command.

I am also pleased that the bee-keepers through the province, excepting one or two would-be scientists, have cheerfully, willingly and thoroughly followed the inspectors' instructions, and made a clean job by so doing. They have clean and healthy apiaries, and will be in a position to reap a bountiful harvest, if the Ruler of all causes the nectar to secrete in the flowers.

I am pleased that so many in Europe have been seeking our produce, and hope that in the year 1896 we may have a full crop, and that the demand for it may be great. I find that our honey gives satis

faction to our British friends, and I urge that all of us put up and sell only first-class goods, and by so doing the demand for our product will increase. I would urge you to push the pure honey legislation. If, obtained, it will give us a position as honey producers second to none in the world, for then our goods would have the guarantee of the Government of Canada as regards its purity, and that will go far with the British consumer. When permitted, put your name and address on each package.

As regards the awards made on the Ontario honey exhibited at the World's Fair in Chicago, which surpassed and left far behind in the race all competitors. I suppose we must be content with the Monroe Doctrine as applied to honey, and not dare to ask for the awards, because we cheerfully submit to the Government that flies the Union Jack, and are proud of our allegiance.

An item that may be of interest to some present, and the Executive Committee submit it for your consideration, is in connection with the meeting of the North American held in Toronto. Your Secretary and President were urged to call a meeting of the Board of Directors to meet said North American and welcome its members to the Province of Ontario. To have complied with these wishes would have cost \$175, and this expense the Executive decided as not advisable. So called together for that and other purposes, the Executive Committee, at a cost of \$20.85, thus saving the Society \$154.00.

I am pleased that our Secretary is able to report an increase of County or District Societies affiliating with Ontario, thus showing that an interest in apiculture is increasing, and allow me to repeat that I hope your labors of 1896 will be rewarded by an abundance of choice honey to gladden your hearts and supply the demand of the honey-loving public.

Moved by Mr. Best, seconded by Mr. Chrysler, that the President's address be accepted. In making the motion, Mr. Best said: I might say that I had much pleasure in noticing that the President has made kindly mention of the late Mr. Rose. I can assure you we have lost not only a good man in the bee business, but in any other business he has shown to the public that he is a man in every respect. As regards the other part of the address, I am sure it is a credit to our President.

Mr. McKnight raised a question of privilege and complained that he had been unjustly attacked in THE CANADIAN BEE

JOURNAL, and spoke at great length on the matter, and was replied to by Mr. Holtermann and Mr. Pettit.

A letter was read from Mr. Clark objecting to the action of the foul brood inspector.

Moved by Mr. Evans, seconded by W. J. Brown, that this Association approves of the action of the foul brood inspector in his treatment of the bees of the Rev. Mr. Clark, and that a copy of the resolution be sent to Mr. Clark. Carried.

Louis Maples.—What kind of receptacles do the members of this Association retail their honey in? We have in York County a honey pail, and we sell it by the gross weight. In that way we sell the pail at the same time.

Mr. Armstrong—As far as I am concerned, I use a package and charge extra for the pails. I also use 20-pound pails I find that 20-pound pails are the best, because they can use them after the honey is out of them.

Mr. Pringle.—I am not in favor of 10-pound pails gross; I am in favor of ten-pound pails net.

Mr. Hall.—I must say that I never sold ten pounds gross. I find it a great inconvenience to get 10 cents a pound for the package. You say to them you will give the 10 cents back, but the customer says he don't want to lay out 10 cents. At the exhibition in Toronto I noticed an old lady and gentleman and a young lady walking through, asking a certain question. Our turn came last, and the question asked was: "How do you sell honey?" "Ten cents a pound." "How much is that vessel?" "Five pounds." It was taken down and done up for them, and 50 cents laid down for it. "But the vessel is 10 cents." "You said five pounds, at 10 cents a pound?" "Yes." "I have no use for the vessel." Well, then, we won't charge you for it." And she reached for the honey, and the boy took the top off the tin and said: "Will you take in your pocket or in your basket?"

Mr. Pringle—I mean to make the ten-pound tins to hold ten pounds.

Mr. Holtermann.—I think we have to be guided in part by the way they do with other products, if the buyer understands it is in 10-pound cans gross, there is nothing unfair about it, but there is the difficulty of the buyer being misled.

Mr. Holmes.—I would be inclined to favor the net weight; that is the plan I follow. I use quite a number of 25-pound packages, and I invariably tell the customer that the price of the article is 25 cents, and that there are 25 pounds, and

the customer usually pays cheerfully for the package.

Louis Maples.—I fail to see the difference whether you tell a man he pays for it or whether you do not. I have been trying to work up a home market for my honey, and I have been out a little with a horse and wagon. I say 10 cents a pound, and I have 5-pound pails and 10-pound pails. If they ask if the pail is theirs, I tell them you pay for the pail when you pay for the honey. I weigh pails and all, and I find it is more satisfactory. It is hard to get that 10 cents out.

Mr. Couse.—I have had considerable experience along this line. As a rule when I get my tins back they are not worth half what I gave for them. Now I am gradually getting into the practice of marking the whole thing gross weight, and I do not fail to tell this to whom I am selling. I shipped a few crates of honey a few days ago to one of the best grocers, and I marked it 5 pounds gross. I do not want to deceive the customer at all. I get paid for my tins now, and I don't want to get them back.

Mr. John Newton.—As far as I am concerned, I think both methods are right. For my part I have tried both, and for the last two years I have put some up in both ways, and I have some customers that won't pay for the pails and do not want them. I tell them it is ten pounds of honey and the pail is 10 cents extra. If they just want the even money, they get 9 pounds of honey and pay for the tin. I tell them we do not get these pails for nothing. I do not think it is right to say here is ten pounds of honey, and then they find out it is only 9 pounds. As far as my experience goes, they are willing to buy 9 pounds of honey and pay for the can. I think it is just a matter of how we explain it to our customers.

Mr. Chryster, Chatham.—I have used both kinds. As for the 10 pounds in pails, I find the same trouble as Mr. Newton. You are getting back 25 per cent. of the pails you send out. You might tell them the price is \$1.10, and they will say, "I do not want the pail." If they are well acquainted with you, they will take the pail for \$1.00 and say they will return it. Ninety per cent of them do not return it. I have used the 10-pound gross pail, and will explain to them that it was ten pounds gross and the pail weigh about $\frac{1}{4}$ of a pound, and I find that the most satisfactory way.

Mr. Newton—I had considerable success with the 20-pound pails. They do not object to paying for the 20-pound pails.

Mr. Heise.—When I retail I sell a 5-pound pail or 10-pound pail, and when I wholesale, I sell so many pounds net. Those customers who say they have no use for the package, I say to them you return it in good condition, I will take it back; and when they do not return it in good shape I say I have no more use for it.

Report of S. T. Pettit on efforts to secure an Act, to Prohibit the Production and Manufacture of Spurious Honey in Canada.

It will be remembered that soon after the session of Parliament for 1895 closed, that I reported through the CANADIAN BEE JOURNAL that the Bill had not been reached. Now if there is any consolation in it I will state that there were over 30 other bills in that session that had shared a like fate. But I believe the failure in our case came about largely through the fact that we have in our Association an opposition of two members; a small opposition but a very vigorous one. When it was announced that the House of Commons would meet in April, 1895, I at once wrote T. S. Sproule, M.P., to introduce our Bill at the earliest possible moment so that it would be sure to get through. Mr. Sproule answered that he would do so, and that I had better come down to Ottawa about the second week of the session for the Bill would likely get its second reading about that time. So in compliance I went down.

During the year 1894 as well as previous to that there was an under current of opposition that did not come to the surface very distinctly, but it did harm all the same. But during the session of 1895 beside the under current there was open and virulent opposition waged in the Press against our Bill. From the many misleading statements set forth in the Press I select the following, viz:

That "the nectar of flowers and cane sugar are one and the same." That "it has been accidentally discovered that the best granulated sugar is converted by the bees into a honey which cannot be distinguished by experts from the best grades of honey." That "no sooner was this discovery made public than a hue and cry arose among ignorant unscientific, narrow-minded bee keepers against what they alleged to be threatened adulteration." That "this law is sought for selfish ends, it is wanted as a weapon and a menace to keep an upstart clique in power." That "unfortunately our Parliaments have too often passed Acts in the interests of Monopolists and combines rather than for the good of the general public, the anti-sugar honey Bill is one of this kind." Now you can all understand how these untruthful

and damaging statements militate against the success of our Bill. I may state right here that I replied through the Press in order to disabuse the public mind of the spurious and misleading statements held forth by our opponent.

Again an effort was made to work up a prejudice against our Bill by stating in a public way that it legalizes honey dew, when such is not the case, for it does not in any way seek to affect the legal status of honey dew. Again one of our opponents sets forth that fifty dollars is the maximum fine in the Adulteration Act for manufacturing or selling food mixed with that which is not injurious to the public health. This statement is not in accord with facts, for the maximum fine for the former offence is one hundred dollars. It would seem that that statement is made in order to prejudicially affect our Bill. I mention these things that all may understand the difficulties to be overcome.

While at the Capital last April I again had the honor of placing our claims before the Premier and nearly all the Ministers and many Members of the House of Commons, and also before some of our Senators, and I came away with the feeling that our Bill would become law if the Members should be privileged with an opportunity to vote upon it and I am seized with the same conviction still.

And now I do recommend that the Association continue to press its claims for the legal protection our struggling industry and the reputation of Canada demand.

All of which is respectfully submitted.

S. T. PETTIT.

Mr. McKnight.—I opposed the Bill because I considered it needless and secondly because it is unwise to spend money on a needless thing. My opinion is that if you have not a Sugar Honey Bill it is Mr. Pettit's fault.

The Chairman.—Call it a Pure Honey Bill.

Mr. McKnight.—No, I won't call it a Pure honey Bill. Here is the words of the Act itself "what the bees gather from natural sources." We could have had the Bill if it had not been for the opposition of Mr. Pettit himself. Here is an extract from a letter he wrote Dr. Sproule: in this letter he urges Dr. Sproule to oppose Mr. Wood's Bill. He is endeavoring to show Mr. Sproule that Mr. Wood's Bill is not a suitable Bill, not what Mr. Pettit wanted.

Mr. Pettit.—Although the Hon. Mr. Wood's intentions were good his Bill could not possibly be of any use but rather an injury.

Mr. McKnight.—I look upon the Bill now as I did before just like a chip in porridge. I believe we have already all the protection that Bill affords. The cost of the delegations must be somewhere over \$800. I believe this Association was misled last year and because of its being misled this additional amount was taken out of the Treasury. If the honest truth had been stated to the Association last year I firmly believe no delegates would have been sent the work would have been done without incurring any expense.

Mr. Pettit.—I say the Bill would certainly have passed if I had not objected to it, and I did object to it, and because I objected to it, it did not pass. The provisions in Mr. Wood's Bill was that it should be marked on the label what it was, you could go right on producing if you wanted to. If that is the kind of a Bill you wanted, I made a mistake in opposing it, but my opinion is that if we get a Bill at all we must have one that will give us proper protection.

Mr. Brown.—In my neighborhood I supply honey for the dealers. One grocery store that I had been in the habit of supplying honey to I did not fill my order for a few days, and when I came back I found the shelves decorated with honey of this description (showing bottle of honey labeled "Pure Canadian Honey"). I said, "What are you selling honey at?" and he says 25 cents for two or 13 cents for one. He partly refused to buy any from me, but afterwards agreed to take some of mine.

Now it is open for anyone in the audience to see the label on that package. It is labeled Pure Canadian Honey. I purchased two of these and sent one to be analyzed by the public chemists at Ottawa and here is his reply. The package I sent to Ottawa was sent with an unbroken seal and here is the report of the public chemists: "Canada analysis of food number 4937. Office at Ottawa, 2nd Jan., 1896. I, T. MacFarlane, chief analyst duly appointed and acting on and for the Inland Revenue Department, thereby certify that I received from Mr. Frank T. Schult, chemist for the Experimental Farm, on the 13th day of Dec., 1895, by hand, a sample of honey for analysis with label unbroken and I have caused the same to be analyzed and declare it to contain as follows:

Water	26.30
Substance soluble in alcohol including 53.23 reducing sugar.....	67.12
Dextrine, etc., insoluble in alcohol .	6.08

100.00

Optical examination. It possesses right-

handed rotation to a very considerable degree, both before and after inversion. I am of the opinion that it contains an adulteration of glucose and more than an average amount of water. I am also of opinion that it is not injurious to the health of the person consuming it. Fee \$5. As witnesses my hand, Thomas MacFarlane, chief analyst."

Mr. Pettit.—Our bill is so worded that it covers that stuff and if we get our bill through, a man will be liable to a \$400 fine and that will stop people putting such stuff on the market.

Mr. Brown.—This is crowding good honey out of the market, it is injuring good Canadian honey, it is labeled Canadian honey and there is no honey in it. The fine at present is too low. This adulteration is not made within our province, it is imported into the province and we want to keep it out. We want to have a severer fine and a clearer way of getting at the truth. I consider that if we want to maintain the reputation of our honey in this province we will have to get something better than the Adulteration of Foods Act, because there is nothing in that to protect us to any extent. I say, therefore, it would be the duty of this association to prosecute a case of this kind, because it comes too hard on an individual to do it. Our grocery stores are glutted with this kind of stuff. I ask this association for assistance to stamp out this adulteration. I want to drive this stuff out of the country.

Mr. Hall.—The pure honey bill will cover that case. The Adulteration of Food's Act is not sufficient to deter these rascals from doing this act. They can afford to pay \$5 every two or three days for selling such stuff as that. I think this is a very good example that we need this bill that we have been discussing in the past.

Mr. Pettit.—I have a letter from a man in Nova Scotia, Mr. Belle. In it he says: "We are in sympathy with you in reference to your work in trying to get a law passed prohibiting the manufacture of sugar honey. We are all aware that out here it is sent in and sold. We find it a great curse to our province." I might say that I have sat at my desk and written some times for a week and this is one of the many letters I got.

J. E. Frith.—For the last three times we have been told to go to Ottawa. The unanimous verdict of this association has been that we require a special bill to protect our industries at home and abroad. It will take a long time to go over all the reasons why we should have the bill, but my opin-

ion is that we need it. I have gone all over this province and all through the Northwest Territories and the general feeling is that we want this bill and that it is really necessary. Suppose we never have to exercise it, it goes out to the world that Canada is producing pure honey. The cost of getting the bill through I consider nothing if we can afford it in any way. Just as soon as we stop agitating for this bill our reputation is going to be classed with that of the United States. We must not be discouraged because we have been down three times. I find the unanimous verdict is that we want such a bill and I think we ought to press for it here.

Mr. Evans.—I move (seconded by Mr. Chrysler) that the report of Mr. Pettit be received and that the Executive of this Association be instructed to press for the passage of the pure honey bill with any amendment that they may deem advisable, and that the same committee be appointed and the Executive have power to decide whether one or three should go to Ottawa.—Carried.

Moved by Mr. Holterman, seconded by Mr. Hughes that the Treasurer's report be adopted.—Carried.

Foul Brood Inspector's Report.

During 1895 I visited bee yards in the counties of Lambton, Middlesex, Oxford, Brant, Elgin, Norfolk, Wentworth, Lincoln, Perth, Wellington, Peel, York, Ontario, Hastings and Simcoe. I examined 85 apiaries and found foul brood in 32 bee yards, and other kinds of dead brood in many others. The great frosts in May and the dry weather that set in right after and continued for so long a time, was very hard on all apiaries on account of its shutting off the honey flow when the colonies had large quantities of larvae to feed. When the unsealed stores were used up the bees in many cases did not uncap the old sealed honey fast enough to keep pace with the large amount of larvae that required so much feeding, and the result was a good deal of starved brood in several colonies, which was mistook for foul brood in many cases. The great failure of the honey flow would have led to the wholesale spread of foul brood through robbing setting in by the bees when the diseased colonies were being treated, if I had not taken particular pains to warn the bee-keepers well and insisted on everything being done exactly as I ordered. I went in for putting every diseased apiary in grand order and for having as many, if not more, apiaries at the close of the season as when I began. In every part of the province I went into I found the bee-

keepers pleased when I called on them to examine their apiaries, with the exception of three men. One of these men had only four colonies and they were bad with foul brood, and near other apiaries. I explained to him how to cure and urged him to do so. I also warned him of the great danger of keeping the disease so near other bee hives. but it was all no use, he refused to cure. I waited for over six weeks for that man to get his few colonies cured. He did not even try to do anything. Then there was nothing left for me to do but to go and burn his foul brood colonies so as to save other bee-keepers from having their apiaries ruined by his diseased stock. I burned one colony that was nearly dead with foul brood for a bee-keeper that I never could get to cure his few colonies or do his duty like other men. I burned three very badly diseased colonies in the same apiary the year before. When a bee-keeper can cure a few colonies in a short time of foul brood and is urged to do so time after time, and will not do it after being given every possible chance, then I have to stamp the disease out by fire for the public good. I burned 13 colonies for another bee-keeper that were nearly dead with foul brood, in fact some colonies in the same apiary had died right out with the plague. I did my best with that man several times to melt up his diseased combs and burned three foul brood colonies for him before, but all that had no effect on him, he would and did risk using old diseased combs until his apiary got into a horrid state with foul brood. I then stamped the plague out again by fire so as to save the valuable apiaries in the same locality. I was very much pleased with the way all the other bee-keepers went to work and cured their apiaries of foul brood and some of these men had nearly 100 diseased colonies when they started to cure them. Five years ago last spring when I started out to get all the diseased apiaries in the province cured of foul brood I soon learned that I had undertaken a tremendous job. I found the bee yards in every locality that I went into at that time in a horrible state with foul brood and the disease spreading at an alarming rate then. And to make matters worse many were selling diseased colonies, and very few bee-keepers knew foul brood when they saw it. I had first to take the greatest of pains to explain to every bee-keeper how to cure his colonies of foul brood and then see that they made no mistakes but did cure every colony. Some bee-keepers did and would make some mistakes, and that led to my having to write many long letters to them hours after I

should have been in my bed, so as to help them out by explaining everything again, which I always did.

I have handled the disease in six cities and 26 counties and made a great success of ridding out the disease by getting thousands of colonies cured of foul brood and put in grand order. Several sales of diseased colonies had taken place by the very best of men amounting to hundreds of dollars. I soon found that neither the buyers nor sellers knew that the colonies had foul brood at the time of sale, I was chosen as the sole judge by all these parties. And in one case a note for \$240 had been given. I decided what I believed to be just and very fair to all and I am very much pleased to say that I satisfied both the buyers and the sellers and got every thing settled very nicely. Five years ago last summer while on my rounds through the Province I often met with opposition from the bee keepers. Many of the small bee keepers looked on the inspection business as something got up to drive them out of bee keeping and several had no faith in a cure. And some expected that I was going to stamp the disease out by fire. I was astonished to find so many holding such views in so many parts of Ontario. I felt very sorry for these people and took the greatest of pains explaining to them that I came to cure and not destroy any colony if the bee keepers would take hold and cure after I told them how to do it. Things have taken a great change since then. I don't find any more opposition but all very willing to have me call and examine their apiaries.

My railway fares, time, and livery hire for 1895 came to \$673.40.

Wm. McEvoy.

Woodburn, Jan. 8th, 1896.

Moved by Mr. Frith, seconded by Mr. Chrysler, that the report be adopted.—Carried.

Moved by Mr. R. H. Smith, seconded by John Newton that this Convention desires herewith to express its appreciation of the work done by the government in the cure of the various Foul Brood Apiaries throughout the Province by the Foul Brood Inspector, William McEvoy, and to give their hearty indorsement of the methods of the cure as adopted by him, also to express themselves as believing Mr. McEvoy's method for the cure of the Foul Brood to be the best at present known.—Carried.

Moved by Mr. Holterman, seconded by Mr. Frith, that the report of the affiliated societies be received.—Carried.

Thursday, 16th, 2 p.m.

OVER-STOCKING LOCALITIES.

BY MR. C. W. POST.

The above topic has been discussed freely for the last few years, and after all said and done we cannot find an apiarist to say just the number of colonies that can be kept in any certain locality to be of the greatest profit to their owner.

There are several obstacles to prevent us from ever knowing the greatest number of colonies that can be profitably kept in one locality for a term of years. A locality may produce a very large amount of honey-producing flora one year, and secrete nectar in abundance, and the next year the very opposite results may follow. Then again, if the following season was just as favorable for honey-producing flora, the elements in the great laboratory of nature may be against the secretion of nectar.

Now, in the former case, there would be very little danger of over stocking, while in the latter, even a few colonies would secure a very scanty supply. I don't think that there is an apiarist in this or any other country but will admit that any locality can be over-stocked, but to the extent that this can be carried on with the greatest profit is what we are all looking to for more knowledge.

For the last ten years I have been running out apiaries and always have an average colony on scales, and for the last two years I compared the daily gain with colonies in small apiaries (other conditions being as nearly equal as we could get them), and in both cases they were equal.

In 1891 I placed one hundred colonies in a locality already stocked with the same number, in fact they were in the same yard. There was a small apiary of about 19 colonies about three miles away; each apiary had a colony on scales and the average daily gain was about the same. Through the basswood flow on favorable days, the gain was from 6 to 15 lbs. a day and for a few cool, chilly days neither of them gained an ounce.

The following season, 1892, I tried it on a much larger scale. I was running three out apiaries, and I moved them all home to Weller's Bay for the buckwheat flow. At that time I had 350 colonies, and three other apiarists moved 175 colonies and placed them along with mine, making 525 colonies in my apiary. At that same time I had a friend, 7 miles from me to the west, with 90 colonies, localities about the same. We each had a colony on scales and kept a daily record, and it was surprising to see how nearly alike the average

daily gain was. My best three days in succession, gave an average of 10 lbs. per day, while my friend to the west, got 31 lbs. in the same time. Then again there were several days in succession that neither of them gained one ounce; thus showing that as much depends on climate conditions as on the blossoms.

In the above tests, my localities were not over-stocked, but how much more they could have stood would be mere theory to say.

In locating out apiaries I don't think it pays to have less than from 125 to 150 in the same yard. And if it should be somewhat over-stocked I don't think the loss would be as heavy as the extra expense in running them in two different apiaries, this to apply for a term of years.

Trenton, Dec. 15th, 1896.

Mr. Holterman.—I have been out at Mr. Post's place different times. I was there the time he mentioned when the man brought down these bees, he had so many in one locality, and he thought he would get just as much honey as he could had not the other man brought the bees down. I think he has some doubts about it in other localities. There is a great deal of buckwheat available there in that respect. It was an exceptional case.

Mr. F. Gemmell.—I think we all over-stock in the west.

A Member.—I have been under the impression in my locality that since there were more bees on the ground I have been getting as much honey as I would have, if they were fewer in number. As far as buckwheat is concerned I do not think it makes any difference.

The Chairman.—You think on white honey you could over-stock?

A Member.—I think I would get more honey if there were no more bees on the ground.

Mr. Brown.—I am living in a locality where there is a large quantity of honey grown annually, and I find the flow of buckwheat honey varies both in quality and quantity, for instance, three years ago the flow of buckwheat honey was very light, hardly any surplus whatever, and what little there was; was of a dark, reddish color. In '95 the last season the flow was good. I consider it would be very easy to over-stock the locality where the flow is light but where the flow is good it is pretty hard to over stock it where in another year four hives would over-stock it.

Mr. Holmes.—I would regard the instance referred to in the paper as being something out of the ordinary altogether. As I certainly consider from 150 to 200

colonies is sufficient for a locality, taking one year with another.

Mr. Frith.—What would be the territorial dimensions for that?

Mr. Holmes.—Two and one-half miles in 150 to 250 colonies each direction. Perhaps I will be too severe in my views of that matter.

Mr. Frith—Do you think any apiaries should be placed any closer than five miles from you?

Mr. Holmes—If a person who chances to be located within a mile and a half of me wants to keep bees, he has a perfect privilege to do so. It is not my prerogative to tell him to remove to California if he wants to keep bees.

Mr. Frith—For profit you think apiaries should not be closer than five miles a part?

Moved by Mr. Best, seconded by Mr. Frith, that a vote of thanks be tendered to Mr. Post for his excellent paper on the question of "Over-stocking." Motion. Carried. (With applause).

Review of Papers of Last Annual Meeting by Allan Pringle

The duty which has been assigned me on this occasion is to review the papers presented to this Association at the last annual meeting, with the exception of the president's address, which, of course, was not an apicultural subject, and my own address on "Education."

The first paper presented was by Mr. A. E. Sherrington, on "Conventions." The leading ideas of the brief paper were, first, that conventions are not only useful for the dissemination of knowledge, but are important social agencies, with which nearly everybody will I suppose agree whether our own meetings are as sociable and harmonious as they might be (is another question); second,—that, in regard to the papers and essays that are read at Conventions, they should be more in the line of questions than mere essays,—with which many will not agree, and third, that "the officers of an Association should be changed quite frequently"—a very doubtful proposition which needs much qualification and from which many will dissent.

As to the desirability of "essays being mostly in the line of questions", I do not agree with that at all. We have our "Question Box" where any member may deposit his question and it will receive attention; and that is the proper place for questions.

Following out the line of question essays, what sort of report could we present to the Government and the public? Instead of

good substantial papers embracing the mature, thought and experience of the best apiarists and members of this society from year to year we should have a crude mass of off-hand discussion, some of it wise and some otherwise, to present to the Government and public for their edification. It stands to reason that when a member undertakes to write an essay for this or any other convention he will put into that essay his best thought and his ripest experience in the subject in hand. This is what we want, to give weight and substance to our report and to our association, and not only to give useful and permanent information to each other, but to the great boon of readers who are not present at our meetings.

As to the third point, that "the officers of an association should be changed quite frequently, just to infuse new blood into it," I cannot agree with that either. Indeed, it would be the ruin of most societies. When the right man is in the right place it is a great mistake to put him out just to make a change.

The experience of an official, added to painstaking and faithfulness, is an important consideration. Take, for example, the present secretary of this association. There can be little doubt that his long experience in that position enables him now to discharge its functions, not only much easier but much better than he could during his first years of service. Speaking for myself, I would want a much better reason for changing well-tryed and faithful officials than merely for change or the introduction of "new blood."

The next paper or report read was one by F. M. Webster, of Ohio, on "Spraying with Arsenites vs. Bees," which was read to this Association by Professor James Fletcher, of Ottawa, and commented on by him. The substance of Prof. Webster's paper was that experiments he had made proved not only that "bees are liable to be poisoned by spraying the bloom of fruit trees," but that the larvae are also so liable.

Prof. Fletcher fully concurred in the conclusion reached by Prof. Webster from his experiments, which Prof. Fletcher said, "had been carried on with great care by a competent man," and which showed "that there is danger of killing bees with a mixture applied to kill other insects." The conclusion, therefore, was that it was "wrong to apply Paris green when trees are in blossom," not only because of the danger to bees, but the liability of injuring the fertilizing powers of the trees. Prof. Fletcher took the further ground that after

ten years' investigation of crop injuries by insects he could not think "of a single kind of tree that requires the spraying to be done while the trees are in bloom;" and that, as Prof. Webster's were the first scientific ones which had set the disputed question at rest, "we have, therefore, a firmer basis than ever for demanding the enforcement of the act prohibiting the spraying of fruit trees while in bloom." As to the question whether the honey gathered from the poisoned bloom would be dangerous as food, Pro. Flether's opinion was "that it would do no harm to the individual eater," but that he would only give that as an opinion — not as knowledge.

Next came the "Foul Brood Inspector's Report." The gist of it was that the Inspector, during 1894, had examined one hundred and five apiaries, and found foul brood in 39 of them, 34 of these being very bad with the disease, two in which the disease had not made much headway, and three where it had. The Inspector found the people more willing than previously to "take hold" and cure their apiaries; nevertheless, the condition he found things in gave him more to do, he says, than "any person he ever knew of."

The wet weather of May and June of that year proved serious to the bees, the honey flow being so suddenly cut off when the hives were full of brood that the unsealed honey was soon used up and then as the bees failed to uncup fast enough for the brood lots of it starved. The dead brood was supposed by the inexperienced to be foul brood, and a panic ensued, which kept our worthy Inspector hustling at a fearful gait, "rushing, here and there over the Province but keeping "pretty well up with the work," so he tells us. He burned 13 colonies in all, 9 in the County of Halton, 3 in Wellington, and one in Oxford. "The Inspector's time, car fare and livery hire came to \$662.25." I have one criticism or suggestion to make in reference to the Inspector's work, which has suggested to me by a careful reading of the Report I have just reviewed. It would seem from the Report that the Inspector made no call on the Deputy during the season, notwithstanding the repeated pressure of the work.

Now I submit that it would be well for the Inspector either to do less doctoring and more inspecting when there is a pressure upon him for his services in different places, or call out the Deputy to assist him. I take this ground for the following reasons: In most if not all cases delay in the arrival of the Inspector must be dangerous to the bee keeper who has discovered that he has foul brood, and has sent for the

Inspector, and would be more dangerous to his neighbors. Now, if the Inspector is not able to go promptly, when he is urgently called for, the reason ought to be that he is simply inspecting and advising, not doctoring, those who were in ahead of the last applicant. That would be a good reason for the delay, provided the Government refused to pay for the services of the Deputy. But I submit that it would not be a good reason for the dangerous delay on the Inspector's part to say that he was "rushing" through as fast as possible, if, in the meantime he were tarrying here and there to doctor as well as inspect and advise. I do not go even further than that. When the Inspector has more urgent applications for his services than he can possibly attend to promptly, even though he may not be stopping to doctor, but is simply doing his duty inspecting and advising as fast as he can, it is, I submit, his duty to call in his Deputy to his assistance unless the Government positively refused to pay the Deputy under such circumstances. And there should be a distinct understanding with the Department on this point for it is very important. The matter should be brought before the Minister of Agriculture. The Inspector himself, and all of you know the danger of delay in attending to diseased yards, and the injustice of it to the owners of those yards and their neighbors. For such delay there must be a good and sufficient reason as above indicated.

I trust these suggestions will be received by this Association — especially by the worthy Inspector — in the spirit and intent with which they are given in our common interests.

The next paper was, "Will the Future of Bee-keeping Differ From the Past?" by Mr. W. Z. Hutchinson, editor of The Bee-Keepers' Review, Flint, Michigan. Mr. Hutchinson thought that the bee-keeping of the future would differ from that of the past, and took a rather pessimistic view of the future. The industry was becoming a failure in many parts of the United States. The only reason that the essayist knew of for this was that "the natural honey pastures are cut away, and the artificial resources are not sufficient to make the business a profitable calling," added to which is "the summer drouth that results from the clearing away of the forests." There are many localities now "in which," the essayist would not, he tells us, "dare to depend for a living upon a bee-keeping alone. In such places 'bee-keeping as a specialty is doomed.'" In reviewing this paper I see nothing to criticise unless the author means to include Canada, especially Ontario, in

his diagnosis. In that case I hardly think we need take as gloomy a view as he has taken of the future of bee culture in Canada.

The next was on "Some Difficulties," by Mr. J. K. Darling, of Almonte. Mr. Darling in his brief paper, raised a lot of difficulties, some of which I fancy we should never be able to get over, and some of which we shall. There were winter losses, spring dwindling, swarming out, "balling" of queens, desertions, and a host of idiosyncracies and peculiarities, and even what Josh Billing would call "pure cussedness," to which the little honey bee is addicted, as well as to gathering honey, all of which greatly puzzled as well as bothered our worthy member, Darling. This is not to be wondered at. The rest of us have been worried over these matters, too. Looking at some of the manoeuvres on the part of the little insects he has evidently come to the conclusion that the bee is a "thinker," and that some of them are a little "smarter than others," and that some of them can "sulk" and so forth, like the higher animal. In fact, they are not all "darlings," but some of them are more like little devils. I believe every word of this as to the "thinking," the "sulks" and other peculiarities which may proceed from the brain and nerve ganglia of a honey bee, as well as from those of a human being. Both have this "dome of thought, or 'seat of gump-ton,' as the case may be, but we have not, as yet, been able to locate the particular "bumps" in one as in the other. When therefore, we can not cure the "cussedness" of each other, how on earth can the essayist reasonably expect us to cure it in his bees? He imploringly asks us "how to keep the bees at home in the spring like good children; how to make them be kind to their mothers; how to induce lazy or sulky bees to work," etc., etc. For myself I give it up, with the exception of the laziness and the sulks which I sometimes deal with as I would with the able-bodied tramp who is able to work but not willing, viz.: withdraw the "grub" and starve him to it. In the case of the bees, when I find them playing that game I take away their stores and say "work or starve."

Next was a paper by Mr. F. A. Gemmill, of Stratford, on the "Difficulties Experienced in Marketing Comb honey." Only a portion of this paper was devoted to the subject in hand; and the substance of that portion was that the principal difficulty at present experienced in marketing comb honey is the indisposition to handle it on the part of dealers, which has been produced by the sloven manner in which the article

has been supplied to dealers than by producers, causing them so much trouble and annoyance with it as to deter them altogether from handling comb honey.

This is no doubt true, but it is equally true that this sloven work is not traceable to members of this Association, or readers of bee journals, but, for the most part, to the "one horse" bee-keepers, who neither read journals nor use modern appliances.

Once in a while, however, we must locate the dereliction at home among ourselves. I have seen the last fall, supers of sections with propolis stuck fast in the supers, so that the grocer or customer not knowing just how to get them out, often break them in so doing. These sections were not, of course, produced by an old box hive bee-keeper, and any bee-keeper of modern methods, who takes his honey to market in that shape, ought to be read out of the fraternity. The few suggestions of the essay on marketing comb honey were good.

The next paper was a report by Prof. F. T. Shutt, the chemist of the Experimental Farm, at Ottawa, upon "Experiments with Foundation," read by Prof. Fletcher, and commented upon by him. The gist of the report may be summed up as follows: "The weight of the wax produced by the bees is inversely proportional to the amount of wax supplied as foundation." In other words, the more foundation you supply the bees, of the whole quantity needed, the less of course, the bees will have to secrete and supply themselves. It does not follow, however, that it would be wise to supply the bees "all the wax necessary for the construction of the comb." "The production of the wax by the bees is a normal function, and its entire cessation might possibly affect the honey yield or lead to a derangement of the general health of the bees," so says the experimenter. It seems to me, however, that there is a slight misapprehension here on his part. He appears to assume that it would be possible to give the bees all the wax they require. This is, I think, quite impossible. We might, it is true, give them all they require; that is, place it as best we could at their disposal, but it would not be "available" to them. They would not take of it all they actually need. Some, more or less, they would secrete themselves. The other, and more important, point of the report is: "That a dark or deeply-colored foundation gives a dark and unsightly 'fish-bone' in the resulting comb, materially affecting its palatability and injuring the sale."

The moral of this is to use nothing in your sections but the very lightest and nicest foundation. But I would go one

better than this and use none at all in sections, or, at any rate, nothing more than a "starter" of the very best. It would appear also from this report that sugar fed to bees produces more wax than a like weight of honey, and that the free use of pollen by the bees when secreting wax, "greatly reduces the amount of honey or sugar otherwise required." That, however, is nothing new. The other main point of practical importance in the report is that the experiment emphatically points to "the economy of supplying the bees with a foundation of not more than $7\frac{1}{2}$ ft. to 8 feet to the pound."

The next paper presented—that on Education—I shall have to charitably pass over in silence. Should the writer of it get striking out at himself, there is no telling what the consequences might mean.

This concluded the regular papers of last year's convention, but at the public meeting on the evening of the second day were two addresses well worthy of notice—one by Mr. R. McKnight, of Owen Sound, on the "Queen Bees," and the other by Prof. C. C. James, Deputy Minister of Agriculture for Ontario, on "The Value of Skill."

Between these addresses was also an interesting explanation of the lantern views illustrating the structure and habits of bees, by Mr. R. F. Holtermann, of this city.

Mr McKnight's address on the "Queen Bee" was in his usual terse, humorous style, and was an admirable one for such an occasion, though brief. Among other strange facts about "our lady the queen" (bee), he told the astonished people how she could "produce three times her own weight in eggs in a day," and gave those top-lofty rivals of ours, the stockmen, a valuable hint.

But, so far, since the address was delivered, I have not heard that they have been able to realize the friendly suggestion thrown out to them by the speaker, and that suggestion was "that they ought to set to and discover rations for a cow that would enable her to give three times her own weight in milk in a day and keep it up;" and the same with turkeys: "instead of stuffing them for ten months with peas." Sir, these dairymen and their big stock are not "in it" with us and our little queen.

The address by Prof. James was delivered in his usual able and effective manner, showing by different examples and illustrations the value of skilled labor. The product which required skill to produce it brought more in the market than that which required less skill. Skill, of course, is a leading factor in determining price but

it is possible to place too much stress on it, as there are various other factors in the problem.

I have endeavored to perform a delicate and difficult task fairly.

ALLEN PRINGLE.

Mr. Darling.—I do not know whether any person has any desire to criticize the critic or not, but I certainly have had great pleasure in listening to these criticisms of what came before the convention last year, and I move a vote of thanks for the able manner in which he has made his criticisms.

Mr. McKnight.—That paper is perhaps more favorable to this Association than we have yet realized; it brings up in a legitimate way of business and work, which was discussed during our Association last year. It is an admirable paper to afford food for thought; I would not expect anything less from Mr. Pringle. We all know there is a diversity of opinion about reading papers at conventions of this kind, but I am more and more impressed with the belief that it is a good plan and I am sure that it is a plan desired by the Government. I make this statement from the fact that I read in a report of The Pet Stock Journal of the address delivered by Mr James, Deputy Minister of Agriculture, in which he urged upon that Association the desirability of bringing up papers of this character, that there was more food for thought in them when read by the public than the imperfect report they must necessarily give to country of what is said. There is one correction I want to make. Both the reporters and Mr. Pringle said I spoke of stuffing turkeys for ten months. That is not what I said. What I said was that if people could devise something for feeding the turkeys instead of stuffing them with peas ten months before they killed them, it would be better, I think. It would be well for the inspectors to think over what Mr. Pringle has said.

Mr. McEvoy.—I have been five years in the province and I do not think there is a single person who can say they ever got the disease through me not getting there in time, sometimes I put in my time curing, but not very often; take a case where we come across a man who is pretty old, you have to talk a little longer to explain to that man. Mr. Pringle will give me credit for firing some.

Mr. Pringle.—Certainly.

A. E. Sherrington.—I want to say that Mr. Pringle's paper is first-class in every respect. I think it is a move in the right direction. If this Association's work is to become profitable we must have discussions on bee-keeping and unless we can open up

discussions by papers or through question boxes it will not be very profitable.

J. W. Sparling.—Mr. Pringle spoke about using less foundation for sections.

Mr. Pringle.—I believe in using it in brood chambers. I give my opinion that the less we use in the sections the better, but what you do use should be the very best.

Mr. Sparling.—I would like to hear from some of the other members, not as to which is the most palatable, but which is the most profitable. There was another matter with regard to the weight of the foundation. It was exceedingly heavy, seven and a half feet to the pound would be exceedingly heavy foundation for sections.

A member—I have been very much pleased with the criticisms of last year's papers. I must say I heartily approve of the work that has been done.

Mr. Gemmell.—With regard to the use of foundations in sections if you were speaking from a dollar and cents point of view, I would say that I would do the very reverse of Mr. Pringle. I would have no foundation in the brood chamber, but I would in the section.

A member—A I understand, Mr. Gemmell, you mean to use a "starter" in the brood chamber?

Mr. Gemmell—Yes

Mr. R. H. Smith—As regards foundation for sections, we find that honey for shipping purposes we want full sheets; by that means you get it full and better finished to the wood all around.

Mr. Hall.—I am keeping bees, first for pleasure, and secondly and more especially for the profit, and as you know I have done a little in taking comb honey and some of you have seen that I can take some worth looking at. I don't want any "starters" in my sections. I don't want any starters in the body of the hive unless it is a swarm and then I want starters. I want sections filled up with just such a weight of foundation as that man spoke of, seven and a half feet to the pound, but I want to have it so that the bees will utilize that wax.

A Member—I would like to ask if there is anybody who has tried starting sections at top and bottom.

Mr. Gemmell—I have never used starters at top and bottom, but I have used a full sheet of foundation, coming within 3/4 of an inch at the bottom, and then put a starter at the bottom, so that the bees would join them together.

Mr. Smith.—I may say I have tried the same thing, and although it makes a first-class job, it is doubtful whether it pays for the trouble.

Mr. McKnight—I would ask the President if he has used both light and heavy foundation for comb-honey?

Mr. Hall.—I have never used heavier foundation than 7½ to 8 feet to the pound; I have used lighter foundation—12 feet to the pound.

Mr. McKnight—Did you ever in your experience find that the proportionate thickness of the fish-bone was as that of the foundation you put in?

Mr. Hall.—The reverse.

Mr. McKnight—Your experience, I think, is somewhat different from the experience of Prof. Fletcher.

Mr. Hall—If you take Mr. VanDeusen's flat-bottom foundation, take it thin, and it remains the same thickness as you gave it to the bees. Give it to them thin, and it remains the same thickness; take the Pellem or take the Given and you give it to them thick, make a good wax and they pull it down to a very thin comb, if you have to ship your honey. I have tried the starter on the bottom, on a large scale, every other frame with four sections in. I have marked it, and if you or any other man could tell which had the starter on the bottom and which had not, unless you read it on the top of the frame, you will beat me.

Mr. Gemmell.—That is right in a good year, but in a bad year it is different. If you put a starter on the bottom, you must put it right from one side to the other. They will join two pieces of the foundation, and leave a little hole in the section. You want a foundation right up to the section.

Mr. Newton—Although I am of the same school as Mr. Hall, since I have branched out for myself, I have fallen away from his ideas. I do not believe in heavy foundation in sections. I think in nine cases out of ten that with heavy foundation you will find the wax much heavier than you will if you use thin foundation in sections. I have tried it on the Pellem and VanDusen, and I think you will find it heavier on the Pellem. I have cut honey out of brood frames with much heavier foundation, and I have found it very thick. I have been very doubtful myself as to the profit of using extra light foundation.

Mr. Frith—There was a question of marketing in Mr. Pringle's address. In all the answers that have been given, with regard to comb-foundation, there has been no reference made to the marketing of comb-honey. During the last two or three years I have taken some pains to inquire of dealers of honey in Winnipeg and a number of towns through the west, and it just struck me that there might be an improvement.

Dealers in Winnipeg this fall declared that they would never get another pound of honey from Ontario, it was in such bad shape when it arrived there, and the principal difficulty was that the honey had separated from the frame of the section, and, of course, it ran out and partly granulated. I tried seven or eight crates in one shipment, and I could not get one section out without some extra work—could not get it out whole. Would not foundation at the top or the bottom, or one piece on the right-hand side, have something to do with that?

(To be continued.)

One More Woman's Editor.

Mr. Francis Bellamy, who for nearly six years was one of the editors of The Youth's Companion, has been added to the editorial staff of The Ladies' Home Journal as one of Mr. Bok's principal associates. The new editor is a cousin of Edward Bellamy, author of "Looking Backward."

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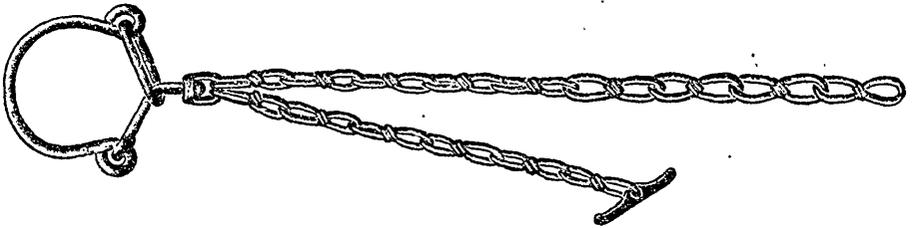
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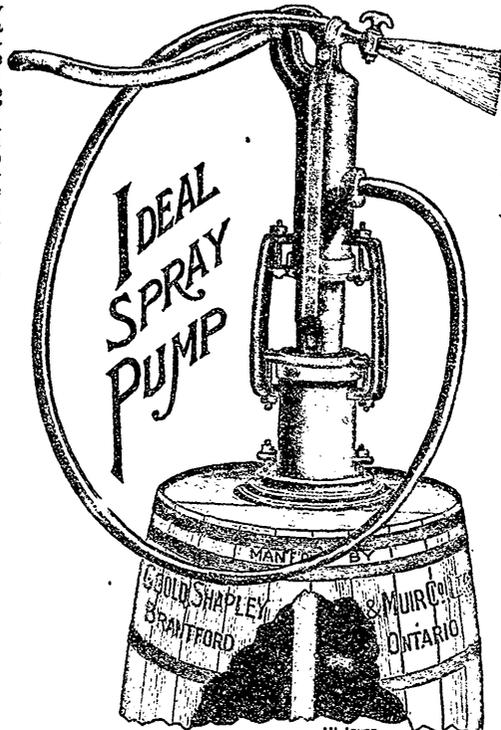
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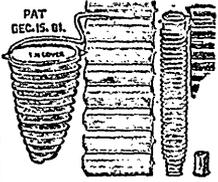
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