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CANADIAN BEE JOURNAL

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BRANTFORD, ONT., FEB., 1896.

WHOLE
No. 372

The report of Thomas G. Newman, General Manager Bee-Keepers Union, 147 South Western avenue, Chicago, Ills., is to hand. Bee-Keepers' Union. There were 242 membership fees paid during the

past year. The expenses for the same time were \$254.90, the balance on hand is \$771.28. The Union through its past record and the attitude which it is ready to assume in the future is a tower of strength to prevent the spiteful persecution of bee-keepers. The Canadian members are we regret to say, but few. We find upon the list Dr. A. O. Camire, St. Francis du Lac, Que., R. F. Ho'termann, Brantford, Ont., Wm. McEvoy, Woodburn, Ont., R. L. Meade, Nassagaweya, Ont., R. H. Smith, Thomas, Ont., W. L. Wilson, Elmvale, Ont. The membership should be much larger, remember your rights will be denied just as soon as a Canadian and you do not know when trouble may arise. If you join after you are in difficulty the Union need not defend your case. Again the more Canadian members their are the more likely the Union may defend any Canadian case. The editor of this Journal has been a member of the Union for years and the mere knowledge of the fact we believe has prevented one action.

* * *

We have decided to make the following offer: To the old subscriber sending us a new subscription at \$1 per annum we will send a beautiful copy of "The Bonnie Brier Bush" by Jan

Maclaren, 13 mo. cloth. Mr. Gladstone describes the "Lad o' Pairts" as most touching, most true, most beautiful." He says there has never been anything of the kind finer than the sketch of "The Country Doctor."

Andrew Carnegie says: "Nothing written recently upon Scotland equals this gem in pathos. It is a masterpiece." In addition to the premium to the old subscriber a copy of the above work. Surely a liberal offer.

* * *

President Mills of the Ontario Agricultural College has been elected a Director of the Ontario Bee-Keepers Encouraging Association in a recent letter he writes.—"I thank members for this courtesy, and I shall endeavor to do what I can to promote the interests of the important industry which you represent.

* * *

The Hon. W. H. Montague, who has lately been appointed Minister of Agriculture at Ottawa, has mapped out a very active agricultural policy. In addition to Bee Keeping many other plans, the new Minister has publicly signified his intention to advance the bee-keeping interests of the country. Bee-keepers who know that the Minister has for the last sixteen years or more taken an interest in bee keeping, will not be surprised that he sees bee-keeping and its relation to the country in something like its proper light. Before he was even a member of

parliament and when very closely identified with the farming interests, he tried to give due prominence to this important branch of the farm. His own constituency which exports a large quantity of alsike clover seed, has many good bee-keepers, and an active local society, the Haldimand Bee Keepers' Association, the officers of which are at present three able bee-keepers: President, Jas. Armstrong, Cheapside; Vice-Pres., J. H. Best, Balmoral; Sec-Treas., E. C. Campbell, Cayuga. The latter gentleman is also editor and proprietor of the Haldimand Advocate, and his excellent clean weekly has always been at the service of the organization. The Haldimand Association has had at its convention Doctor Montague, and at one of these conventions this gentleman freely pledged himself to support the Pure Honey Bill in the House of Commons. and the pledge has been fully carried out.

We have reason to believe that it will be the policy of Doctor Montague to improve by education the quality of honey put upon the market by bee-keepers generally. While it is not applicable to our best bee-keepers, there are many who put an inferior comb and extracted honey upon the market. By raising the quality of honey the demand will be increased. He will also aim to develop the home and foreign market. The home, by drawing attention to the value of honey as a food, and by instructing the consumer as to the peculiarities of honey, and how it should be used and cared for. In the foreign market as well as in the home we will have the active assistance of Prof. James Robertson, who, it is proposed, shall be Commissioner of Agriculture. His great abilities and well-known energies which have so often in the past been directed for the benefit of his country will give bee keepers confidence in what he may do under the department of Agriculture. The following letter will show he is already thinking of bee-keepers.

OTTAWA, Dec. 20th. 95.

Dear Mr. Holtermann, - If the honey men seek an excellent opportunity for introducing honey in the British markets next

summer and autumn, it is possible that an opening might be found for the introduction of a small quantity through the depots which it is expected will be established in Great Britain for the distribution of dressed meats. How to combine the meat and the honey may be a difficult problem or riddle, but I hope it will be one with a more peaceful and delightful result than that which followed Samson's riddle as to how honey came to be evolved from meat

I am yours, very truly,

JAS. W. ROBERTSON,
Dairy Commissioner.

Since the above letter was written we have seen Prof. Robertson. He said he would make no absolute promise to bee-keepers. Something at present not seen might prevent the arrangement mentioned in his letter, but as far as we understand it, unless something at present not shown develops, the Government will introduce throughout Great Britain Canadian honey. The Ontario Bee keepers Association has also passed a resolution asking the Dominion Government to act along the lines indicated in the above.

It is also the intention of the Minister of Agriculture to try and devise better methods of bee-keeping. A first-class apiary is to be equipped, and the necessary appliances secured to conduct very careful tests in wintering bees; also experiments during spring and summer; in fact, to cover the entire year. It is to be hoped that no false economy will be practiced in the organization of this department. A few hundred dollars, more or less, is of small consequence as a tax upon the country. but it may add or take away hundreds of thousands of dollars from the annual crop of the country. What our creameries, cheese factories, dairy schools, the travelling dairy, etc., has done for dairying to make that business more profitable, can, by proper means, in a measure, be done for bee-keeping.

The mere fact of the above step being taken by the Minister, will, aside from what it may do, have the effect of putting bee-keeping on a better footing. It will help to raise it to the dignity to which it has a right—a profession, worthy of the best efforts of the best minds of the Agricultural class,

Death of Dr. George Duncan.

The last Courier briefly announced the death of Dr. George Duncan, which occurred on the morning of issue after a short illness from gastritis. Seldom has there a death occurred in this vicinity where there was so much wide-spread regret expressed—young and old were among the mourners with tear-stained faces. Such an outburst of universal sympathy and regret can not be wondered at, when we remember the close associations not forgotten between deceased and his mourners. It can be properly said that "he died in the harness," for only a few hours before his death he might be seen the central figure in the merry whirl of pleasure, or consoling some one in distress or grief, or it might be wiping cold sweat from off a patient's brow, or administering words of comfort and consolation to some aged one. He was old in years only; his delights were with the young, who loved him as a companion and friend. Deceased's life was a busy one throughout. There are many who can remember the eventful year of 1866, when Canada was threatened with an invasion by rebels from the United States. Loyal to the core, the doctor (Captain Duncan) was among the first to march, with his fifty-five stalwart Highlanders, to defend the frontier. No officer could be more beloved by his men. Their faults were covered by him with a broad mantle of charity, and any worthy act had its reward; perfect discipline without punishment was wisely administered by him, and you cannot talk with any of the survivors of those troublesome days without listening to some incident that would make Dr. Duncan's memory right up with brightness. A few of the survivors of Capt. Duncan's Highland Company are: Rev. John Laycock, of Fort William; Donald Bayne, of Lakeside; John Ross, Esq., of West Zorra; Hugh Ferguson, of Chicago, Ill.; Hugh Ross, of West Zorra; John Sutherland, Charles McKay, and Alex. Campbell, also of West Zorra; George Gordon, at present in the Western States; A. G. McKay, of East Zorra, J. R. McKay, Harrington, Donald Munroe, of Rochester; George Green, Downie, Robt. Munroe, California, and others.

Deceased was born in Sutherlandshire, Scotland, and emigrated to this country,

landing here with his parents in the year 1839. He started to study medicine about 1848 under the celebrated Prof. Rolph; graduated in 1852, his diploma bearing the signature of James, Earl of Elgin and Kincardine, Governor-General of all the Canadas. He started to practice medicine in Embro steadily after, and from then until the day of his illness was almost a constant worker in his profession, although retiring a few years ago from active work, yet many an old resident refused to have anyone else for their family physician. As a doctor he was wonderfully successful, always keeping up with the advance of the different systems of treatment. Some of the most celebrated doctors of this country were former graduates with him.

Since his retirement he made a special and deep study of apiculture, and was recognized not only in Canada as an authority, but many an article of his appeared in American Journals. One can almost imagine during the balmy summer days how the very bees will miss him.

[We were shocked to learn through the Embro Courier of the death of Dr. Duncan. The Oxford Bee-keepers' Association, of which he was an active member, will mourn him. The Canadian Bee Journal has lost in him a warm friend, and bee-keepers generally have lost one who has lost no opportunity to advance its best interests.—Ed]

The Past Season—Not Discouraged.

—FRANCIS ORTT.

I have long been planing to come to Brantford, to the Ontario Bee Meeting, but my calculations failed and I was very much disappointed because I could not come. I have had a very hard time of it this winter. I have been shut in the house for two months with an abcess on the side of my face, it run me hard for my life. I could not open my mouth for two months, so I had to live on milk porridge, and it is not much better yet, but I am thankful that my life was spared. Last season was a very poor one for bees here. I lost 20 colonies in the spring, out of seventy, they all went in the spring. They had brood started but dwindled away until there was not bees enough to care for it. I have never

had the like of it before. Since I have kept bees I never lost half that many all together. I had only one new swarm. I am wintering 50 this winter, they are doing well thus far. I got 40 pounds of surplus honey and fed 700 pounds of sugar. How is that for luck. But I gave it with good will, thank fortune sugar is cheap. and I don't expect to see such a poor season again for some time. I winter on summer stands with outside winter cases and chaff packing. I am in a good locality for honey, when there is any flow. There is lots of alsike clover raised here, and there is some basswood near me, enough to keep them busy when in bloom. I could keep over 100 colonies if I could care for them, but I am a farmer and cannot give all my time to the bees, and 50 or 60 well cared for is better than 100 neglected; bees must have care to make it pay, if they are not cared for at the proper time the loss will be great, and no profit to their keeper. I am well pleased with the Canadian Bee Journal. It is full of useful knowledge to the bee-keeper, and no bee-keeper can afford to do without it, if he wishes to succeed in business.

Darling Road, Ont.

Wintering Bees in California.

Nearly every bee journal in the East is burdened these times with articles and symposiums upon wintering. The California Beekeeper, so happily free from those troubles, thinks it his duty to skip all such writing, and at the same time express himself strongly against having such articles in his paper. The subject, however, is of vital interest to the Eastern beekeepers, and is likely to be the burden of many discussions in the future.

It is a pleasure to learn that this important feature in Eastern beekeeping is making progress toward success, and it is hoped that when a few now winter with but little loss in a cold climate, all may learn to do so in the near future.

It was my lot to pass through many wintering experiences in Eastern N. Y., and the skeletons of many blasted hopes lay strewn around the old homestead. I have lost as high as 75 per cent. of my colonies, while the remaining 25 per cent. were weak and required much nursing to get them into the working order.

When I left the East I had an idea that I had solved the wintering problem, not from theory alone but from a practical demonstration for three winters.

I practiced cellar wintering, but not successfully, until I adopted a sealed cover and

a large air space below the cluster. I used the Haddon hive; usually in two sections. The same plan would work with the ordinary L. hive, or any hive with like capacity. The air space was made by using a 2½-inch rim under the brood frames. The temperature of the cellar was held at about 45°, and there was no cold draught of air allowed to strike the covers and cause condensation of moisture in the hive. The bees could be seen at any time clustered in a ball below the frames, and always in that semi-dormant and healthful condition that a beekeeper loves to witness. But my interesting wintering studies were brought to an end by a sudden resolve to migrate to a more genial climate, and the summer of 1891 found me looking into the honey interests of California, and here I certainly found freedom from those Eastern wintering troubles.

Where the temperature seldom gets below the freezing point, the wintering of bees should have no terrors. Still in the balmy climate of California, strange as it may seem, we have a considerable loss of bees in the winter, and to the methods of management we can attribute all of the loss.

Some of our beekeepers are careful to fulfill all of the requirements necessary for the highest success. Some partly fulfill them and some think there are no requirements to fulfill.

The careful beekeeper seldom extracts honey from the brood-chamber, and toward the close of the season he is careful to leave some honey in the super after each extracting. Our seasons usually closes here in July, but sometimes the yield holds out a month or more later. Be that as it may, the careful beekeeper is never caught with an apiary that needs feeding.

The careful beekeeper also has an eye to his queens, and supercedes the old at superannuated stock, and starts into the winter with young and vigorous ones.

The seasons are so long here that the queen is putting forth her best endeavors for several months, and though I have seen the matter demonstrated by facts of experiments, I am sure that the queen's usefulness is impaired earlier than in the east; and while a queen may do good service there for three years, it is not advisable to use a queen here past the second year.

In nearly all of the apiaries here, the extracting supers, be they one or more, are usually left on the hives all winter. A few very careful beekeepers have a storehouse for the supers and combs, and confine the bees to the one storey or brood

chamber, and evidently save honey and bees. But there are very few that practice this, and the removal of extracting supers is considered immaterial with a large number.

The losses occur when the beekeeper extracts honey as long as the season lasts, and then depends upon the bees to make a living through the rest of the year. The bees will do this many times; then there are seasons in which they will not do it, and in such cases there are losses that exceed 50 per cent. of the colonies.

A superannuated queen is a dangerous factor to commence the winter with. She usually fails in the early Spring, and the result is a fertile worker, queenless colonies, and colonies in which the aforesaid workers are plentiful in many apiaries, and the loss from this cause is some times 10 to 15 per cent.

With careful management, as first described, there is no use for beekeepers to loose but a trifling per cent., or to lose none.

Bees are able to fly here every day in the year. If there are any exceptions, it is during a day of heavy rain, and an all day's rain is of such seldom occurrence that the bees are free to fly.

Upon the whole, California is a most balmy State in which to manage bees, and even though losses may sometimes be heavy, through bad management, the recuperative powers of a continuous honey flow are such that the empty hives are soon filled with bees and a considerable field of honey obtained. The process of getting the honey is so easy that beekeepers who have been careful, neat and tidy in the East, become shiftless in management here.

The wintering question, though not of such paramount interest as in the East, will still bear study here, and care must be exercised in order to obtain the best results.

J. H. MARTIN.

Prospects.

From the poor prospects of the present season's honey crop, a great many, no doubt, are getting tired of waiting from year to year for a good honey flow. It may be a little consoling to know that other lines of businesses and occupations are having their darkest sides out. Drought

and frost has done damage to others than the apiarist.

A question every bee-keeper might ask him or herself now is, how could I have secured a larger surplus? or, in extreme cases how can I secure enough honey to winter the bees without having to feed sugar syrup or would it pay to extract the honey and feed sugar syrup for winter?

First, I will say that I believe that the honey bee in the hands of many breeders has degenerated somewhat to a short lived and tender bee.

Longevity of bees should be the greatest mark to aim at in breeding queens. Taking six weeks to be the average life of a worker bee, and to be three weeks old before she commences field work. Suppose by a little careless selection and breeding the bees of a queen live but five weeks, and by a careful selection and breeding the bees of another queen live for, say seven weeks during the working season. (I have found greater differences than the above).

It will be seen from the above that the carefully bred bees will have four weeks at field work while the others will have but two.

Would it not be reasonable to suppose that the longest lived bees would gather double the amount of honey. Some might say that the lazy bees would live the longest and be a guide to breed from them, but I doubt if the lazy bees will live the longest any more than a saloon loafer lives longer than an industrious man, because he did not work. He as well as the bee will wear themselves out at something, even if it is not to some good.

Second, too much swarming may mean no surplus honey, and probably have the weaker colonies to feed for winter. It will have to be an extra long and good season when you are obliged to have more than one swarm from each colony. If you will replace on the old stand the first swarm with the remainder, or nearly all of the bees shaken from the frames of the old hive and the old hive moved to a new location. The above plan will many times give you a surplus, as you get all the working force in the one hive.

Third, sufficient stores may many times be obtained without feeding by removing the queen about August 1st with one frame of bees, and placed in an empty hive and allow a young queen to be reared who will be an advantage to the colony for next season by being young and probably more vigorous than her mother. As it will be about four weeks before the young queen will be laying in the hive after the old queen was removed, there will be a four weeks' hatch of young bees less to consume

stores, and with a less favorable fall flow the bees will secure ampler stores for winter than they otherwise would. The old queen and frame that was removed may be added to a weaker colony less the queen if others are apparently as good.

Fourth. As to extracting honey, the honey from the bees and feeding sugar syrup for winter, it looks reasonable and might pay, but I will venture the opinion you will not do it very often. Don't do it until you have got to, and that will be when there is honey dew in the hives.—W. A. Chrysler, Chatham, Ont.

The Heddon Hive.

To the Editor,

Your card re what Rev. L. L. Langstroth intended to say about the new Heddon hive came duly to hand. I may state that on the morning of the second day of the Toronto convention, that I had considerably over an hour's conversation with him on different subjects, one of them being about the correspondence that took place between us at the time I purchased my first Italian queen from him in October, 1864, the price then paid being \$10. This you will observe was 31 years ago, and I have all the correspondence still in my possession, amounting to quite a few letters bearing on this matter, and which I prize very much, as also some of a more recent date.

"By the way friend Gemmell, before I forget," said Mr. Langstroth, "I want an opportunity if possible, of saying something on two subjects at the convention, one is on Mr. Parson's first importation of Italian queens to America, and the other is concerning the new Heddon hive. This I desire to do in simple justice to both Mr. Parson and Mr. Heddon."

You no doubt will remember that I came to the meeting with Mr. L. having to wait some little time, after the meeting opened, in order to accompany him there, and that he did get the opportunity of relating about the importation of the Italians. Well I cannot inform either yourself, or the general public, as to what he intended saying about the Heddon hive, but from the little he did say to me about this time, I concluded he intended to speak favorably of it, and its working, etc. You, of course, are quite aware that the opportunity for speaking on this subject did not present itself, and this I understand Mr. Langstroth very much regretted, as no doubt many others, myself being one of them.

These are the facts as I know them, and I trust may serve the purpose for which

you have written me concerning the conversation which took place between Mr. Langstroth and myself on the subject.

F. A. GEMMELL,
Stratford, Nov. 25th, 1895.

FRIEND HOLTERMAN.—You have asked me for an article for C.B.J., but the fact is it is pretty much up-hill work to write an interesting article, as the honey crop here has been a total failure. Bees will have to be fed for the winter, and are almost starving now.

The firm I buy grain for wished me to open up a new market at Cookstown. We did not decide to go till about July 1st, and as alsike and white clover was quite fresh there, our bees were sent north as soon as possible, but a little late to get much clover honey, but lately have been getting considerable from fall pasturage, as they are now located near that large swamp between Beeton and Alliston. But I expect to have to do some feeding, the way the bees were moved during such warm weather. After nailing frames and giving plenty of ventilation, I shipped a wagon every evening by express, and they were met at Beeton by a friend, John H. Mitchell, (who assisted us with the bees two seasons), and taken out five miles to their farm, and the 130 hives were placed in the new location without any mishap. Only about half-a-dozen combs were broken down, although none of the frames were wired.

Bee-keepers in Simcoe County have had a fair yield of honey. I should say half a crop, which was gathered from white and alsike clover, although they did not have any more rain than we had here, yet the valleys, lowlands and peculiarity of soil was more moist, and alsike was a good crop. It is a very hard trial for us to pick up and leave a locality like this after a sojourn of about 11 years, especially when you have so many kind friends. However we hope to see many of them again. We expect to be moved to Cookstown September 1st.

HENRY COUSE.

Cookstown.

I renew my subscription for '96. Find enclosed postoffice order for one dollar. I like the Bee Journal very much now. We had a very poor season last year. Hoping we will have a better next.

James Davidson,
Goderich, January, 1896.

Annual Meeting

Ontario Bee-Keepers' Association

HELD AT BRANTFORD, ONT.....

THE annual meeting of the Ontario Bee-keepers' Association took place in Wickliffe Hall, Brantford, Jan. 15th, 16th and 17th. The attendance was not as large as it would have been if the previous honey season had been good. The local attendance was good, and the majority of those interested in bees were present during a portion of the convention. Too much of the time of the convention was taken up by the discussion of matter which would be of no assistance in the better management of bees. The Hon. A. S. Hardy, Commissioner of Crown Lands, kindly attended one of the sessions and addressed the meeting in a manner pleasing to those present. The Hon. John Dryden, Minister of Agriculture, was unavoidably absent. Among those present at the convention were:—J. B. Hall, President; J. K. Darling, Vice-President; W. Couse, Secretary; W. J. Brown, Chard; Dennis Brown, Chard; F. A. Gemmill, Stratford; W. S. Walton, Scarborough; J. M. B. Holmes, Athens; J. D. Evans, Islington; A. Pickett, Nassagaweya; R. F. Holtermann, Brantford; R. H. Smith, St. Thomas; H. N. Hughes, Barrie; J. W. Sparling, Bowmanville; W. A. Chrysler, Chatham; A. E. Sherrington, Walkerton; Wm. McEvoy, Woodburn; Allen Pringle, Selby; John Calvert, Walsh; R. Coverdall, Canfield; James Armstrong, Cheapside; J. H. Best, Balmoral; Frank Davis, Mrs. Davis, C. Shaver, Mrs. Shaver, Cainsville; L. Van-ickle, Trinity; J. K. Darling, Almonte; J. R. Howell, Brantford; John Newton, Thamesford; A. Shantz, Haysville; C. Edmondson, T. Birkett, Brantford; D. W. Heise, John March, Bethesda; Ernest Robinson, Hatchley; R. McKnight, Owen Sound; Martin Emigh, Holbrook; Charles Kelly, Cathcart; R. L. Patterson, Lenndy; W. J. Creig, Charles Watson, Wm. Bayless, Brantford; S. T. Pettit, Belmont; R. J. Taylor, Brantford; Jas. E. Frith, Princeton; L. Mapes, Headford.
Mr. J. B. Hall, President of the associa-

tion, took the chair, and after calling the meeting to order stated that as the Secretary had not yet arrived, any member who wished to ask a question might do so.

Mr. J. D. Evans, Islington.—I would like to know if it is advisable for the Bee-keepers' Association to encourage an increase in the number of Bee-keepers. I notice in the journals that a large quantity of honey is being wasted, and I want to know if we as bee-keepers, who desire to make something out of the business, should desire to increase the number in the profession.

The Chairman—What do you think about it yourself?

Mr. Evans—I do not think so. I do not think the doctors and lawyers go around seeking to get more in their profession. It makes me red-hot when I see this. I think it is simply committing suicide, and therefore think it is a mistake on our part to encourage other people to leave any business and take up bee-keeping.

A member—It is a mistake we make in not giving the difficulties of the calling. As it is, gentlemen, we are all red-hot about our business, and we don't tell the public about the rocks and shoals and therefore they lose their money.

Mr. Evans—While it may not be advisable nor desirable to encourage the masses to go into bee-keeping, I want to know how it is to be avoided. The reports of our annual meeting get into the public press and the people read the papers.

A Member—If the press will give an accurate report of the crop for the last two seasons, it will have a tendency to stop people from going into bee-keeping.

Mr. Allen Pringle—There is a difference between carrying on our conventions and making a special effort to induce all and sundry to engage in the business of bee-keeping. I do not think Mr. Evans meant to say that we ought to relax our legitimate efforts, but that we should not be putting forth special efforts to get everybody to go into bee-keeping; it would be hard to answer his question from a busi-

ness standpoint. In England, however, they go into it a great deal more strongly than we do. They endeavor to induce people to go into the business more extensively. As for myself, I have always given any neighbor or any man who came to me all the information I could. I have not gone out in the by places to teach bee-culture, still I am inclined to agree with Mr. Evans that it is not just wise to try and induce everybody to go into the business.

The Chairman—I think in England it is calculated to induce and encourage the cottagers to go into bee-keeping, so as to assist them in eking out an existence. Happily in this country of ours, we are better off.

A Member—This reminds me of a member of this Association who told me that he never allowed anyone into his bee-yard unless they paid him. I trust it will not go to the public that this association has decided to hide its light under a bushel. This is the purpose for which we received public aid. We are getting a grant for the purpose of developing the honey industry, and I do trust that we will not accept that grant and use it and let the world believe that we are endeavoring to conceal knowledge from them. It is to propagate that knowledge that we are getting that grant. The country is also paying men year after year to go around and attend Farmers' Institutes and speak on bee-keeping in order to enlighten the public on the theory and practice of bee-keeping, and I do trust no such expression of opinion will go to the public as has been made here to-day.

Mr. S. T. Pettit—There are just two lines of action before us; the one is to be exclusive to ourselves, and selfish, getting all the knowledge we can and husbanding it, and the other is that this association means to develop the great bee industry, and for that purpose we ask the Government aid, and we ask an increase of grant, and that is the plea that is put forth, and if we are going to go back from that, we must say to Mr. Dryden: We do not want another dollar. If we receive the money we must push beekeeping. My friend Mr. Evans is laboring under a mistake when he supposes that an increase of bee-culture is going to hurt him or me. The more honey we have the better it sells. If we have not an article to sell, we cannot open a market for it, and if we open a market in a foreign county, we must have the article to supply that market or we will lose it. Now I hold it is the right thing for this association to encourage bee-keepers, so that we will have tons and hundreds of thousands of tons to put on the market, and we are going to get

a market for it. There is already a market opened in England. If we push it and keep our reputation right, there is no trouble in disposing of our honey at paying prices. There are three things necessary to keep the market. First, the article, then the reputation and then the quality. We have the article, we have the reputation, we have the quality and we want to go on, and produce that article and let the people of the world know that we have got it. It is a great mistake to huddle a lot of bee-keepers together in one neighborhood where a man is settled down and has his bee-yard. We ought to cultivate the sentiments that if another man wants to start, he should go a respectable distance, and there is no clashing.

Mr. R. F. Holtermann—As I have been out at the Institute meetings for some years, and have lectured to a class in the Ontario Agricultural College, I do not think it is out of place for the association to know just the exact stand I have taken on this question. I think the straightforward and honest principles are the correct thing. I think in the past the idea has been circulated to a great extent that is required neither time, experience, nor intelligence to keep bees. A good many have been under the impression that anybody could buy a few hives of bees and get the honey from them. Where I have addressed Institute meetings I have always said that bee-keeping did require experience and time and unless a man was prepared to give time and get experience, that he had better keep out of bee-keeping. I think if we as members of the Association go out with that idea, and circulate it, it will keep the province from losing money, because men have lost money through keeping bees. One of the strong points of bee-keeping that I have stated at these meetings has been that it took nothing from the soil, and that it displaces no other crop on the farm and it might be that girls and boys, who might otherwise have to leave the farm, through bee-keeping might be engaged in profitable work on the farm. My idea has been to develop bee-keeping in that way on good solid lines, and it is desirable also to do what we can to develop our home and the foreign market. I do not think there is a man here present who will not admit that our home and foreign market can be developed. If bee-keepers send poor honey on the market, and people get hold of that, those people are not going to buy honey again, but if we encourage the production of a pure article, we are going to do the industry and the Province of Ontario a good deal of good.

Mr. Evans,—I had no idea of advising

that the proceedings of this convention should be curtailed, but I am still of the opinion that we should make no special effort to increase bee-keepers. I think in Ontario we can produce more honey than we can sell in ordinary years, and I think attempting to send it to Europe has been a failure. I have seen the best honey sold in Toronto at 6c a pound. As to receiving a grant from the Ontario government, we find the legal professions, and the medical profession receive large grants, and the colleges and universities are maintained by the country largely, to teach these men, and yet we find these professions use every effort in their power to restrict the number of men that come into their profession, and if they could so succeed, they would not allow a store keeper to sell an ounce of slats, and a lawyer would not allow an ordinary man to draw a will. I do not think it is a good thing either through Farmer's Institutes or the Agricultural College to increase the number of bee keepers. I think if you send men around to lecture, you will get so many people interested in bee-keeping, that we will not be able to sell our honey.

J. E. Frith.—I have been listening to these remarks with regard to the production of honey, and the proposer of the question, Mr. Evans seems to have based his question on the fact that getting everybody to go into bee-keeping and raising a few pounds of honey, and perhaps launching that on the market will demoralize it. I think there is another feature of the question, can we produce or over produce a good quality of honey and can we have too many qualified progressive bee-keepers? Take the dairy industry; butter brings just as much to-day as it did twenty-five years ago, that is taking it for a number of years. Take the cheese industry; very little was produced in this country twenty-five years ago and it didn't bring any better price than it does to day, yet the production of cheese has increased 100 per cent. in this country. It seems to me Mr. Evans is mistaken in his remarks and there is room for qualified bee-keepers all over the country. My experience leads me to this conclusion that if we have qualified bee-keepers just the same as in any other industry it will increase our market rather than overdo it.

I have been up in the Northwest Territory three seasons, and I have taken some pains to examine the quality of honey sent from the country, and I think that just about 90 per cent of all the honey that has been sent up Manitoba is not fit to leave this country. It has been produced by unqualified bee-keepers, and I might say just here that

Manitoba is going to be a market for our honey for a long time to come. Now, I think the work of this Association is to raise the standard of our bee-keepers as a profession; You take any class of industry or any department of Agriculture where men become qualified for that department, we find that department increases and becomes very valuable. I do not think it will hurt me if I have good men in every direction all around my section of the country. I would not like to go into the by-ways and high-ways and persuade every man to go into the business. I think we can not press the fact too much that we must have good men.

Mr. Holtermann.—In regard to the foreign market, there are several members present who have sent their honey home and secured better prices than in this country.

Mr. Heise.—I think nature itself will attend to this matter, possibly better than we could. Every two or three years we have a poor season, and all the slipshod bee-keepers find themselves without any bees in the spring, and it is only practical bee-keepers that remain in the field. We ought to know something about our man before we advise him to go into bee-keeping.

The President—I rise to emphasize what Mr. Holtermann has said. We ship honey to Britain and it brings us better prices than we get at home for one-tenth part of the trouble for they look upon it as a choice article and write back "Have you any more? Cannot you supply us with some more like the last" and we have to say no. We want bee-keepers and bee-keepers in Ontario, but we do not want men who buy bees and put them down and let them work for nothing and take the honey when they feel inclined. This association receives from the government so much money each year to improve ourselves and give true information to the public and if we give true information we shall never have a surplus of bee-keepers for those people who are so anxious to go into the business if there is anything to do. I go thirty years back when our cheese was worth five cents a pound and very poor stuff and very little of it made. I am up in the century where it was sold forty years ago by Mrs. Rennie; she used to get a good price for her cheese simply because she knew how to make it. It is the same with the bee-keepers; we cannot have too many bee keepers in Ontario. If we get the right kind we cannot have enough honey to supply the demand, I mean now the foreign demand.

A member.—What kind of honey?

The President—Only first class honey, produced by first-class bee-keepers, not those who cannot succeed in anything else.

Mr. McKnight—Might I not ask if this is not the man of straw that we have set up and we are voluntarily throwing him down. Is it a fact there are such men in the country?

The President—It is a fact. Your Executive was advised to recommend men who could go around and talk bees at the Farmer's Institutes. We said it was difficult thing to do, as some of our men were good talkers, they could entertain an audience for two hours and at the end of that time they would not know how much about bee-keeping. The practical bee-keepers had were not good talkers.

Mr. McKnight—I think it is due this association that if there are any such men in it and if they have been pointed out as eligible for their position we ought to know it.

Mr. M. B. Holmes, Athens—People come to me to buy bees, and I say here are the bees and this is my price, and if you are not prepared to give them the time and study that is required, you had better let the specialist attend to it and you try some other line.

Mr. Pringle—I was asked by Mr. Hodson to take a tour with the Farmer's Institute, and speak on Bee Culture, and for the Department of Agriculture. I declined; you made this statement that we cannot have too many expert bee-keepers get too close together.

The Chairman—This is a big country.

Mr. Pringle—There is a choice province and that is Ontario and here it is possible to get too many expert bee-keepers because just as soon as they get more than the locality can supply, they are getting too many.

Moved by Mr. McKnight, seconded by Mr. Chrysler, that the minutes of the last meeting be taken as read. (Carried).

Moved by Mr. Holtermann, seconded by Mr. Sherrington that By-law No. 15 be amended so as to read December instead of January. Carried.

Moved by Mr. Holtermann, seconded by Mr. Sparling, that clause 6 be rescinded. Carried.

Moved by Mr. Holtermann, seconded by Mr. Sherrington, that By-law No. 13 be amended to read "That each affiliated Association be entitled to send two delegates to this Association." Carried.

Moved by Mr. McKnight, seconded by Mr. Smith, that the Secretary be instructed to write to the Secretary of Agriculture at Washington for 250 copies of bulletin No. 1 on bees and bee-keeping.

Moved by Mr. Pettit, seconded by Mr. Darling that a committee of five be appointed by the president to draw a By-law

to provide for the election of directors and to re-organize districts. Carried.

Wednesday, January 15th, 1896, 7 p. m.

The president in the chair.—Committee appointed at the afternoon session to draw by-law for the election of directors, report as follows:—The committee unanimously recommend and submit as a solution in regard to by-law 19, that said by-law be recommended as follows:

Each affiliated association shall be entitled to the privilege of two delegates to the meeting of the association; said delegates if not already members of the Ontario Bee-Keepers' Association shall have their membership fee paid out of the \$5 affiliation fee paid by the affiliated society, and be entitled to all the rights and privileges of members of the association, the year to terminate on the next affiliation fee becomes due.

Signed:

Allan Pringle.

R. F. Holtermann.

J. E. Pirth.

On motion the report was adopted.

Mr. Evans—And should not the public be made acquainted with the fact that a bee-keeper has foul brood?

Mr. Calvert—Mr. A. I Root published in his own paper the fact that he had foul brood and it did harm his business in any way.

Mr. McKnight—Does it not do the honey man more harm to conceal the fact that certain parties have foul brood, than it would to publish it; does it not leave it on the mind of the consumer that every man's honey is affected by foul brood? and I do not think that our inspector should publish to the world that any man's apiary is rotten with foul brood. I say that statement has the effect of making people suspicious of buying honey, and I would like to see our inspector put that word under his feet and keep it there as long as he lives.

Mr. McEvoy—He has got me in a tight place. I did not see it in that way; he is right. I should not use the word rotten, because a person that did not understand bees might be misled.

Mr. Pringle—I think the word is too strong. I think I suggested that to the inspector during the time he was under my direction as president. This is a delicate question, and there is only one solution to it; there is no doubt the principle Mr. McKnight sets out is strong but it is founded upon a wrong impression. If you publish the names of those who have foul brood it would be in your annual report at that time the publication would do no good and a great deal of harm, because the very man who would be published as having

foul brood would have got rid of it by that time. Those who are headstrong and obstinate and will not follow the inspector's instructions and who do not care whether their neighbors are endangered or not, their names should be published to the world, if they have shown their neglect and obstinacy the public ought to know these men.

Mr. Evans—The names should be published in the Bee Journal and when the apiaries are burned there should be a certificate from the inspector that they are cured. The general public do not read bee journals. I am continually buying bees, and I ought to know by some means where I can safely buy. It is not my idea that the names should be published in the report but I think as soon as the apiary is found to be diseased it should be published in The Bee Journal.

Mr. Holtermann—I do not think it would be advisable to publish the names in the journals.

Mr. Firth—I passed through the foul brood scourge, and I made it public. I had a great number of orders from all over Canada and some foreign countries for queens. I published the fact that I had foul brood but the man from whom I got the foul brood, had it for two years within a mile and a half of my apiary, he passed my door every day and never let me know he had the disease, and when I discovered it by accident I cornered him up. For the good of the association, I think it would be unwise to publish the names. People are buying queens everywhere. We took the matter up in our local association, and recommended every man who was buying queens not to buy from any apiaries unless had the assurance that there was no foul brood there. For the good of the fraternity I would not like to have any man's name published.

(To be Continued.)

California.

—Jacob Alpaugh.

DEAR SIR.—I dropped you a card when we arrived here, did you get it? I ask you to address my C. B. J. to North Ontario, Cal., but as yet I have seen nothing of it. We arrived here on November 18th. and found everything lovely, and the goose hanging high. It has been lovely weather since we landed here, it just dawns on one like the opening of spring in Canada. The avenues here are lined with nice green trees the year round, and some of them in bloom all the time. We have had only four cloudy days since we came to the coast,

three of them it rained, the rest has been lovely sunshine with the thermometer standing from 70 to 80 in the shade, most every day. Until this last week or so it has been a little cooler, it always gets cool at night, we generally have a little fire in the evenings and mornings, but scarcely ever any through the day. We sometimes have a little frost, but not enough to hurt much.

We have on our markets now, ripe tomatoes, strawberries, green peas, beans, corn, etc. Fruits are very plentiful and cheap, except apples, they are dear, 2½ to 3 cents per pound; potatoes 90 cents per bag, flour \$2 per cwt., bread 5 cents for a 1½ lb loaf pretty high in comparison to flour, wood and labor being the cause, wood sells from \$8 to \$12 per cord, depends on the kind, coal from \$10 to \$15 per ton, that also depends on the kind, for general housekeeping you do not require very much wood or coal, nearly all the cooking is done here with gasoline, which is worth 20 cents per gallon but not imperial measure. Living here in general is quite a bit higher than in the east, I have already got a small start in bees, I bought five colonies for \$1 each, three of them had top stories on, and chuck full of honey, for which I paid 25 cents extra each, the same man gave me a swarm if I would take it out of the gable of his house, which I did, and got a fine colony of bees and about 100 pounds of honey. There being very few trees that bees can get into they accept any place in which they can find shelter. Some of the beekeepers here have taken as high as five and six swarms out of one church steeple at one time. They tell me there are over 1,000 colonies in the city if Los Angeles in houses and church steeples, etc. Most all the honey produced in this country is extracted and they ship it east in cases of two 60 lb tins, it is mostly put up in gasoline cans, which they can buy at the storages for 5 or 10 cents each, and will hold 60 pounds, I may be able to drop a few lines later after I have a little more experience in this country.

North Ontario, Cal., Dec. 23, 1895.

[From the above we judge that the bees in California are better church goers than the average California.—Ed.]

Successful Wintering.

To winter bees successfully still seems to trouble many bee-keepers, not the novice only, but some whom we might call veterans, as well. Volumes have been written and elaborate are the preparations we are advised to make to ensure the successful wintering of our pets, but, alas! a winter

like that of 1894-5 proves disastrous to many an expert, as well as unexperienced apiarist. The losses in this district last winter were very heavy, but confined mostly to those who winter outdoors.

I am not a veteran, nor do I claim to be an expert, but having had a few years experience with bees, attaining at least an average degree of success, it may not be presumptuous for me to write briefly on this old, but to some, ever interesting subject. Cellar wintering is the plan I adopted and still adhere to, believing it to be the best suited for this climate. I prepare the bees for winter in September or the early part of October, the earlier the better. I examine each colony and leave as nearly as possible twenty pounds of honey, clover or basswood preferred. If there is any honey dew or inferior honey in the hive it is taken out, or put farthest from the centre, where it is not likely to be consumed until spring. I leave a full set of combs, eight or ten whichever the hive holds, and in fact leave it in such condition that it will not be opened again until the honey harvest of the following year. Early in November the bees are placed in the cellar. The first row is set about three or four inches apart upon a plank raised a foot or more above the cemented floor. The hives in the second, third and fourth rows are placed directly upon those of the first with nothing between the rows. No provision is made for ventilating the hives, except that the entrances are left open the full size. The bottom boards, and covers also, when they will permit of being piled up, are always left in place. I know this is contrary to the practice and teaching of some of our best apiarists, but my experience is, that with pure air in the cellar no special ventilation is needed for the hive.

The essential requisites for successful wintering in this part of Ontario are: a good cellar with plenty of pure air and a uniform temperature; an ample supply of good food, and the bees in a normal condition when put in winter quarters.

U. H. BOWEN.

Niagara Falls, Ont., Aug. 30th, 1895.

The Composition of Honey.

Honey from the honey bee consists essentially of a mixture of three sugars in watery solution—cane-sugar, dextrose, and levulose—together with small and variable quantities of non-saccharine constituents, including nitrogenous or proteid matter, aromatic substances, pollen, wax, colouring matter, formic acid, and a small amount of mineral

matter containing phosphates.

These substances are present in all genuine honeys. In addition to the above, honey from different sources often contain other ingredients; for instance, mannite is found in Ethiopian honey, made by a kind of mosquito in hollows without wax.—F. B. Guthrie, in the Australian Agriculturist.

Bees on the Farm.

—York Bee-keepers' Convention.

In an introductory way it might be well if we had the time to glance at the sentimental side of the relation between the home and the honey bee, but I will omit it for more important matters. It is too often the case that this side of important questions are left in the back-ground. It would be folly for me to ask any one here if they would keep house without a few colonies of bees on the lawn, or near the kitchen door. It is not only a fact that thrift, industry and ingenuity, are characteristic traits of the inmates of the hive, but the presence of the houses of our busy little friends near our habitations, impart to us their elements in manhood or womanhood. You never saw a lazy or stupid person succeed with bees. The bee fever may sometimes get into the system of a lazy man, but after its first attack it leaves him in a seven fold state. The successful bee-keeper is an industrious person. Whoever would take a place in the front rank of bee-keepers of to-day, must understand that the road to success lies not through the sunny plains of indolence, but rather over the rugged, hilly country of constant endeavor. Mental and physical activity are as necessary as in any other occupation, and the person who thinks that the bees work for nothing and board themselves, had better buy their honey.

The bee hive is not like the sugar maple to be tapped once a year.

We are in times now that plainly show that industrial conditions are going through a most radical change, and the farmer, his methods, and his farm are going rapidly in the same direction.

The old farm routine will be a thing of the past, if it is not the farmer sees plainly that his ownership will be.

We find, in looking around, that the hive is being placed on a great many farms. The question then comes up, is every person going into the bee business? and the most serious question follows: What are spe-

lists and bee-keepers going to do, if a well regulated home apiary is placed on all of the best conducted farms, and bees become as common as poultry? Here Mr. Walton quoted from official reports showing that the demands for thousands of tons of Canadian honey could not be supplied, as it is reputed to be the purest nectar of flowers that can be produced, and that the little insect, the bee, has a high commercial value amongst the branch of the medical profession and scientists. Again he read, "Let us look beyond ourselves, and see what the bee will bring with it. As it finds its place on nearly every farm. It will make the farm more homelike, and cement home ties: it will throw another gleam of light across the hard, beaten path of drudgery; it will give fireside entertainment; it will place one of the rarest delicacies on the table to take the place of that glucose article that should find no other place than in Willie Watson's soup for his doddies."

SWEETS THAT WASTE.

It is too bad to allow so much of the sweets provided by nature to go to waste for lack of a little care and attention on the part of many farmers who have facilities for carrying on this important branch of agriculture. It is not an adjunct to agriculture, but is as legitimate part of it as is raising poultry, fruit, grain or stock. I am decidedly of the opinion that the sooner the agriculturists recognize this fact, and profit by it, the better it will be for the country. I know that some of our bee-keepers hold that farmers should not keep bees and that bee-keeping is not an industry suited to be carried on in connection with mixed farming, but I am not amongst that number. I verily believe that apiculture can be as successfully carried on on the farm as in any other way. In fact, it is the heart of farming which has been overlooked. It may be claimed that this industry requires special skill and aptitude, and that this cannot be found on the farm; further, that the farmer has not time to give the bees the attention that their successful management requires. I maintain that the proper place for bees is on the farm, for who has a better right to the flora of the fields and orchard, than the farmer; and again, almost every farmer's household is made up of a number of people, and there is generally some one among that number who could be successful with bees, if he or she could make the proper effort to learn how to handle them.

Bees, poultry, fruit and seed might be made a great success on the farm if placed in charge of some member of the family. Frequently it would save the father and

mother many days of anxiety and trouble if these things were placed on the farm and given into the hands of a son or daughter. Too many farmers bring up their children without permitting them to have anything they can call their own, and then when the boys persist in leaving home, or the beautiful daughters do wrong, the parents wonder why it is, and try to console themselves with the remark "I always tried to bring my children up to do right," little thinking what they called doing right had narrowed the lives of their children to a very small compass. Give the boys the bees and the girls the poultry, or visa versa. Let them have something they can call their own, something for which they will feel their entire responsibility and profit, then their doing right will not seem so such a matter of arbitrary restraint. A right to think and act for themselves will develop the latent manhood or womanhood, and they will seek all that pertains to it, because it will be to them the dearest place on earth. A house of happiness and contentment. Yes! it is too bad to let the delicious sweet go to waste when it means so much to the farmer and his family. Nay, more, when the very labor necessary to the saving of it of it may be the means of so sweetening life to some boy or girl that no temptation will have any influence to lead him or her astray. Employment with contentment, and contentment is more apt to exist where there is a feeling of personal ownership. Surely there is someone on every farm who could find sufficient time to care for the bees enough to furnish the family with honey, and have a few extra pounds to sell for pin money or buy something useful and be a source of pleasure to the family circle.

Go back 100 years and note the condition of apiculture. The scheme was unknown. It had scarcely any literature outside of the poetry of Virgil, which though written before the time of our Saviour, was barren of any benefit to bee-keeping. The bee hive was an unsolved riddle. Its mysterious inmates from which the people endeavored to filch a portion of God's bountiful gifts by killing the goose that laid the golden egg, were objects of superstitious reverence. Poetic attributes and superhuman wisdom were ascribed to them. The profoundest ignorance as to their habits and capabilities was common among the people. It is safe to say that more positive and practical knowledge regarding bees has been brought to light in the past 100 years than was ever known before, unless bee-keeping, like some other industries has become a lost art during some of the revolutionary struggles of former times. Since Huber published his

observations on the habits of the honey bee in 1792, and since Langstroth by his invention of the movable comb made the bee hive an open book, practical scientific apiculture has made a giant stride forward. A hundred years ago the honey of commerce was insignificant in amount compared with to-day. Our apiarian appliances are so far ahead of those used by bee-keepers then as the self-binder is better than the old sickle, or the electric car is ahead of going afoot. While in the matter of breeding and the introduction of foreign races of bees, through the daily mails, we are familiar with what would have been a marvel in Huber's time.

Again in its modern phase bee-keeping is a comparatively new industry. To be sure the business is not overly popular, for which state of things two reasons may be assigned. The first, the bee will defend its abode with its sting. To the skilled apiarists this reason has no force. Do not cattle use their horns to defend themselves, yet no one thinks of assigning that as a reason why the production of cattle should not be encouraged. We hear and read of people being injured and killed by horses, yet no one thinks of preventing the keeping and driving of horses. But ignorance sees in the honey bee one whose hand is against every living thing, and in its sting an arrow ever ready and ever laden with fatal poison. The other reason is that the bee is a free commoner. There are no limits or restriction as to its pasture but time and endurance of her wing. She gathers as freely from the clover and the apple trees of the envious neighbor as she does from her owner. They might see in the tons of honey piled in her owner's hives the measure of the depletion of their own mows and bin. The light that reveals the bee getting little but giving much in the fertility of the tree and clover, that shows her owner receiving little or nothing of value to them, but often heaping up their baskets and bins has not yet found their eye. So ignorance again would welcome the absence of the honey bee. Their reasons give rise to a third and that is the small estimation in which the business is held, and therefore the low degree of its importance. Some even look upon the bee-keeper as little better than a freebooter, or as one who would steal if he had the courage and skill. It is hardly worth while to argue to bee-keepers the invalidity of these reasons, but as to the importance of bee-keeping, a few suggestions may not be out of place. In fact I need not dwell on the magnitude of bee-keeping as a business, most intelligent bee-keepers appreciate that in some degree, what other pursuit calls together so many

and such grand conventions as does bee-keeping, or support so many class journals; or is adapted so generally to all localities; or whose product is purely from what would otherwise be waste. It also creates a finished product of food of the highest value, both for sustenance and health, out of what is otherwise without value, and would be an entire loss. Bee-keeping ought surely to stand well with the people in view of the direct product alone as compared with other pursuits. But great as is the gain to the country in the product of bee-keeping no doubt the advantages arising from the ministry of the bees in causing fruitfulness to follow bloom is immensely greater. Any one who gave even a little attention to this matter in the time of fruit bloom, comparing the fruitfulness and perfection of fruit those plants and trees which from location or inclemency of weather have been deprived of their visitations during the time of bloom, will readily see that this fructifying in a great country devoted everywhere to fruit growing must be almost incalculable value. Many striking instances proving the truth of this might be adduced, but that is unnecessary as all readers of apicultural publications are familiar with the subject. What shall we do with these facts clothed as they are with such grave import. In spite of them apiculture has received as yet but meagre recognition at our experimental stations or oftener no recognition at all. It is not to be wondered at them that it is unpopular. Why should not apiculture be placed on an equal footing at our stations with potato growing and the manufacture of cheese, or the production of seed grain, or the growing of vegetables. The experiments carried on in all these things to gain new knowledge are invaluable. But they should not be heard to deny the validity of apiculture claim to equal recognition, when it is of so much importance to horticulture and agriculture.

The Rev. Mr. Brown and Messrs. Ianson, Galbraith, Lindley, Scott, Elliott, Renna, Bell and others joined in asking questions and Mr. Walton afforded them much instruction as to the habits of bees, and his successful method of treating them.

On motion a vote of thanks was tendered Mr. Walton for his excellent paper.

I think your Bee Journal is the best bee paper printed. I packed 31 swarms with oat hulls and forest leaves last fall and took all out in good shape.

D. McFARLANE,
Tilconburg.

Sketch of S. M. Smith, Esq.

The subject of the accompanying cut was born in Western New York, where he learned the trade of cabinet-making. When about 18 years of age he left his native state and came to Canada, where he has made his home ever since.

During this time he has lived in Gananoque, Stratford and Listowel successively. He came to Listowel in 1861, which was then known as Mapleton, a small hamlet in the Northern part of Perth county. Here he followed his trade for awhile, providing the pioneers of the new country with the best in his line.

Mr. Smith then decided to learn watch-making, which he did successfully, and carries on a very nice trade in this line at the present time in his neat and commodious shop on the north side of Main street, Listowel, combined with which is an excellent art gallery and telegraph office, over all of which he presides himself, and in each department of which he is a thoroughly practical man.

In addition to these departmentals ready mentioned, Mr. Smith finds time to devote

which, to him, has been a source of pleasure and profit, and in order that he could more closely observe the movements of these sagacious creatures, he has provided himself with a glass hive, thus affording a fine opportunity of seeing them in the performance of their labors.

Mr. Smith also keeps a few well-bred cattle and horses on his small farm lying in the suburbs of the town.

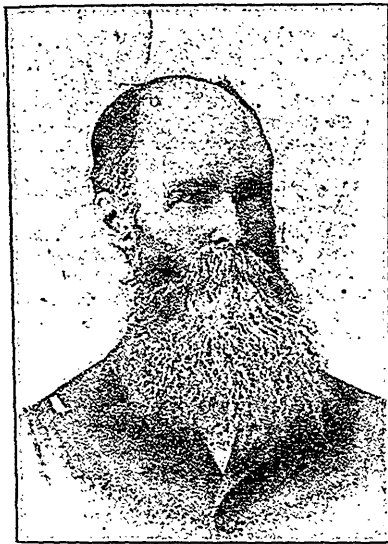
It need not be remarked that Mr. Smith is to all intents and purposes a busy man, because, in addition to all this, he has found time on more than one occasion to discharge the duties pertaining to public life, having several times sat at the Council Board of Listowel, and as a public man, he has earned the character of being an honest, trusty and painstaking officer.

On November 2nd, 1892, Mr. Smith was married to Miss E. Hampson, of Listowel. Their home is happy and hospitable, and one from which not even a tramp goes away hungry.

Bees For Use in War.

It is more than likely that the next great European war will be signalized by some altogether remarkable innovations in the way of carrying military despatches. The carrier pigeons of a quarter of a century back are certain to be superseded, perhaps by storks, perhaps by sparrows. Experiments have already been tried with both these birds, and with a fair degree of success. The stork, however, despite his swiftness of flight and his strength, is too easy a mark for the Lebel bullet, and it is questioned whether the sparrow is sufficiently strong. In this uncertainty an English apiculturist offers bees as messengers of war. He has tested their packet-carrying abilities, and can vouch for their speedy return, upon liberation, to the place whence they came.

While at first sight the turning of when they have proved invaluable as thing of a joke, it is nevertheless regarded seriously throughout England. The man who suggested it took a few bees from his own house to that of a friend four miles away. He waited several days, so that the bees might become familiar with their surroundings. He then let a few of them loose in a room, in which was a plate of honey. The bees settled upon this, and while they were fastened on them by the apiculturist's trained hand.



to horticulture, and at his home on Main street south you will always find the earliest and best in this line.

Nor must I forget to mention the fact that bee-keeping, too, has come in for a fair share of his attention. For the last twelve or fifteen years he has given much time to this interesting industry,

The thinnest of all thread bound the little packets, which were of the flimsiest of paper, to the bees' backs. Great care was taken to leave the head and wings absolutely free. The windows were then opened and the bees thrown out into the air. With the certainty of carrier pigeons they started off at once for home, arriving there in an incredibly short time, with the packets secure upon their backs.

Naturally this project would only be possible in summer and in warm climates, for the reason that the bees would be unable to endure severe weather. Bees would have the advantage over pigeons or birds because of their invisibility. Nor would there be any difficulty in going through the enemy's lines. The apiculturist says that they could travel fifty miles quite as easily as they could four.

Though this is the first time that bees have been suggested as army messengers, there have been many cases when they have proved invaluable as defending forces. At one time, several centuries ago, the city of Tamly, in the Spanish territory of Xiatine, was besieged by the Portuguese. The invaders were winning bastion after bastion, when the beleaguered citizens were struck with a brilliant project. They brought all the hives that they could find in the place and set them upon the city wall, building great fires underneath them. The smoke and the flames so incensed the bees that they rushed out in swarms and flew down upon the enemy, making a panic instant and causing them to flee.

Very much the same plan was tried, and with equal success, by a statesman of Thuringia, whose house was surrounded one day by a furious mob. He marched his servants out with all his beehives and threw them one by one in the midst of the crowd. A cannon ball would not have been half so effective as were these strange and unexpected weapons. It took but a moment to clear the space around the statesman's dwelling.—N. Y. World.

Editor Canadian Bee Journal, Brantford, Ont:

DEAR SIR,—I beg to acknowledge through the C. B. J. the arrival of the Knoll Washer, which was awarded to me as a prize for sending in the largest list of new members to the O. B. A., for which accept my thanks. If my judgment is of any use, I pronounce it a likely looking machine, although we have not tried it yet. Bee-keeping has only been a partial success this season in this locality, imputable to late frosts and severe drought, which is still continuing. At this date bees are very

attentive to thistle, and some surplus may be stored from this source. But the crop at best will be very light. Bee-keepers who have been desiring a non-swarmling race of bees, could have had their desires gratified if they had been living in my locality this season. I only had one swarm from twenty-five colonies and that, no doubt, will have to be fed up for winter. Therefore, I am thankful that no more swarmed, notwithstanding the slow and moderate yield. I have extracted from one colony 79 pounds, and expect at least thirty more, but this is my best, and I trust bee-keepers in other localities may have been favored with large yields.

Yours truly,
D. W. HEISE.

Wintering Bees.

To the Editor of the Canadian Bee Journal.

On page 818 of A. B. J., I notice an article by Geo Sage, under the heading of Wintering Bees in Box Hives. In the first paragraph he says, "I believe if a colony has a good hive and all the stores the bees want and are kept dry, they will come out all right in the spring. But I do believe that bees will withstand more severe weather in a box hive, than they will in a moveable frame hive. Now, while I have never kept bees in box hives and have never seen but one or two colonies so kept since the time when I had to stand on a sheet of paper to peep into a quart measure, therefore I speak theoretically, when I say that I fully concur in Mr. Sage's belief as regards bees wintering better in box hives than they will in moveable frames without some kind of protection. Because a swarm of bees dumped into a box, will build their comb to suit themselves, and according to their own instincts. And who will say that the peculiar shape in which they will build comb, when left entirely to themselves is not essential to their welfare during the winter season. I have sometimes thought when noticing the singular formation, and irregularity in which comb are sometimes built in trees, whether this was not done for the purpose of securing a circulation of air, peculiar to their own welfare, which we mortals knew nothing about. That I believe bees will winter better in box hives, because the boxes are generally from 12 to 14 inches square, and 16 or 18 inches high. The bees are very seldom disturbed, or molested in their home which they have made to their own liking, the honey is principally at the top and above the cluster, and therefore as Mr. Sage says, if they have

plenty of it I believe they will come out all right in the spring. But, is this the all important problem which modern bee-keepers are trying to solve, I say no. What the bee-keepers of this nineteenth century are trying to solve is the question of how can bees kept in moveable frame hives be wintered successfully without resorting to cellaring, clamping or double walled stuffed hives. All which Mr. Sage considers unnecessary with box hives. Never mind if they will winter better in box hives—we don't want them there—we cannot manage them successfully, and therefore, want them in moveable frame hives. A colony of bees in a box hive may fairly be compared to a fruit tree, which could not be pruned, or whose fruit could not be secured without cutting down and killing the tree. Well then if we do not want them in box hives, because they are unprofitable aside from the question of wintering, and the most of us, do not keep bees merely for the sake of seeing them crawl out of a box hive, and show life in the spring. But, we keep them for the pleasure and money there is attached to the pursuit, and we want them in moveable frame hives, because we want to remove an inferior queen and infuse new blood. To see how much brood is in a hive at a certain date, how many queen cells, to remove queen cell, and a hundred and one other reasons and perhaps last, but not least, we want to take a large crop of surplus honey, which I do not think can be successfully taken from box hives, unless the sulphur is resorted to, and I do not know if that even could be called success. Now I am sure every enlightened bee-keeper of the age, will agree with me when I say, that the moveable frame hive, is as far ahead of the box hive as the modern grain thresher and separator, is superior to the two sticks of misery. Then the great question which concerns me, and bee-keepers generally, by which we can safely bring our bees through the winter, and have them in good condition without the expensive and laborious methods now in practice and which box hive foggies deem unnecessary. Who will be the first to come forward with some startling discovery in this direction, that he may receive a crown of roses.

D. W. HEISE.

Bethesda, Jan. 8th, 1896.

JERSEY STOCK

I have a fine registered Jersey Cow for sale. Her can tested 17 lbs. of butter a week when 14 years old. Also some choice heifers and calves. I will sell cheap, or give on shares a bull calf from my choice cow. If on shares, the cost of keep to be deducted from my share of the returns the following year. If you want anything in Jerseys, come and see, or write me, G. A. DEADMAN, Drugist, et c., Brussels, Ont.

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To any one not now a subscriber to the Bee-Keepers' Review, who sends \$1.00 for it for 1896, and says that he wants them, I will send 12 back numbers, free. This is done to induce those who are strangers to the Review to become acquainted with its merits. To hold old subscribers is not difficult; and, to get the Review into the hands of new men, and they, too, may, in time, become old subscribers, is worth an extra effort, hence this offer. The back numbers of the Review, most of them, have a value peculiarly their own; they are "special topic" numbers. That is, each number is really a little book in which may be found the views of the best bee-keepers upon some important apiarian subject. They are as valuable now as when published. Of some of these issues there are several hundred, of others not more than a dozen, and in filling these orders I must be allowed to make the selection, but no two copies will be alike. For 25c. extra, the 50c. book, Advanced Bee-Culture, will be included. The Review for 1896, 12 back numbers, and the book, all for only \$1.25.

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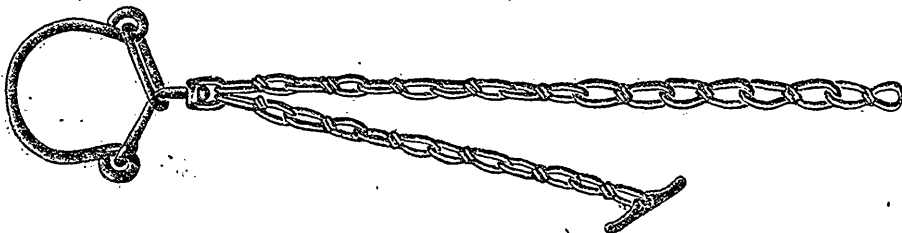
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BRANTFORD, CANADA.

R. F. HOLTERMANN, EDITOR

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Extractor to hand; it is very satisfactory. J. D. Evans, Idlington, Ont., June 5th, 1895.

I am delighted with the sections. They are very much superior to those I have been getting. I am pleased, also with the foundation. Rev. Thomas J. Spratt, Wolfe Island, June 5th, 1895.

The 97 lbs. of extra thin foundation for sections is something nice. Josiah Reaman, Cardville, June 5th, 1895.

I received my order in good condition and am well satisfied with everything. George Marcotte, St. Quillaine, June 3, 1895.

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TO THE BEE-KEEPERS OF CANADA.

The Ontario Bee-Keepers' Association desire to have as large a membership as possible of those interested in apiculture, and, as the bonus to members, is worth more than their annual membership fee it seems but reasonable that all interested should become members, as the object of the Association is to benefit the industry and those engaged in it as well as being a benefit to the country at large.

THE CANADIAN BEE JOURNAL, of which the annual subscription fee is \$1.00, will be given to members of 1896. The report of the annual meeting is also given, which is a full report of all interesting discussions as well as giving financial statements, etc.

There is no doubt but what the Association is doing a good work in many ways, such as having a Foul Brood Inspector going through the apiaries in the Province, curing and clearing the country of that dreaded disease where found, and in getting laws passed by the government to protect the industry, even as to prevent the spraying of fruit trees with poisons which has been very injurious and caused great loss to those having bees poisoned where spraying was done at the wrong time.

The Association can fairly claim the support of all interested in bee culture and we trust that all seeing this request will respond by remitting the annual membership fee of one dollar, (\$1.00) by registered letter or Post Office Order.

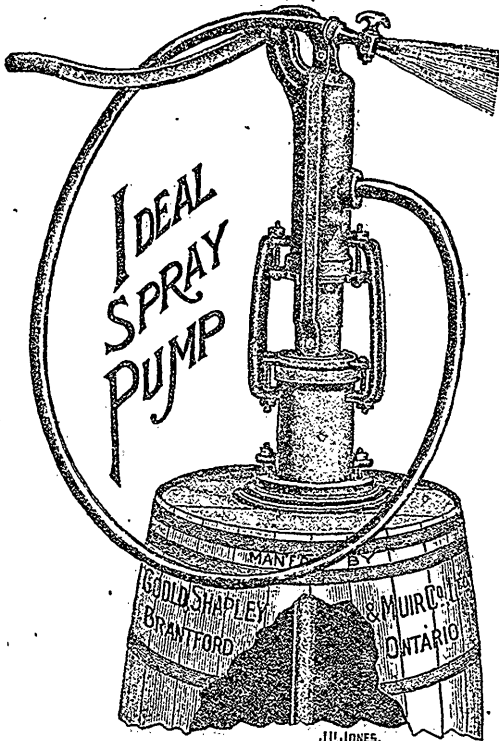
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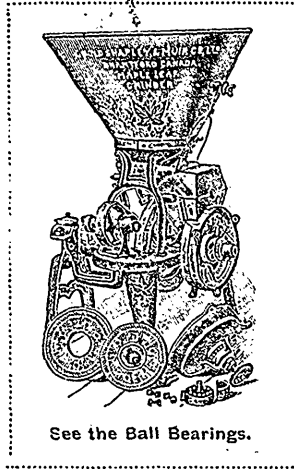
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Oct. 18th, 1895, Mr. George Law, of Drumbo, writes: The Maple Leaf Grinder is a good one: I like it splendid. It is as good, and I like it better than the Joliette Grinder, and I have fully tried both.

Oct. 30th he says: The chopper is running all right, and does splendid work.

Lynden, Nov. 12th, 1895.

Messrs. Gould, Shapley & Muir Co., Ltd., Brantford, Ont.

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P.S.—Mr. Whittington runs a steam threshing outfit, and purchased the grinder to use in connection with it during the winter months.

Guelph, Ont. Oct. 30th, 1895.

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