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NEW SERIES.
Vol. I, No. 7, 1894. December.

 The
Practical

Bee-Keeper

CONTENTS

	Page.
O. B. K. A. MEETING.....	3
TO OUR READERS	Editor. 3
BEEKEEPING IN ONTARIO	Allen Bringle. 4-5
LESSONS OF THE SEASON	A. Boomer. 6-7
BEE CULTURE IN CANADA.....	R. McKnight. 8-9-10
NOTES FROM LINDEN APIARY	C. D. Duvall. 11
THE AGE OF MACHINERY.....	Editor. 12
FOR THE PRACTICAL	Peter Bussey. 12
TIMELY TOPICS.....	A. E. Hoshal. 13
LEEDS AND GRENVILLE	14
FRESCOTT BEE-KEEPERS	14

PUBLISHED MONTHLY BY
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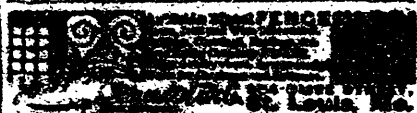
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NEW SERIES
VOL. 1.

TILBURY CENTRE, ONT., DECEMBER, 1894.

No. 7.

O. B.-K. A.

The annual meeting of Ontario Bee-keepers' Association will be held in the city of Stratford on the 22nd, 23rd., and 24th of January 1895. All bee-keepers are cordially invited to attend.

W. COUSE,
Secretary.

To Our Readers.

Owing to the many changes that have been made in the manufactory the whole institution has been in a demoralized condition, and the editor has taken advantage of this state of affairs to take a holiday. Now that the factory has been put in apple-pie order it behooves the journal to go and do likewise. As the stock turned out from the factory is immeasurably superior to last year so it will be our aim to correspondingly improve the journal.

We are pleased to note that our subscribers have in every instance been completely satisfied. Starting out modestly to furnish our subscribers with four numbers per annum we have this year gotten out nine numbers. We point with pride to our list of able correspondents and take this opportunity to thank them and all our friends for the tangible assistance rendered. Our aim for 1895 will be to give our readers the latest best, and most practical informa-

tion of value to bee-keepers in their cherished occupation.

The journal will be published monthly beginning with the January number and the price will remain the same—50 cents per annum in advance.

To our subscribers we would request that they renew at once and at the same time endeavor to send with their renewal the subscriptions for one or more new subscribers.

The premium queen will be continued that is we will furnish the journal and one 5-Banded Italian Queen puremated for \$1. per annum.

Arrangements are being made by which other premiums will be offered.

Don't wait however, but renew at once and by remitting the difference at any future time one or more of our valuable premiums may be obtained.

{ Selby Lennox Co., Ont.,
Nov. 26th, 1894.

C. A. Ouliette, Esq.

Tilbury Centre.

Dear Sir:—

Yours received, also sample of Sections. These sections are I think as fine, if not the finest I have ever seen being beautiful in color, smooth and finished in a workmanship manner, and being made of very fine second growth basswood they appear tough and strong.

Yours truly,
ALLEN PRINGLE.

Bee-Keeping in Ontario.

ITS PROSPECTS AND POSSIBILITIES,

ALLEN PRINGLE.

The following paper was read at the recent meeting of Bee-keepers in Brockville:

I notice the subject you have me down for is a large one, viz.: "Bee-keeping in Ontario; Its Prospects, Possibilities, etc." Without time at present for hunting figures or even for reflection I shall merely give you such thoughts on the subject as may occur to me while I write. As to the present status of bee-keeping in Ontario, the achievements of the province at the great Columbian exposition at Chicago last year tell their own tale in a manner so creditable as to inspire the bee-keepers of this province with honest and laudable pride. I had the privilege and honor of representing them on that occasion and know whereof I affirm, when I say that no honey from any quarter of the globe surpassed in excellence the Ontario honey, while very little equalled it. Of all the states and countries exhibiting honey there, Ontario came out away ahead, taking twice as many awards as the best of them, and from five to ten times as many as most of them. While I expected much from my native province, this greatly surpassed my expectations. Ontario may be safely written down as a land "flowing with milk and honey." Our cheese as well as our honey was the best at the World's Fair. Ontario has climate as well as the flora for producing the best. The Linden, the clover, the thistle, the raspberry, the maple, the willow, the sumach, the buckwheat, the golden rod and numerous other plants yield abundantly.

Judging from the area within my own personal knowledge, the output of honey in Ontario must have quadrupled with-

in the past decade, and the consumption has kept corresponding pace, as but little is yet exported. The people generally are beginning to use it as an article of food; and what was in fact a luxury, and is so in reality, is fast becoming a staple on our tables. This is as it should be, as pure honey is not only wholesome and palatable but more easily digested than most other sweets. Its medicinal qualities also in various affections of throat, lungs and bowels, go far in warranting us to follow the poet's advice to "throw physic to the dogs." No argument, however, we can make use of—whether physiological or economic—will be half as persuasive or potent to induce the masses to eat honey, as their own palates, because appetite instead of reason is yet unfortunately king among men and women with the exception of the precious few. The honey is "good to take" and superbly pleasant to the palate, and that is enough for them whenever they can get it! And the price being comparatively low and quite within their reach, the consumption is bound to still further increase, provided we continue in Canada to furnish a good and pure article. This latter consideration is a very important one in these days of food adulteration commercial frauds. Our honey must be kept pure at any cost, and any and every species of adulteration (or rather attempt at adulteration) frowned down and stamped out. At Chicago I was greatly astonished to find the suspicious of adulteration of honey—especially extracted honey—so prevalent and wide spread among consumers. And this suspicion undoubtedly not altogether without without substantial foundation, though it must be stated in justice to the producers, to the bee-keepers of the U. S., that the onus of adulteration rests with the dealers rather than the producers. But the fact of adulteration there, and the want of confidence is there; and the fact, together with superior quality, was the reason why I was able to sell our Ontario exhibit of honey at Chicago, after the exposition, at prices considerably above those commanded by the

home product. The character and quality of our honey is so good that its reputation is high both home and abroad. Let us preserve and maintain this good name by taking and handling our honey in a proper manner and by watching and putting down the first sign of adulteration.

The proper taking and doubling of honey means, in the first place, allowing it to ripen in the hives before removing it, or, when this is impracticable as it occasionally is, thoroughly ripening it after it is removed, and in the second place, never putting it on the market

UNRIPE, UNTIDY OR UNCLEAN.

Bee-keepers as a rule are intelligent, moral, neat and clean, but I have seen in my time a few slovenly ones who were a disgrace to the whole fraternity. This stricture is mostly applicable to those old-fashioned one-horse covens who still use the box hive in the summer, and fire and brimstone in the fall, and cut out honey, bee-bread, young bees, dead bees and all, and take this apiarian mush to market in old tin pails and pans and take what price they can get for it; or mash the whole up, strain it and market it in that shape. This is bee-keeping with a vengeance, and, of course, Ontario, like every other country, has a few such bee-keepers. But they are gradually diminishing, and must in time disappear along with other antique excrescences. But there is another side to this picture. Ontario has many first-class apiarists, and a few equal to any anywhere in the world, and these are constantly increasing in numbers.

As to the prospects and possibilities of bee-culture in this province, the prospects are that bee-keepers will continue to multiply and the industry continue to grow, until the ground in the habitable parts is pretty well occupied. This growth will probably not be so much in the direction of specialism as

bee-keeping in conjunction with farming, gardening, fruit raising, etc. Bee-keeping as an exclusive business is hardly safe except in the hands of a master who is favorably situated as to locality for forage. The business has its ups and downs, and its failures. One of these overtook the bee-industry the past season as you no doubt know. In Ontario, as a whole, there is perhaps not more than a third of an average crop, while in many of the states of the union the returns are much less. From a letter now before me from a leading bee-keeper in Nova Scotia, he says, "clover yielded no honey here this season."

The clover seems to have been pretty badly spring and winter killed the past season over a wide area on this continent, and this supplemented by the severe and wide-spread drouth, left the crop of light honey very short. The drouth extended so far into the fall as to also seriously affect the fall flow of honey, as buckwheat, which is the fall staple in many parts, only yielded moderately.

The question as to whether it would pay the bee-keeper who has land at his disposal to sow or plant specially for honey, is one much discussed and seriously considered in localities where failure of the honey crop is frequent. There seems to have been but little experimentation to settle the matter practically, and hence the divergence of opinion on the subject. My own opinion, which is founded on experience so far at least as two of the honey plants are concerned, is that it pays the bee-keeper who can do so, to sow and plant three honey producers, viz: alsike clover buckwheat and basswood, or linden. I have been sowing alsike and buckwheat for many years for honey, and both have paid well. These two plants hardly ever fail to yield nectar, while the white clover, which as you know grows spontaneously, often fails. Then we have the double crop from them—hay and

honey from one and grain and honey from the other. While the red clover often fails to produce a crop of seed, the alsike scarcely ever so fails, owing chiefly to the fact that the latter seeds in the first crop, while the red seeds in the second. Moreover the alsike seed always commands a higher price in the market than the red. Of course you cannot have good hay and seed both in the same season from alsike, but sometime you can have seed and a straw quality of feed simultaneously from it, in which case there is a treble crop, viz: honey, seed, feed.

As to the linden tree, I am greatly in favor of planting it for honey, and have practised my preaching by planting some 700 to 800. They are not blooming yet, but I expect to see them bloom. My advice then to all bee-keepers in localities where the tree is not plentiful in the woodland, is to plant basswood. If you do not feel like affording field land for the purpose, plant along the fences and highways—but plant somewhere. I planted 400 in good field land. The linden is a beautiful shade tree, is a rapid grower and hardy; and if we cannot make axe handles and whiffletrees out of the wood, we can use it profitably in cabinet and other work. One of the ways to enhance the prospects and possibilities of bee-culture in Ontario is for every bee-keeper who can, to plant basswood and he will not only be serving himself, but posterity, as one chief cause of the severe drouths which Canada with other countries is beginning to experience, is the rapid disappearance of trees from our portion of the earth's surface.

Wishing every success to the bee-keepers of Leeds and Grenville and that your present convention may be a pleasant and profitable one, I am

Yours Fraternaly,

ALLEN PRINGLE.

Seily, Ont.

Lessons of the Season,

A. BOOMER.

CONTINUED.

In my former article I promised something concerning harmony hives one of which you were good enough to send me. Soon after receiving it, I ran a good swarm into one division of it, and I then believed it to be important that the other division should be occupied at once, but owing to unfavorable weather I was not able to fill it for several days, and when I did so, I had the section crate on and the bees of the first swarm were up in the sections and they at once came over and swooped down upon the new occupants killing a large part of them, the remainder on losing their Queen either determining to make peace and unite with the first colony or returning to the parent colony. However as I had now an overplus of swarms I determined to try again and ran in two good swarms, then the fight began in earnest, but the new comers being much the stronger force succeeded after considerable slaughter in holding the fort and in a day or two got right down to work, but it being now late in the season they did not enter the sections. The first colony filled their half of the case quite nicely. Upon examining them in September I found that neither of them had sufficient stores for the winter and as I was anxious to thoroughly test this modern idea in stimulating bees to work, I put on feeders and fed them both liberally so as to leave no doubt as to their wintering safely. It now remains to be seen whether this plan will prove a success or not and should it do so, I may, if spared myself, have something to say. &c.

"Separators for Sections." I had

heretofore produced my sections without separators, and got on fairly well, but was induced this year to try the separators, and using the Richardson Hive I had to use tin, wood taking too much room, I used them in about half of my cases, and I am not fully convinced of their utility. I have fuller and better selling sections without them, and do not think that I will bother with them another season; in most of the cases where they were used the bees built brace combs to the tin, whilst without them I had little or no brace combs.

I am now pretty well satisfied that, if full sheets of good foundation be put in, and care taken to have them attached in the centre, and the hives set level and a good strong first swarm, there will be nice sections without the trouble of separators.

"When should the last case of sections be put on?" For some years here we have had no flow of Honey after the Basswood, and I have at the end of every season had so many half and quarter filled sections that I have had to decide on a time in the season when the putting on of sections must stop, if we are to get full sections only. Therefore in this section I would say that as soon as the Basswood flow is on, stop, and if they should get these filled before the flow was over, raise them up, and put a set of combs under, and if these be not at hand, take out the outside combs in the lower story or brood part and put in frames of foundation. This will give the Bees all the room they will likely want for the remainder of the season.

Swarming device—I have this season been using one of "Manums" and have found it very useful, would have lost one or more swarms if I had not had it. Bee Escapes.—I have been using a few of those of the Porter make which I presume are as good as any, for some seasons past, and where only a few

colonies are kept, they may come useful I shall not bother with them any more. If the Bees are cross, I just put on a good pair of gloves and veil and go right ahead.

"Preparing the combs for keeping well over winter."

When extracting for the last time it has been my custom to put two or three cases of combs over one hive to have them cleaned out and afterwards stack them up in the cellar where they keep well and were in good shape for the next seasons use. This season I stacked up some four sets of combs upon one colony and closed the entrance to one bee space. The Bees in that hive seemed to get so demoralized, with the large space about them and the amount of honey at their disposal that they neglected to guard the entrance and in a very short time the other bees of the yard found their opportunity and not only assisted to clean out the combs but cleaned out the hive below and killed about all the Bees. Next year I shall stack my combs up at some little distance and avoid a recurrence of such an event.

These then are some of the "lessons of the season" with me, and may be useful to some novices in the business like myself. Practical and experienced Bee-keepers will of course only smile at my simplicity in some directions at least.

I have increased my stock from some sixty to one hundred colonies, and am now preparing these for winter. Formerly I have not been so particular as to weigh my hive before packing them for the winter, this season I am weighing them and have reserved sufficient full combs to level them up to say 55lb each, which will leave about 30lb of honey exclusive of hive, combs and Bees, which should be amply sufficient to carry them through the winter in good shape.

Bee Culture in Canada.

R. MCKNIGHT, OWEN SOUND.

[A PAPER PREPARED FOR THE MEETING OF THE N. A. B. K. A. AT ST. JOSEPH, MO., OCT. 10, 11, 12.]

MR. PRESIDENT, LADIES AND GENTLEMEN:—

Nearly forty years ago, and while this province was yet but thinly settled. I knew an expert bee-hunter bring home tubs-full of honey from the pine forest. Where the bees that collected it originally came from I knew not, as none were kept within many miles of the place.

The conditions under which the bees lived however were favourable. A hollow pine tree with its warm padding of dry decayed wood was a congenial home for them. In no modern hive do we find conditions so favourable to the well being of a colony, as these hollow giants of the forest furnished. Surrounded by a shell a handsbreadth in thickness lined with the best kind of assortment, a solid trunk above, ample space below, with a "puk-hole" for an entrance, they gave comfort, accomodation and protection, surpassing that of any modern contrivance of the hive maker.

But the pine forests have largely disappeared, and with them have disappeared the well-stocked bee-trees.

It was to those old time bee-trees, our earlier bee-keepers were indebted for their stocked "gums"—the progeny of which, modified, and improved by the admixture of new blood, constitute the present working force of our bee-keepers.

The box hive succeeded the bee-gum, and was for years the best known method of housing bees.

When the movable frame first came into use in Canada I am unable to say; nor do I know who introduced it. Both it and the extractor were known of, and

their advantages understood some years before either came into general use. D. A. Jones was amongst the first to extensively employ them, and was unquestionably the first to demonstrate the honey producing capabilities of this province. In 1875 he placed on exhibition, at the Toronto Industrial Fair: ten tons of honey—the product of his own apiary that season.

Honey was not on the Industrial's prize-list that year; but its managers gave Mr. Jones a massive gold medal for his exhibit. Mr. Jones' exhibit attracted so much attention that the Toronto Globe sent a special reporter to Beeton to write up his apiary as well as his methods of managing it. The fame of Mr. Jones' immense exhibit at the Toronto show, and the Globe's report of his management, led up to a bee-keeper's convention during fair time next year.

I have attended a good many bee-keeper's meetings from then till now, but in point of numbers and manifest interest in all that was said and done that convention was the greatest of them all. It met in the City Hall, Toronto, and that commodious room was packed from the dais to the door during the three days the convention was in session. The writer had the honor of presiding, at that convention, but as might be expected Mr. Jones was the chief speaker. Indeed those present came to sit at the feet of D. A. and drink in apianian knowledge from the lips of the Gemiel of Beeton; who knew so well how to paint the beauties of bee-keeping in pleasing and attractive colours. That convention gave an impetus to bee-keeping all over the province—at its close the Ontario bee-keepers Association was organized.

Fourteen years have come and gone since, and it is not too much to say, that in the interval Canadian Bee-keepers have made a place for themselves in the

THE PRACTICAL BEE-KEEPER.

apicultural world of which they have no reason to be ashamed.

I shall now briefly advert to the agencies employed in bringing about this result, some of which are the creation of our own people, and serves to exemplify their character. In intelligent application of detail, combined with a thorough knowledge of the principles involved in their work they have no superiors. To these characteristics may be attributed the high level they occupy in the apicultural world. Amongst them may be found as large a proportion of men, skilled in all that pertains to their calling as any country can produce. This manifests itself in the output of their apiaries. But they have enterprise as well as intelligence. The substantial aid they have secured for the industry proves this. Organized effort is what has brought them this aid. In other words the Ontario Bee-keepers Association is the agency through which it has been obtained.

I know I leave myself open to the charge of 'boasting (in some quarters) when I say, that in my judgment our association is the best and solidest organization of its kind on this continent. It has features peculiar to itself. Through its instrumentality, there has been secured for those engaged in the honey industry, a greater share of public recognition, and more substantial aid than any other like association with which I am acquainted has succeeded in securing. If this be true the charge of boasting has no foundation.

During the first five years of the association's existence it had no material outside assistance, but was steadily working with that end in view. In 1893 it became incorporated by act of parliament with an annual grant from the Public Treasury of \$500 and the free publication and distribution of its annual reports. Later on it secured the appointment of a Foul-Brood Inspector

at a cost to the country of another \$500 yearly (the Inspector is a Provincial officer under the guidance and control of the Association) add to these achievements the procuring of at least \$5,000 of public money granted and expended in connection with the London and Chicago honey shows, and it presents a record of activity and success that will challenge comparison with any like association in the world.

SOME FEATURES OF THE ASSOCIATION STABILITY.

It has a board of thirteen directors, not accidentally chosen but each residing in, and representing one of the 13 districts into which the Province is divided by act of parliament, the directors are paid their expenses in attending meetings and they together with the Secretary and Treasurer (both of which are paid a reasonable salary), constitute a permanent executive body, around which there is little difficulty in gathering the desired number of members. The act of incorporation requires 50 bonafide members on the roll to secure the government grant. Our constitution provides for these without much effort on the part of the directorate. Under its provisions, local district associations may affiliate with the parent society; and severally participate in the grant of \$200, which is annually appropriated for distribution amongst them. One of the conditions of affiliation is that each local association must have on its roll the names of at least five beekeepers who are members of the O. B. A. Last year we had 18 such district Associations in affiliation, in which there was of necessity 65 men who were members of the parent society. Apart from other sources we had in these affiliated societies more than the required number of members to ensure the government grant.

The association has not contented it-

self with securing incorporation and its attendant money grants, but has sought to attract attention to the excellence of our honey by large and attractive public displays of it. Its first great effort in this direction was made in 1886 when at the Colonial and Indian Exhibition. The association's delegates set up the the largest display of honey ever yet made. It exceeded in quantity, the combined display at the Chicago Fair; and attracted the attention of the world to the honey producing capabilities of Canada. Twenty seven members supplied the whole display; and gave the delegates carte blanche to do with it as they deemed best.

The delegates took advantage of the license thus accorded them, and gratuitously distributed four tons of honey by way of advertisement. All kinds and classes of people, from Queen Victoria, to the children of the charity schools of London, participated in the gift. Notwithstanding this and the expenditure of some \$2000 for labor and material in connection with its sale, the contributors received back 10c. a pound for extracted; and an average of 16½c. for their comb honey on the total amount of their contributions, and were also paid the cost of the glasses and tins in which they put it up.

Advantage is also taken of the opportunity the Toronto Industrial Exhibition offers to keep the product of the apiary before the people of the Province. The Industrial is largely a Toronto enterprise, but has much of a provincial character. Its directorate embraces delegates from all the incorporated industries in Ontario. Our Association is entitled to two members on its Board through whose instrumentality very liberal prizes are offered for honey and bee-keepers, supplies. The prize list makes it possible for several exhibitors to carry off \$100 in cash, and one or more medals beside. The exhibitor is

also accorded the privilege of disposing of his honey at retail; provided he does not impair the attractiveness of his exhibit. The show lasts ten days; and is largely attended by people from all parts of the Dominion; thus offering inducements to exhibitors rarely found outside its grounds advantage is taken of this annual opportunity by a number of our best bee-keepers to make an exhibition of honey that is alike a credit to themselves and the industry they represent. These exhibitions have had no little effect in securing a home market for all the honey produced in the Country, at prices that cannot be exceeded in foreign markets.

Thus far I have dealt mainly with men and methods. The scope of my paper demands a word or two on the quality of Canadian honey, and the sources from which it is procured. In briefly advertising to this part of my subject; I know I am treading on dangerous ground, considering the company I am in at present, as my expressed opinion has been warmly resented, by some of your good people. But that does not disprove the fact, that Ontario honey in the aggregate, cannot be surpassed; in point of quality, by the product of any other state or country. If our barley be better and brighter. If our apples possess better keeping qualities, and a finer flavour, than like products of any state or county in America. Is there anything surprising in the superior excellence of our honey? The character of our soil climatic condition, explains the desirable qualities in our barley and apples; and these have something to do in determining the quality of honey. It is a recognized fact that the character of a plant may be greatly modified, by the soil from which it grows, by moisture, temperature and light. Such modifications produce a corresponding change in the economic products of plants of like species. But the main cause of

the excellence of our honey, is found in the fact, that all or nearly all our surplus is secreted by plants and trees, universally recognized as producers of high grade honey. Clover, basswood and Canada thistles; are the sources from which our surplus honey comes. The result is, it is all bright and good, this is true of the entire product of the Province; except a limited portion in the Eastern part of it, where buckwheat is pretty extensively grown. At all the fairs I have attended in Canada, I have not seen 100 pounds of dark honey exhibited; and I have seen at least 100 tons of Canadian honey on exhibition.

I shall not attempt to give even an outline of the style of hives used in Canada, or the system of manipulation prosecuted: as they are both practically identical with your own. Besides I have spun out this paper, to a length far exceeding my original intention and probably your patience as well.

In closing, let me extend to you Sir, and to the ladies and gentlemen present at St Joseph's, a fraternal greeting; assuring you of my earnest wish, that your national meeting in the far West may afford pleasant reminiscence to those present; as I have no doubt it will be profitable to the brotherhood of beekeepers, everywhere.

Honey for lung trouble.—In an exchange we find the following about the use of honey in the treatment of lung affections, etc.:

Honey-candy is an excellent remedy for coughs, colds, whooping-cough, etc. Fill a bellmetal kettle with hoarhound leaves and soft water, letting it boil until the liquor becomes strong—strain through a muslin cloth, adding as much honey as desired—then cook it in the same kettle until the water evaporates, when the candy may be poured into shallow vessels and remain until needed or pulled like molasses candy until white.

Notes from Linden Apiary.

Those, like myself, who do not attend the Convention at St. Joseph, can keep posted by reading the report as they appear in the journals; it will not be so pleasant but it will not cost as much. There will be some new features brought forward by what I can understand.

The fall of the year is a good time to re-queen your colonies if you have any that have old queens and it is better if it is done the last of August or the first of September, then you will have a good stock of young bees to go through the winter and a young prolific queen that will commence laying early in the spring.

Crooked and drone combs are mostly built by those swarms that have too much room in the brood-chamber for the size of the swarm; hive your swarms in small or contracted brood chambers to secure evenly built worker combs, this is W. Z. Hutchinson's plan.

Mr. H. Alley suggests cutting out drone comb at the time the bees are killing off their drones, and the bees will replace it with worker comb.

The new method of feeding sugar by percolated syrup is very simple and handy when you have the feeders fixed for feeding that way, and it is said there is no danger of the syrup granulating, but I have been too busy this year to test it.

Excessive swarming is caused partly by having too much drone comb in the hive and queens that are fond of filling drone comb with eggs, the hive that has few or no drones is not inclined to swarm.

The virgin queen business will not increase as rapidly as some thought it would; it has too many draw backs. A virgin queen cannot be shipped as far as a laying queen, and these queens are much harder to introduce taking it all together, the laying queens are cheaper.

C. D. DUVAL,
Spencerville, Md.

The Age of Machinery.

That this is the age of machinery, was strongly impressed upon the editor's mind by a recent visit to the Ouellette Manufactory in order to see the working of the new section machines which Mr. Ouellette has recently set up. The bass-wood bolt is first ripped into slabs by a huge circular saw, next passed through a large planer to a cut off saw, from which they are sent on to the new dove-tailer and slotter. This machine is a wonder. The block placed upon an endless chain is first brought in contact with two saws, one on either side, which make the ends perfectly square and the block the exact length for sections. Passing on it meets the dove-tail saws which also are placed on either side upon upright shafts, dove-tailing both ends at once with a precision that ensures an exact fit. Next the block passes under the slotting-knives after which it is ready to be sawn into sections. This machine it will be noticed does the work of three machines and what is more important secures that accuracy in measurements and dove-tailing so essential to the bee-keeper. The block is next run through a gang-saw, which slices the whole block up into sections, all of an equal thickness. Next the sections are passed through the sanding machine, which sands them on both sides and gives them a polish as smooth as glass, justifying the name given by Mr. Ouellette "The Glass-finish Sections." The sections are next run through the groove, and assorted into packages of 500 in a crate.

A large blower has been erected which is connected by piping with each machine, carrying all dust and shavings to a room adjoining the engine room.

The whole factory has been remodelled as far as its interior is concerned, and Mr. Ouellette is now in a position to fill

orders better than ever before.

Large shipments are now being got ready for England and France.

Samples will be sent to any bee-keeper in the world on receipt of a postal card requesting the same.

For the Practical.

MR. EDITOR,

If you will allow me a small space in your valuable journal, I would like to tell the bee-keepers outside Essex what we can do in the shape of exhibiting honey at the county exhibitions. Essex held its union fair on October, 2nd, 3rd, and 4th and it was a decided success there being 700 more entries than at any previous fair held in Essex county. The honey exhibit was something grand and drew the largest crowd of any one exhibit on the ground. The following is clipped from the Amherst-bur Echo:—"Peter Bussey, of Cottam, has usually a complete display of honey in all shapes and bee-keepers' supplies of every kind that his long experience has enabled him to select as most useful in his line. The dry season has made honey scarce and the price is higher."

"W. H. Maynard, of Edgar's mills, has a very nice display, extracted and honey in comb. Also bee hives and other apiary supplies."

"George Morris, of Stoney Point, examined our stock, he being an expert in bees and honey pronounced the display something extra."

Wm. McEvory of Woodburn, Ontario's foul brood inspector paid the show, a visit and tested the honey thoroughly and said that he had travelled Ontario from east to west and north to south and been to the World's Fair and remarked that our honey excelled all that he had ever seen. Nicolis Smith of Tilbury Centre, had a number of five banded queens on exhibition and sold them at a fair price.

Essex bee-keepers know a good thing when they see it and take the advantage. We might say that if any of those struggling bee men in the north, want to raise honey and make a success of it just come up here and start a ranch, we have every advantage—winters are mild, and wild and tame flowers abound.

Yours truly,

PETER BUSSEY.

Cottam, Ont.

Timely Topics.

A. E. HOSHAL.

In rendering comb and cappings into wax, I have found most of the ordinary methods of doing this work quite unsatisfactory. However, if a person has the time and patience, it can be fairly well accomplished by any of them; but when there is a considerable quantity of comb cappings to be rendered, and a person's time is valuable, such pottering processes cannot be tolerated. For a rapid and generally satisfactory way of rendering a considerable quantity of wax, I have found none better than the following. Provided with a large tin boiler, a dipper, an ordinary steam wax extractor and sufficient vessels for holding the wax, proceed as follows. Place the boiler with five or six inches of water in it to prevent burning the wax on the stove, and beside it the wax extractor ready for work. As soon as the water in the boiler boils, put into it the comb or cappings to be rendered, and when melted dip the melted comb or cappings from the boiler into the extractor, and the melted wax will at once begin to run from the extractor as fast as you can dip it into it from the boiler. The vessels for holding the wax should have in them some hot water when the wax is run in. This can be done by dipping some of the water from the boiler into the extractor with the

wax. The first few dipperfulls taken from the boiler should be principally sediment, as clean wax will not run from the extractor, until the bottom of the perforated basket is covered with sediment. When the basket becomes full of this, it should be thoroughly stirred and worked until the wax stops running from the extractor, before emptying.

Old dark combs and those filled with pollens should never be melted with new empty combs or cappings. It hardly pays to attempt to render them even by themselves, unless a person has a wax press. The foreign matter they contain, seems to absorb about all the wax in them, and sometimes I imagine even more.

Unless a press is used, I am strongly of the opinion, that the amount of wax left in the sediment by bee-keepers is considerably more than most of them suspect, no matter whether rendered by a solar or steam extractor, or the bag and hot water process. To the naked eye the sediment appears to be quite free from wax but (1) when dry it will burn quite fiercely and for some time. (2) When magnified one hundred times, it appears to be nearly all wax with only enough dark matter to give it coloring. (3.) If while boiling hot a quantity of it equal in bulk to a walnut or less be tied in a piece of cotton, and strongly pressed between two blacks, a comparatively large quantity of wax will be squeezed out.

Owing however to the small quantity of this material which collects about an apiary, I very much doubt if it would pay an ordinary bee-keeper to build a press to extract the wax from this ordinarily refuse matter, unless he should happen to have a large quantity of old comb to render. For rendering small quantities of ordinary comb or cappings, perhaps nothing will prove more satisfactory than a good solar wax extractor.

Beamsville, Ont.

Leeds and Grenville.

BEE-KEEPERS' CONVENTION.

The annual meeting of the Leeds and Grenville Bee-keepers' Association was held at Brockville on Tuesday, Oct. 9th.

At the opening of the afternoon session an address of welcome to the convention was read by Mayor Culvert.

Mr. M. B. Holmes' president, occupied the chair, and Mr. Fulford, sec'y-treas., was present.

The president in his opening remarks indulged in a retrospective glance over the advancement made in the past ten years and said:—"What a wonderful change has taken place! Then it was a box containing a chaotic mass of honey in the comb; now it is a dozen or so of one-pound sections nicely finished by the bees themselves. Then it was 'Strained Honey,' a compound of nectar of flowers, pollen, grains of wax, &c.; now extracted honey in an amber liquid fit to tempt the most fastidious taste. But that which is of most interest to the general public is this fact: that, because of modern improvements, honey has been so reduced in price that it is no longer a luxury seen only on the tables of the rich, but it is within the reach of all. And what do we see as a result? I think we may safely say that there is ten times as much honey consumed as there was ten years ago, and if the bee-keepers of this country do their whole duty there is not a doubt that the consumption of honey will continue to increase at the same rate for the next ten years."

Mr. F. P. Clare is evidently an experienced bee-keeper and close observer, and he condenses much practical information in the following paper which he contributed to the convention.

QUEENS.

I do not think we need to trouble our-

selves much about them; not but what much depends upon a good queen, but because the bees know when and how to rear the best of queens. This is always done (if bees are in a normal condition) when honey is coming in regularly and the hives are filled with young bees. I have never had better queens than those raised under the swarming impulse, and with this end in view. I think it well to help those colonies that we desire to breed from by giving them sealed brood from the others. The selected ones will then swarm first and we will have young queens or cells for the others. All this means work and bother, and then how often do we find some hybrid stock better honey-gathers than our gentle Italians.

To be continued.

Prescott Bee-Keepers.

Plantaganet, Oct. 16th, 1894.

The second annual meeting of the County of Prescott Bee-keepers' Association was held in the town hall, Plantaganet, Oct. 15.

A valuable address from the President, the reading of interesting papers from prominent bee-keepers, and the discussions thereon, passed the time both pleasantly and profitably.

A splendid display was made of almost everything required in a well conducted apiary.

The election of officers resulted as follows:—

President, W. J. Brown, Chard; Vice-president, C. Rivers, Alford; Sec-Treas., Jos. Charbonneau, Plantaganet; Directors, Dennis Brown, Jos. Charbonneau, James Dickson.

The next meeting will be held at Plantaganet, on the second Monday of Oct., 1895.

JOS. CHARBONNEAU, Sec.

ADVERTISEMENT.

My

Apiary is now stocked entirely with young laying queens of this year's rearing. Some of them have been laying long enough so that they are tested I will sell the tested ones at \$1.00 each, or with Review one year for \$1.75. For \$2.00 the

Queen,

the Review and the book "Advanced Bee Culture" will be sent. I am yet receiving weekly shipments of young laying queens from the best breeders in the South. These untested queens I will sell at

75 cts.

each, or with the Review one year for \$1.50. For \$1.75 I will send the Review a year, one untested queen, and the book "Advanced Bee Culture." For

10 cts.

three late but different issues of the Review will be sent. The May Review contains an article from M. M. Baldrige in which he tells how to get rid of foul brood with the least possible labor — no shaking bees off the combs, they transfer themselves to a new hive at a time when their bodies are free from the spores of the disease. He also tells how to disinfect hives with one-fourth the labor of boiling. B. Taylor tells how to secure as much white comb honey as extracted.

W. Z. HUTCHINSON, Flint, Mich.

PROGRESSIVE.

The Progressive Bee-Keeper is the name of a journal for which you ought to subscribe. Though the price is only 50c., the journal is first-class in every respect. Dr. Miller calls it "the really progressive Progressive." During the past year it has received more favorable notices from the bee-keeping press than has any other journal. Its subscription list is six times what it was a year ago when taken in charge by Mr. Leachy.

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