

# The Canadian Bee Journal

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Whole No. 522

A correspondent from the east writes as follows: "Say! Don't you pity us in Eastern Ontario? After all that has been published in the Journals and in Government Bulletins describing foul brood and its treatment in detail, and after the various shipments of infected bees coming into these counties from the west, we are thought to be so very dense that a man has to be sent from the WEST to ascertain if we have really got the real thing!" Inasmuch as the King's Government is responsible for this, we think we had better leave the expression of opinion to those in the east who are affected. We might be charged with lese majeste.

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The Ontario Bulletin No. 166, appearing elsewhere, gives a very good resume of the apicultural conditions of the past year. The Department is doing good work for the bee-keepers of Ontario. The careful preparation of the bulletin is very creditable to the Department. It is to be greatly regretted that so many bee-keepers remain indifferent or ignorant of the efforts of the Department in their behalf. Fifteen hundred bee-keepers made reply to the enquiries of the Government. It is this class of persons who constitute the real menace to our industry. Many of them are afraid of Government enquiries and inspection. They live away in isolated places with only a few hives, and are often overlooked by the inspector. If these people could be made to believe that a visit from an inspector would greatly benefit them, whether they had foul brood or not, by rea-

son of the good advice and assistance he could give them, a great step in advance would be made. A careful reading of the reports will convince us of the splendid food qualities of sugar syrup for winter stores. Buckwheat honey is good for winter food, but we are never sure how far it is mixed with honey-dew; especially is this the case if the buckwheat is left in the supers until late in September. Honey-dew is one of the greatest sources of dysentery. If buckwheat is to be the winter food, let full frames be put into the brood chamber as early as possible. Avoid half-filled ones. Where sugar is not fed finally to fill up all vacant cells, these half-filled buckwheat combs are sure to be the receptacles of honey-dew. Then will follow dysentery and spring dwindling. The best plan is to feed sugar early and then feed again later on, so as to fill up all cells from which the last batch of brood has hatched.

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Mr. Wm. McEvoy, the veteran foul brood inspector, in passing through Brant County recently, gave us a call. He was accompanied by Mr. A. Comiré, of Quebec, who, at the instance of the Quebec Government, is taking a course of practical instruction with Mr. McEvoy. Mr. Comiré is anxious to get acquainted with every phase of the disease and its treatment. He has recently been appointed one of the foul brood inspectors for the Province of Quebec, and is taking this practical method of getting experience. The Minister of Agriculture of the Province of Quebec could have taken no

better course than to send Mr. Comiré about with Mr. McEvoy. He is a master in the discovery and treatment of foul brood. In fact, it is his method that is now universally adopted in its treatment. Mr. Comiré is the son of Dr. A. O. Comiré, secretary-treasurer of the Quebec Association. We wish him every success.

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We have been advised by the Toronto Industrial Exhibition that an error appeared in their prize list in the June issue, on page 231. On the eleventh line of the Rules and Instructions it reads: "All exhibits in this Department to be in place and arranged on Monday, Sept. 5th." This date should have read, **Monday, August 31st**. We would ask intending exhibitors to take particular note of this.

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Before the next issue of the C.B.J. appears preparations for winter will have commenced. We therefore desire to impress upon our readers who have not given this important matter the attention it deserved in the past that most of the success of bee-keeping depends upon the condition in which the bees go into winter quarters. Successful wintering depends largely upon the attention given during August and the first two weeks of September. Where buckwheat is extensively grown the conditions are greatly in favor of the bees; but, generally speaking, there is little to gather at this time. If bees are breeding strongly and gathering little, feed a pint of syrup or more every other day. This will gradually help to fill up the brood-nest and at the same time feed up well the brood that is coming on. These bees will be young and vigorous and will winter best. As brood-rearing ceases, feed with a rush. There are various methods of feeding. To those with only a few hives the following is not a bad plan: Take a two-quart fruit jar and cut a round top of zinc or tin

and punch a lot of small holes in it; fill the jar with syrup and screw cap down tight. Secure a board the size of the outside edges of the hive, and cut a round hole in the centre, just large enough for the metal cap to set down in, and place it over the broad body of the hive. Place an empty hive body on top, invert the jar and place in the hole, then place the lid of the hive over all.

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"It is a real pleasure to see the gradual and steady improvement in our apicultural exchanges. Our contemporary to the north of us, the Canadian Bee Journal, has shown new life since it went into the hands of the new managers. Away to the south of us, in Florida, the American Bee-Keeper is giving us once a month a great deal of practical and valuable matter. The American Bee Journal, still the "Old Reliable," is furnishing a large amount of interesting as well as valuable matter, with many illustrations; and last, but not least, the Bee-Keepers' Review is showing the enthusiasm of an editor who is fresh from the field, for Mr. Hutchinson is a honey-producer. We wish all our exchanges success."—(Gleanings. [Good! This is a grand and beautiful world to the industrious man. There is room enough for us all. The modesty of the editor prevented him saying that Gleanings was best of all.—Ed.]

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A very flattering appreciation of the life and work of Dr. C. C. Miller appeared in the last issue of Gleanings, written by the editor, E. R. Root. It is well deserved. The happy and benevolent face of the Doctor is presented in a full-page engraving. The editor says: "Too often we pay tribute after our friends are gone and just as often regret that we did not bestow some mead of praise while they were with us, especially if they are of the kind that can't be spoiled." Just so. We hope the Doctor will long be spared to smile upon the bee-keepers of the continents.

## Notes

(By

You ask the question (247): "Are bees neighbors?" I think Yes, **some** bee-keepers are neighbors to neighboring beekeepers that the majority of cases are caused by careless management. On the few cases where I cannot see how to establish a definite case, I cannot see how a magistrate or a magistrate like the one in the illustration, suppose Mr. A's bees are on Mr. C, who is very careful of them, is a nuisance keeping a nuisance. It would be the same decision a This is written without any knowledge to the specific distance, bees would not be a nuisance, and view the subject individually as we would have (probably no money would be spent in a large apiary in

### Notes and Comments

(By J. L. Byer)

You ask the question, Mr. Editor (page 247): "Are bees a nuisance to our neighbors?" I will make bold to reply, Yes, **some** bee-keepers' bees are a nuisance to neighbors. A number of bee-keepers that the writer is well acquainted with keep bees in towns and villages, and I have reason to believe that in the majority of cases the bees are so managed as to cause but little annoyance to people living in close proximity to the apiaries. On the other hand, I know of a few cases where a whole lot of annoyance is caused by reason of cross bees and careless management. This being the case, I cannot see how any one case can establish a definite ruling as a precedent for a magistrate to follow in trying a case like the one you refer to. By way of illustration, suppose that the magistrate decides, by the evidence submitted, that Mr. A's bees are not a nuisance; later on Mr. C, who has very cross bees, and who is very careless in his management of them, is accused by a neighbor of keeping a nuisance. If the evidence shows clearly that the accusation is well-founded, it would be absurd to expect the same decision as in the case of Mr.

This is written in a general way, without any knowledge pro or con relative to the specific case you have mentioned, and from what I would infer at this distance, bees as kept by Mr. Bay-benevolent factors would not be a nuisance. However, I firmly maintain that bees sometimes are a nuisance, and it is only fair that I view the subject in an impartial way, and individually as bee-keepers see that "do as we would wish to be done by." Let me whisper that with the bees I have (probably no crosser than any other), money wouldn't tempt me to put up a large apiary in a thickly-populated place.

For various reasons I have never used bee-escapes in taking off honey. Even if my hives were all uniform, and all other conditions favorable for their use, I fail to see so much advantage as has been claimed by those who use them. It has been said in their favor that their use avoids the robbing incidental to taking honey off the hives after the flow is over. While this is true to a certain extent, the honey often taken off with escapes, unless the day is very hot, cannot be extracted until the combs are warmed up. Unless one has some sort of a hive lifter, the putting on of the escapes is no small matter, and the cost of a large number of escapes is worth taking into consideration. Again there need be but little robbing when taking off the honey if proper precautions are taken; at least, that has been the case in our yards. The greater half of our honey was to extract after the flow was over this year, and in three days we took off 2,500, 1,800 and 2,100 pounds, respectively. No wet combs were put back till evening, a cloth was put over the comb box when going back and forth; in short, care was taken to see that the bees did not get a taste of honey. As a result, not a bit of robbing was started, and our extracting house was anything but bee-tight. In the evening the wet combs were put back and next morning everything was quiet.

Let me digress to say something re a day's work in extracting. Have never made any big record in that line, as our extractors are old style, and never more than three helpers have been employed at once. But the evening after taking off the 2,500 pounds all three were tired. The writer took all honey from the hives, a brother ran the extractor, and Mrs. B took off the cappings. Not "every inch capped," but from the cappings nearly 200 pounds of honey dripped out. Not a big day's work, by any means, yet we three felt like saying: "Plenty, thanks—until to-morrow."

Very much pleased, Mr. Editor, to note that the adventures of that "Handy" man of Fenelon Falls and your humble scribe should attract the interest of our good friend in his Notes (page 260). I hasten to assure him that his presence would have been welcome, invited or not, as the "three-is-a-crowd" saying don't apply when one goes fishing.

Father Quinby used to say that when farmers began to complain of dry weather, then was the time that nectar was coming in freely. Perhaps so in Mr. Quinby's time, but in the writer's experience warm weather and moisture is the combination that has always turned the trick when big crops were secured. Dry weather this season cut our crop from alsike in half, and at date of writing (August 3) it looks as though the extremely dry and hot weather would knock out all chances of getting any nectar from the buckwheat around us. Rain in the near future may make a change, but it will have to come inside of ten days to do much good to the buckwheat, which is being wilted and forced into blossom prematurely.

#### WAX FROM SUGAR CANE

The "West India Committee Circular" states that application has been made for a patent for a process of extracting wax from the sugar cane. It seems that the rind of the cane contains a certain proportion of wax which has hitherto been lost with the refuse. By the new process this wax is now recovered from the filter refuse and turned to commercial uses, being very similar in its characteristics to beeswax or Carnauba wax, which can be used for precisely the same purposes. The wax, which resembles that now used very largely for making cylinders for so-called talking machines, is exceedingly hard and capable of taking a high polish. It is understood that many factories in Java will this year be using this process.

#### THE MECCA OF VISITORS

The success of the Process Building at the Canadian National Exhibition, Toronto, has been phenomenal, because it shows, not only the method of making various articles, for wear, for domestic use, for ornamental purposes, and so on, but also the latest inventions for manufacturing purposes. There is not a more interesting or absorbing display on the grounds than these exhibits in the Process Building afford. This building is unique to the Canadian National Exhibition of Toronto. No such structure exists at any other fair. It is the Mecca or centre of attraction for every visitor, and in order that all may have an opportunity to witness these operations and the marvelous creations of human ingenuity, the processes continue from 9 to 12 in the morning, 2 to 6 in the afternoon, and 7 to 10 in the evening. Admission, as to all the other buildings on the grounds, is absolutely free.

#### NEW BALLOON ACT FOR THE FAIR

Prof. Hutchinson, the renowned balloonist engaged for the Central Canada Fair, has a new act calculated to thrill any visitor to the fair. Prof. Hutchinson calls it his "sixture parachute drop," and consists in reaching the ground by means of six separate drops from as many parachutes. The balloon has to ascend 1,200 feet to permit of the daring aeronaut performing this act. Prof. Hutchinson has nearly 3,000 ascents to his credit.

The grand old man of American letterpress, Edward Everett Hale, has several appreciative studies in the Book News Monthly for August. Dr. Hale's own son writes one of the articles. Colonel Thomas Wentworth Higginson and W. de W. Howells staffs add their tributes to the author of "The Man Without a Country."

Wednesday, Aug. 12, is the last day for receiving apiarian entries at Toronto Fair.

#### BEE-KEEPING

[Ontario Department of Agriculture Bulletin]

The information reported has been questions sent to bee-keepers of Ontario, 15th, 1908. When fairly well received, there were those who did not receive them. Until a general engagement in the interest to answer it will be impossible for Agriculture to curate a report.

Of the reports sent, answered cent. answered carried on at a percentage is percentage cases more than reported in the same that while the flourishing condition past two years change, and that were left, while many cases wiped census report of 116,403 information at present year must 3 per cent. to 1907 and 1908. They tend to keep quality of honey, many bees left show attention, as the surplus honey; above sources of time. Very little disease percentage of every case the that the attack was occurring in only on apiary. Of the inst.



**BEE-KEEPING IN ONTARIO**

[Ontario Department of Agriculture, Bulletin No. 166.]

The information contained in this report has been taken from answers to questions sent out in a circular to all the bee-keepers of the Province, dated May 15th, 1908. While the Province has been fairly well covered by the reports received, there were over 1,500 bee-keepers who did not return the blanks sent to them. Until a greater proportion of those engaged in the industry take enough interest to answer the few questions asked, it will be impossible for the Department of Agriculture to prepare as full and accurate a report as is desired.

Of the reports received, only ten per cent. answered that the industry was carried on at all extensively, and this percentage is perhaps high, as in some cases more than one individual so reported in the same vicinity. Others noted that while the business was once in a flourishing condition, the losses of the past two years had made a material change, and that now few large apiaries were left, while the smaller ones were in many cases wiped out of existence. The census report of 1901 gave the Province a total of 116,403 colonies, but from the information at hand, this total for the present year must be decreased at least 25 per cent. to cover the heavy loss of 1907 and 1908. These changes will doubtless tend to keep up prices for the better quality of honey, and those who have any bees left should give them special attention, as the natural increase and the surplus honey gathered will both improve sources of profit at the present time. Very little disease was reported. While the percentage of dysentery seems high, in every case the correspondent stated that the attack was slight, generally occurring in only one or two hives in an apiary. Of the instances where foul brood

was reported, in only two cases was the attack a severe one. European foul brood has appeared in the vicinity of Trenton in rather a virulent form, and has caused heavy losses in two apiaries.

The work of the six inspectors appointed last year has shown itself favorably in the reports received, and the decrease in the disease has been evident. This year the Province has been divided somewhat differently, and the inspectors' names, with their districts, are as follows:

W. A. Chrysler, Chatham—Counties of Essex, Kent and Lambton.

John Newton, Thamesford—Counties of Elgin and Middlesex.

D. Chalmers, Poole—Counties of Perth and Huron.

James Armstrong, Cheapside—Counties of Norfolk, Oxford, Waterloo and Wellington.

William McEvoy, Woodburn—Counties of Haldimand, Welland, Brant, Lincoln, Wentworth and Halton.

H. G. Sibbald, Claude—Counties of Bruce, Grey, Simcoe, Dufferin, Peel and Muskoka.

J. L. Byer, Mt. Joy—Counties of York, Ontario, Victoria and Durham.

From Northumberland east to the boundaries of the Province a special inspector will be sent out to look over the apiaries at every important point. At the present time, outside of the outbreak of European foul brood at Trenton, the Department has no definite information in respect to the prevalence of foul brood or otherwise in most of this territory, and it has been thought advisable to select a man from elsewhere in the Province who is thoroughly conversant with the disease in all its stages to make a careful investigation in the east. All suspected apiaries will first be visited, and any bee-keepers wishing to clear up any doubt as to the presence of this disease in their apiaries should send word to the Department of Agriculture at an early date.

**VISITORS**

Building at exhibition, Toronto, because it is a good method of making for domestic uses, and so on, reasons for manufacture is not a more display on the part of the Province building is a national Exhibition structure exists the Mecca of every visitor, and an opportunity is and the mark of ingenuity, the 9 to 12 in the afternoon, and admission, as to the grounds.

**FOR THE FAIR**

renowned balloonist of the Royal Canadian Fair, and to thrill and excite Hutchinson called it "the te drop," and the ground by means of as many parascopes to ascend 1,200 feet daring aeronautics. Prof. Hutchinson's to his credit.

American letter has several appointments. The Ontario News Monthly is his own son writes Colonel Thomas and W. de W. to the author of "Country."

is the last day of the fair at Toronto Fair.

Apiarists in other districts should report all cases of suspected foul brood either direct to the inspector for their district or to the Department of Agriculture, Parliament Buildings, Toronto.

Reports were received from every county in the Province, but those counties where bee-keepers' associations have been organized sent in by far the largest number of answers. Evidently these associations have proved of much assistance and encouragement to those engaged in the industry, this being shown in the greater number of reports received and the care taken in answering the questions submitted.

The following data have been taken from the information received:

	—Colonies—			
	100 to 400	50 to 100	25 to 50	Under 25
	%	%	%	%
Av. loss in winter..	17	19	16	24
Wintered in cellar..	67	53	46	44
Wintered outdoors, protected .....	33	44	46	50
Wintered outdoors, unprotected .....	..	3	8	6
Diseases reported—				
Foul brood .....	5	7	7	1
Dysentery .....	45	33	32	17

The reports as a whole indicate that the bees wintered well, but suffered later in many localities from the cold spring. The terrible losses of the previous winter are again emphasized, and it will take years to build up to the number of colonies then scattered over the country. While among the larger bee-keepers the losses were bad enough, the smaller apiaries will feel the loss most, as in the majority of cases almost every colony was wiped out. A great deal has been heard of the disastrous effects of foul brood and of the ravages attending this disease, but these have been trifling compared with the total losses of the past few seasons from other causes.

Much of the loss has been due to neglect and carelessness. The larger bee-keepers have specialized in this industry, and, being dependent upon it alone for their livelihood, have studied the requirements of their stock and have given their colonies the best attention. Many others have engaged in bee-keeping as a side line, and left the bees largely to themselves, except perhaps at the time of honey-flow, when they have taken off whatever surplus was available. Others, again, have kept from one to five colonies to produce enough honey for home use only, and these also have suffered for lack of proper attention, as their owners are generally too busy at the proper season with other farm labor to bother with them.

Yet, to the farmer who will make a business of keeping and looking after from ten to twenty-five or fifty colonies, a splendid profit may be made on the necessary investment. Like every other business, care and knowledge is required, and most of the latter can be gained only by experience. Small beginnings should be made and the natural increase under favorable conditions will soon give the number of colonies required. It must be understood that the profits are as great as from any other part of the farm, provided the same care is exercised in looking after the bees as is usually given to other stock or to the orchard. In addition to the crop of honey harvested, the bees are valuable adjuncts to the proper fertilization of blossoms in the orchard and in the alsike clover fields. They take nothing from the soil or other parts of the farm, yet give handsome returns for their keep.

In many parts of the Province are districts now unoccupied by bee-keepers where larger apiaries could be kept with profit. Alsike, white clover, buckwheat, basswood and other honey-producing crops are grown more or less everywhere, while in certain sections these occur

such abundance of honey-pluses of honey means of out-colonies or ov places with go ing his time to

Honey-produ winter well, an The cool, wet s weather, have k and all prospec of clover bloon for spring grain the wet land, wheat, ensuring honey later in th outlook is very I of all kinds of l by care and t through the past

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have served to cal ellent quality of o The following re among some hundr om apiarists hav ver:

Brant—General weaker in brood a

such abundance as to furnish large surpluses of honey in favorable seasons. By means of out-apiaries, from 200 to 300 colonies or over may be run in these places with good results by a person giving his time to this work.

Honey-producing crops have stood the winter well, and are growing luxuriantly. The cool, wet spring, and subsequent hot weather, have brought forth rapid growth and all prospects indicate an abundance of clover bloom. Many fields intended for spring grains, but untouched owing to the wet land, will be planted to buckwheat, ensuring a good harvest of this honey later in the season. Altogether the outlook is very promising for a good yield of all kinds of honey to those who have by care and skill carried their bees through the past two unfavorable springs.

Owing to the tremendous losses during 1907, the total crop will be much reduced even if every colony should harvest a good average of both clover and buckwheat. This shortage, combined with the rapidly-increasing markets in the west, will undoubtedly tend to keep up the prices to about what they were during the past season. This applies specially to the better grades, as the poorer grades are now being imported in large quantities, and can be laid down in Ontario at a very low price. As many of the careless bee-keepers have been cleaned out by disease and the cold springs, the quantity of the poorer grades will fortunately decrease. This should result in a better quality on the market and in increased consumption. Very little adulteration is being practised, and the reports of the Inland Revenue Department, Ottawa, have served to call attention to the excellent quality of our Ontario honey.

The following reports are taken from among some hundreds received and are from apiarists having 100 colonies and over:

**Brant**—General condition somewhat weaker in brood and bees than in the

average season, but building up fast. Loss 5 per cent., due to queenlessness; wintered in cellar, put in November 20 and taken out March 25; fed sugar syrup in fall, about 20 pounds to each colony; honey crops in good condition, alsike not much grown, but good growth of white clover.

**Bruce**—General condition fair to good, loss during winter about 8 per cent., chiefly from failing queens; a few cases of dysentery; wintered in cellar, put in November 25, removed April 22; sugar syrup fed to make up any shortage; clovers came through in fair condition, but not much alsike grown for seed near this apiary.

**Dufferin**—Colonies generally weak, nearly half of brood dead, in some cases seemingly chilled brood; considerable dysentery present; bees wintered in cellar; put in November 18th, removed April 22nd; buckwheat honey fed for winter stores; alsike not cultivated to any extent; white clover wintered safely.

**Dundas**—Quite a number of colonies came out weak, but these are improving rapidly on good pasture and weather; loss heavy, 33 per cent., partly in cellar and remainder after being placed on summer stands; last year being such a poor honey year, quality of honey had a great deal to do with losses, some of honey having soured; wintered in cellar, put in November 18-20th, removed in April; enough surplus honey stored, so did not need to feed sugar syrup; clover wintered well in this vicinity and is generally very abundant; basswood has been good source of nectar, but is getting thinned out very rapidly.

**Durham**—General condition good; wintered in summer stands in double walled hives; loss of three colonies, queenless; crops wintered fairly well and include white clover, alsike, basswood, shumac, golden rod and buckwheat.

**Elgin**—Judging from my own, bees seem to have wintered well outside;

neighbor wintered his in cellar and bees are in poor shape; loss 8 per cent., part queenless and balance through not being cared for soon enough in out-yard; bees wintered outside, packed four in box in leaves, put in October 31st, out May 20-25th; honey for winter stores; clover came through well and prospects look good for a crop, alsike grown to large extent and white clover common, basswood pretty well cut out.

Essex—Bees came out of winter quarters in splendid shape; loss only 5 per cent., these being queenless; wintered on summer stands, mostly in clamps, put in last week October, removed last week of May; honey fed for winter stores; white clover and alsike never in better condition; I work for both comb and extracted honey.

Frontenac—General condition extra good, loss 12 per cent., wintered in cave in sand hill, outdoors, put in November 1-5, removed April 15th; honey and sugar syrup fed to late made colonies for winter stores; little disease except dysentery in four hives; white clover came out fine, alsike little grown in this section.

Glengarry—Those who wintered their bees with combs from top story wintered well, others that fed sugar late did poorly; own loss 20 per cent.; too warm in cellar; bees put in November 10th, removed April 15th; all colonies finished with from 10-25 pounds sugar for winter; considerable dysentery present; clovers wintered well and are principal honey plants.

Grenville—General condition fair to good; mostly wintered in cellars; honey fed for winter stores; quite a lot of dysentery present; clovers came through in excellent condition; other honey-producing plants are basswood, buckwheat, wild cherry, raspberry, golden rod, boneseet, etc.

Grey—Bees came out weak, but doing well since; loss 20 per cent., due to star-

vation and spring dwindling; wintered part in cellar and balance outside packed; honey fed for winter stores; clover came through well and is main honey plant here.

Haldimand—General condition good; no loss, wintered outdoors packed in chaff and sawdust in November; part honey and part sugar syrup fed for winter stores; clovers came through fine, a lot being grown here.

Halton—Colonies in good condition; loss about 7 per cent., due to old queens and queenlessness; wintered two-thirds in cellar, balance in separate hives, packed with sawdust on summer stands; put in November 20th, out April 14th; winter stores, sugar syrup; clovers wintered well; alsike, white clover and basswood being the only plants to give any surplus; alsike grown more largely this season.

Hastings—General condition only medium; spring has been cold and wet; loss 14 per cent., due largely to flooding of cellar, causing dysentery; put in cellar November 29th, removed April 22nd; honey fed for stores; white clover rather good shape; alsike poorer, we depend on clovers and buckwheat for our crop.

Huron—General condition fair to poor; some wintered well, others had considerable loss through cold and queenlessness; wintered outdoors in clamps, honey with a little sugar syrup fed for winter stores; clovers came through fine; alsike and white clovers being grown extensively.

Lambton—General condition good with few losses, only 4 per cent. in own apiary; wintered in clamps packed in dry sawdust, put in November 1st, removed May 1st; no disease present; clovers came through winter all right; raspberries and basswood also give surplus honey.

Lanark—Colonies in poor condition; heavy losses general; 40 per cent. in the apiary, due largely to starvation; no honey gathered after July of 1907; wintered in cella

Aug. 1908  
removed April but not much crop of dandel

Leeds—Coloration notwithstanding cloudy and rainy cent.; bees wintered November 8th, sugar syrup large vicinity; some evidence of dysentery suffered but the rains of the clover into

Lincoln—General loss whatever; cellar, and packages; stored November 25th; sugar syrup lacked in present except wintered very well basswood being surplus honey; Manitoulin—General loss 33 per cent. lar and lack of November 15th, clovers came through condition.

Middlesex—Some small bee-keepers and bees are in colonies wintered on in clamps, four in first part of October 18th of May; be syrup, which is thick with another, no sugar are very well wheat and alsike and out-yard; the better.

Muskoka—General loss about 20 queenless this spring cause of loss; be



tered in cellar, put in November 10th, removed April 17th; clover wintered well, but not much alsike grown; very large crop of dandelions in spring.

Leeds—Colonies in fairly good condition notwithstanding continuance of cloudy and rainy weather; loss 9 per cent.; bees wintered in cellar, put in November 8th, removed April 20th; sugar syrup largely fed for stores in this vicinity; some few colonies showed presence of dysentery; white and alsike clovers suffered badly from drought of 1907, but the rains of this spring have brought the clover into nice condition.

Lincoln—General condition good; no loss whatever; bees wintered partly in cellar, and partly outdoors packed in cases; stored November 28th, out again March 25th; sugar fed to make up what bees lacked in natural stores; no disease present except a little dysentery; crops wintered very well, these with a little basswood being only sources we have here for surplus honey.

Manitoulin—General condition poor; loss 33 per cent., from dampness in cellar and lack of queens; bees were put in November 15th, taken out May 5th; clovers came through winter in very poor condition.

Middlesex—Some loss reported among small bee-keepers; none in our apiary, and bees are in grand condition; colonies wintered on summer stands packed in clamps, four in each clamp; put away first part of October, and unpacked on 18th of May; bees were fed on sugar syrup, which is the best stores one year with another, no signs of disease present; we are very well supplied with both wheat and alsike clover, both at home and out-yard; these crops never looked better.

Muskoka—General condition very good, but loss about 20 per cent.; were requeened heavily last fall and some were queenless this spring, this being particularly cause of loss; bees wintered in clamps

on summer stands packed in four inches forest leaves with some fine sawdust; bees were placed in clamps about October 1st and removed May 20th; sugar syrup fed for winter stores; clovers in good shape and grown to quite a large extent.

Norfolk—Bees came out in fair condition; loss 4 per cent., due to experimenting in swarming; bees wintered in basement of stock barn, partitioned off by themselves; bees housed December 30th, set out April 7th; no winter stores necessary, as the colonies averaged 30 pounds honey each when put in; all clovers came through winter in good shape; this is a white clover locality, but farmers have just nicely started in alsike.

Northumberland—Colonies strong; loss 9 per cent., caused by old queens, and in some cases by spring dwindling; bees wintered in cellar put in December 1st, taken out April 5th; each colony fed ten pounds of sugar syrup for winter stores; clovers wintered well and are grown to quite an extent.

Ontario—General condition fairly good; loss in my apiary 8 per cent., due largely to old queens; bees wintered one-half in cellar, others in special cases made to hold two hives each with six inches sawdust; cases have slide cover in front to take out when putting hives in on the level; buckwheat and goldenrod honey given as winter stores; no disease present; alsike in good condition, but early frosts in 1907 killed half of the clover in our neighborhood; had to plow up 14 acres, and have only 10 left, which was double-seeded.

Oxford—Bees in fine shape; practically no loss; put in cellar from the 25th November to 10th December; no winter stores required; no signs of disease this spring; clovers came through the winter in good shape and other bloom is abundant.

Peel—Bees in fairly good condition, much better than last year; loss in my own apiary rather heavy, due to the dry

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fall, and on that account bees were not in good shape for winter; bees wintered outdoors in boxes, three hives to a box, covered all around sides with four inches of leaves and with six to eight inches of leaves on top; put in case early in November, taken out May 15th; sugar syrup fed quite largely for winter stores; some dysentery present; clover seems to be plentiful; alsike grown considerably, but no other crops this season on account of dry weather.

Perth—General condition very good; loss through shortage of supplies 15 per cent.; wintered in single clamps packed with forest leaves put in about the 1st November, removed May 16th; honey fed for winter stores; foul brood in five colonies; clovers are all right; alsike grown to quite an extent; very little buckwheat, plenty of basswood when it yields.

Prescott—Bees in fairly good shape; loss 10 per cent.; wintered in cellar, put in November 8th, removed April 18th; sugar syrup fed for winter stores; some signs of dysentery among six colonies; wintered on honey alone; clovers came through fine, large amounts grown here, also basswood.

Prince Edward—Most colonies dead; what few are left in good condition; very backward in building up on account of cold spring; loss 65 per cent.; honey crop total failure here in 1907, many bees starved owing to long confinement and no flight from November 8th to April 23rd, and bees flying out up to May 18th perished owing to cold winds and rain. Bees wintered in repository above ground; put in November 8th, removed April 23rd; sugar syrup fed for winter stores; clovers came through in good shape; prospects good; plenty of alsike and clover, and some buckwheat grown.

Renfrew—Colonies only in fair condition; loss here 30 per cent.; wintered in cellar, put in about November 15th; sugar syrup fed for winter stores, clovers came through in good shape.

Russell—Bees are in good condition now; about 15 per cent. loss, caused by want of stores and queenless colonies; wintered in cellar, put in November 12th, taken out April 23rd, about ten days later than usual; sugar syrup fed if necessary with about one-third honey; a few colonies showed signs of dysentery in the spring; all kinds of clovers came through in fine shape.

Simcoe—Colonies having enough honey were in good condition; loss here 20 per cent., due to shortness of stores; wintered in cellar, put in 8th December, taken out second week in April; about 40 pounds of honey left with each colony in the fall; foul brood in two hives; owing to trying season last year, clover crop is very small, about twenty acres within reach of my bees; not as much clover grown as formerly.

Victoria—Strong colonies are building up fairly well and weaker ones held their own, very weak ones dwindled badly on account of cold and wet; loss in six apiaries here 40 per cent.; wintered in clamps, four in clamp with three inches dry sawdust around and six inches on top; most of us found enough fall honey in the hives for winter stores, but where fed with sugar syrup, the queens are mostly alive now; the queens that died had more or less dysentery; foul brood present in this vicinity; alsike looks well generally; about ten acres grown on each farm; no white clover sown.

Waterloo—Only in fair condition; loss 20 per cent., caused by dysentery, and in some cases by starvation; bees partly in cellar and partly outside packed in chaff, four colonies in the case; put in cellar November 26th, removed on April 6th. Bee-keeping badly neglected here owing to failures of the last few years; not enough sugar fed, mostly honey; on account of dry fall last year, there is not much white clover; alsike looks good, but more should be raised.

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Welland—General condition good and losses 5 per cent., caused by starvation and queenlessness; wintered in cellar, put in November 16-29, removed April 10-14; fed on sugar for winter stores; dysentery showing in colonies; clovers wintered well, white plentiful, not much alsike and no buckwheat here.

Wellington—General condition fairly good; loss 12 per cent. from dysentery; wintered in cellar, put in November 20th, out April 25th; fed on honey for winter stores; clovers fairly good shape; alsike grown to a considerable extent.

Wentworth—Colonies in good shape; loss 15 per cent., due to starvation and failing queens; wintered partly in cellar and partly outside, packed in chaff; poorest colonies among those from the cellar; put away November 20th, started putting out on the 12th March, a few each day that was suitable, finished about April 1st; winter stores largely buckwheat honey, but also fed 300 pounds sugar; some little signs of dysentery, owing to cellar getting too warm; white and alsike clover never looked better.

York—Colonies seem in fair condition; loss 12 per cent. here, due to dysentery and spring dwindling; part wintered in cellar, balance outside in double hives packed with sawdust; put away latter part of November, taken from cellar early April; sugar generally fed for winter stores, but small quantities of honey mixed with it; some swarms showed dysentery; alsike clovers in very good shape, and this is about the only crop grown here.

**A BRITISH COLUMBIA REPORT**

I had in the spring four very strong hives, and I thought I was going to do extra well with them this year, but I went away for a week, and on my return my wife told me that the bees were starving, and I immediately told her that the bees were starving. It so happened

that there was a very cold, wet spell just at that time, when cherries and plums were in full bloom, so that though the bees were surrounded by any amount of blossoms, they could not get out to gather, and as a consequence they ran short of supplies. They eat a great deal just at this time, for they are full of young brood, and these take a vast quantity to keep them going. The consequence to me was that though I had wintered a first-rate lot of bees, owing to this cold, wet spell, my harvest has been very seriously spoiled.

Of course, as soon as I got home I fed the bees with syrup, and it was astonishing to see what a change I made in a day or two. The bees that had been listless and discouraged soon took courage again and started to work and, though they cannot altogether recover the lost ground, they are doing very well just now in July. What swarms I had came off in June and July instead of May and June, and they are piling up the honey now in great shape.

All this goes to show that to secure success in bee-keeping one must be ever on the watch, and never forget that bees are very subject to weather conditions, and one must never let them run too low in supplies. Yet just when they are breeding up to the limit, it is not good to have too much comb occupied with honey, or the queen may not find empty cells enough to lay eggs in, and so the breeding may be checked. One is always learning, and I have learned this lesson, that I must see that my bees have plenty of feed at the end of April and beginning of May, and yet not so much as to hinder the queen in laying eggs.

Cherries and plums are rather a poor crop here, and I think it was because the bees had a poor chance to pollinize the blossoms.

**Introducing Queens Expeditiously**

Some of your readers may be pleased to read how I re-queened three hives of

bees in twenty-four hours. On Monday, July 20th, I received three queens from F. P. Adams, of Brantford. I immediately tacked a piece of honey section across the back of each cage, and after removing the old queen, I took out a side frame having little or no honey and then pushed the frames from the middle of the hive to the side. Thus I had a space through the middle of the hive. In this space I placed the cage, wire side down, and, putting on the cover, I left them. On Tuesday, just twenty-four hours after, I took a perfumery atomizer and, filling the bottle with a weak solution of oil of wintergreen and going to the hive, I took off the cover and sprayed the bees in the hive thoroughly with the wintergreen. Then, picking up the cage, I found the bees clustered over the wire face of the cage, to the depth of an inch or more. I sprayed them off and then sprayed the new queen in the cage, and taking off the paper that covered the candy, I set her free in the hive, thoroughly spraying her as she ran off. I then replaced the frame that I had taken away the day before and, closing the hive, I left them until to-day (Wednesday).

On hunting over the frames to-day I found each of the three queens running around as happy and as much at home as though to the "manor born."

I go away to-morrow for several weeks, and have no person to attend to the re-queening in my absence. This was why I departed from the directions given, which say the queens should not be released for three days after being placed in a new hive. I took the risk and was successful. I re-queened three hives in twenty-four hours. Two or three things may have contributed to my success. First, the excessively hot weather may have helped me, but, secondly, the bees are very busy gathering honey from the white clover and have neither time nor inclination for fussing or fighting; but chiefly I attribute my success to the win-

tergreen spray, which made them all smell alike. I have seen peppermint recommended for a spray, but certainly wintergreen is just as good.

Comments on the above from experienced bee-keepers will be gratefully accepted. It may be that this success of mine may encourage some of the novices in bee-keeping to re-queen their hives and so improve them.

H. BEER.

HONEY IMPORTS

The value of honey imported into the United Kingdom during the month of June, 1908, was £3,753.—From a return furnished to the British Bee Journal by the Statistical Office, His Majesty's Customs.

D. ANGUISH HAS RECORD REPORT

I see by C.B.J. for June, page 215, that Mr. E. F. Robinson, of Victoria, B.C., states that a bee's load of nectar is about one grain, and the largest amount stored by one colony in one day has reached eleven pounds two ounces. These statements all depend on circumstances, as the conditions all depend on the amount of flowers and the conditions of the atmosphere. I have unloaded bees often when their load was a good-sized drop. It is easily done by catching a loaded bee by both wings, setting it up on your thumb-nail and pressing it down; it will give up its load. I put a colony on the scales every honey season, so that I will have a guide and know how much honey is coming in every day. I say honey, because I do not change the scales back in the morning for loss by evaporation. I only get the actual gain. I will give you my slates for a few years. Some to say that the 1906 and 1907 records got misplaced through moving. These dates are when I put bees on scales, and their actual gain:

Date	June
5.....	
6.....	
7.....	
8.....	
9.....	
10.....	
11.....	
12.....	
13.....	
14.....	
15.....	
16.....	
17.....	
18.....	
19.....	
20.....	
21.....	
22.....	
23.....	
24.....	
25.....	1 1/2
26.....	1 1/2
27.....	1 1/2
28.....	1
29.....	5
30.....	0

Date	June	Lbs
13.....		1/2
14.....		1/2
15.....		1
16.....		0
17.....		1
18.....		2 1/2
19.....		2 1/2
20.....		0
21.....		2
22.....		1
23.....		3
24.....		5
25.....		5
26.....		1 1/2
27.....		1 1/2
28.....		3
29.....		2
30.....		0



-1903-

-1905-

June		July		June		July	
Date	Lbs.	Date	Lbs.	Date	Lbs.	Date	Lbs.
5.....	2	1.....	4	13.....	2	1.....	0
6.....	3	2.....	7	14.....	3 1/2	2.....	3 1/2
7.....	0	3.....	0	15.....	4 1/2	3.....	17
8.....	3	4.....	5	16.....	0	4.....	8
9.....	1	5.....	4 1/2	17.....	6 1/2	5.....	19
10.....	3	6.....	11	18.....	5	6.....	18
11.....	0	7.....	10	19.....	6	7.....	13
12.....	0	8.....	10	20.....	6	8.....	13
13.....	0	9.....	6	21.....	4 1/2	9.....	4
14.....	1	10.....	8	22.....	2 1/2	10.....	8
15.....	4 1/2	11.....	16	23.....	2	11.....	16
16.....	4	12.....	13	24.....	8	12.....	3
17.....	0	13.....	11	25.....	10	13.....	0
18.....	3	14.....	0	26.....	0	14.....	4
19.....	2	15.....	5	27.....	0		
20.....	0	16.....	2	28.....	4 1/2		
21.....	2	17.....	0	29.....	8		
22.....	1	18.....	0	30.....	11		
23.....	0	19.....	0				
24.....	0						
25.....	12						
26.....	12						
27.....	7						
28.....	1						
29.....	9						
30.....	0						

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June		July		June		July	
Date	Lbs.	Date	Lbs.	Date	Lbs.	Date	Lbs.
13.....	1/2	1.....	0	12.....	1 3/4	1.....	10
14.....	1/2	2.....	3	13.....	3 3/4	2.....	5
15.....	1	3.....	3	14.....	1 1/2	3.....	9 1/2
16.....	0	4.....	3 1/2	15.....	0	4.....	3
17.....	1	5.....	5	16.....	1	5.....	4
18.....	2 1/2	6.....	0	17.....	5	6.....	7
19.....	2 1/2	7.....	3	18.....	9 1/2	7.....	0
20.....	0	8.....	4	19.....	10	8.....	2 1/2
21.....	2	9.....	0	20.....	5	9.....	4 1/2
22.....	1	10.....	2 1/2	21.....	10	10.....	4 1/2
23.....	3	11.....	0	22.....	9	11.....	6
24.....	5	12.....	0	23.....	5	12.....	3
25.....	5	13.....	1 1/2	24.....	1 1/2		
26.....	1 1/2	14.....	3	25.....	0		
27.....	1 1/2	15.....	5	26.....	4		
28.....	3	16.....	5	27.....	6		
29.....	2	17.....	12 1/2	28.....	8		
30.....	0	18.....	11 1/2	29.....	5		
		19.....	5	30.....	5		

I see by C.B.J., page 259, that there is a New Beginner has had a friend lend him a couple of copies of C.B.J., and he is so highly pleased over the number that he is contemplating going in partnership with his friend another year for the

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H. BEER.

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ORD REPORT

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Journal. Rather hard on the Editor. I will give him a little advice—Don't—as mine failed to arrive in June, and I had to depend on my friend; rather inconvenient when I wanted it.

Don't worry over Big Dan—as he classes me—as I never expected to be President of United States, let alone the O.B.K.A.; if I were, everybody would be saying, "It is time for a change."

I see that he is quite a sport by the way he lands out on that big fellow from Markham. If he goes out again in August the same as he did in July, I will give him some more advice: Don't be like the turkey—shove your head under a straw—for your body is the largest part, and it may receive some stray shots; and they will hurt worse than if you had stood out and taken your medicine.

We looked and prepared for a honey-flow, and were not disappointed. We will give our report. We had 180 colonies in the spring; increased to 250 and harvested 20,000 pounds of choice honey—10,000 sections all well filled, 10,000 extracted. What would our entire crop have been if we had been working entirely for extracted? Some claim that they can get so much more of extracted.

Don't neglect your bees, but begin right now to prepare for next season, for it may be better than this, and then you will be prepared.

D. ANGUISH.

Lambeth.

#### FARMERS AND THE HONEY BEE

For some time the interest, on the part of agriculturists, in things pertaining to the apiary has been on the wane. Farmers as a class apparently have come to realize that owing to the comparative insignificance of bees, as against what might be termed our larger live stock, they are not worth the trouble it takes to care for them. Probably this is putting it too strongly. Nevertheless, the

fact remains that year by year the product of our apiaries is falling off, and larger and larger importations of this important food article are being made.

It is to be regretted that we farmers do not take a greater interest in the bee. Did we take a greater interest in that industrious servant of mankind we would profit thereby in many ways. It is difficult to estimate the real value of the honey bee to our present-day agriculture. Bee-keeping is as much a branch of agriculture as any other line of enterprise in which our farmers engage. Considering the importance of this industry to our country at large, it should receive some fostering care from the hands of our Government, and something should be done to encourage our farmers to take a deeper interest in things pertaining to the bee and the apiary.

Bees, when properly handled, are a valuable asset. When wisely managed, and in any fair season, they not only return a direct profit to their owners, in the form of marketable honey, but they do much towards ensuring a full crop of fruit, alsike and buckwheat. It is a well-known fact, and it is vouched for by many of our leading fruit and clover seed growers, that where bees abound, larger yields are obtained than where bees are not so plentiful. So strong is this belief with some, that they offer free sites to the apiarist on which to locate his bees, as well as holding out other inducements for him to locate upon their premises. These men are men of experience, and well know what they are about. We can profitably take a lesson from their enterprise.

A few colonies of bees, at least, should be on every ordinary farm. It costs but little to establish them, and it requires very little time, except on one or two occasions in the season, to care for them. Aside from the swarming time, the bees can be cared for in almost any spare period. Some, however, have carried

this practice careless way in many sect lack of popu able returns t of bees locat insures himse from his bloss --if he grows good turn fo be benefited Besides this c nicer for the extract from h 300 to 500 pou product he co munerative pri it for himself, most delicious that he could Canadian Dairy

#### WINTERING CLAMPS P S

(By George

Fifty-two year bee-keeping, I w on their summer tecton over ther I turned up the boards of dead b more I found de of the hive. In s all dead—seemed with plenty of h reason so many b not properly hous take up their win are of the hive all the honey within consumed, a few b cluster and try t store. They get c bottom board and bees leave the clu and die, until the ft to keep warm

this practice to the extreme, and the careless way of handling bees that exists in many sections is accountable for their lack of popularity and the lack of profitable returns therefrom. With a few skips of bees located on his farm, the farmer insures himself the fullest set of fruit from his blossoms, a larger yield of alsike—if he grows that crop—besides doing a good turn for his neighbor, who might be benefited by any work from the bees. Besides this consideration, what could be nicer for the farmer than to be able to extract from his few colonies of bees from 300 to 500 pounds of honey a year? This product he could always sell at a remunerative price, or, if he cared to keep it for himself, it would form one of the most delicious and wholesome of foods that he could place upon his table.—The Canadian Dairyman and Farming World.

#### WINTERING BEES OUTDOORS IN CLAMPS PACKED WITH DRY SAWDUST

(By George Ott, Arkona, Ont.)

Fifty-two years ago, when I commenced bee-keeping, I wintered my bees outdoors on their summer stands, without any protection over them. In the spring, when I turned up the hives to clean bottom boards of dead bees, half of the bees or more I found dead on the bottom board of the hive. In some hives the bees were all dead—seemed to have starved to death with plenty of honey in the hive. The reason so many bees die and perish when not properly housed is simply this: Bees make up their winter quarters in the centre of the hive all in a cluster. When all the honey within reach of the cluster is consumed, a few bees at a time leave the cluster and try to get to their honey store. They get chilled and drop to the bottom board and die. Then a few more bees leave the cluster in the same way and die, until there are not bees enough left to keep warm in the hive and all

perish with the cold, and, may it not be said, starved to death with plenty of honey in the hive, simply because the bees were not properly housed to keep out the cold. Some hives would have a few bees left. These weak hives would be very late before they gained strength, and the surplus would not amount to very much.

Sometimes a few strong colonies would winter fairly well and would swarm and store some surplus honey.

My next plan was cellar wintering. In the fall, when cold weather set in, I stored part of my colonies in my cellar. They seemed to have wintered fairly well. Got a little uneasy toward spring before I took them out. A few bees left the hives and perished on the cellar floor. As soon as warm weather set in I carried my bees out of the cellar and placed them on the summer stands. They made a great rush for a jubilee fly. They seemed to get somehow mixed up, and some fighting went on for several days, when they finally settled down quietly. In about ten days after I took them out of the cellar cold weather set in, and the bees seemed to dwindle down. When warm weather set in again they gained in strength and did fairly well.

My next plan of wintering was outdoors in clamps. When I say clamps I mean boxes to pack bees in. I make my clamps large enough to hold just two hives, with a vacant space of five inches around hives to pack in dry sawdust. I make my clamps six inches higher in front than the rear, thus making a slant roof to shed the rain. I also make a bottom of inch lumber and nail it on the bottom of my clamp for the hive to rest on. Next I make two entrances in front of clamp, each entrance three inches long and half an inch deep, to correspond with entrance of hives. This completes the clamp.

The bottom boards of hives should project out in front of the entrance of hives four inches, for an alighting board for

the bees to rest on. Make a bridge eight inches long and four inches wide. Lay this bridge on the projecting alighting board in front of the entrance of hives. This bridge prevents the sawdust from clogging the entrance of hives. The entrances to the hives should always be kept open for winter, so the bees can fly out freely whenever the weather is favorable. I place my clamps ten feet apart in rows running east and west and my rows twelve feet apart. The more room we have the more convenient it will be to work among the bees. Clamps should be raised ten inches from the ground by putting a block under each corner, thus keeping the bottom of clamp dry. We are now ready to pack our colonies of bees in clamps. We pack only those which have plenty of honey to carry the bees safely through the winter. We take off the honey board and lay two strips across the top frames. This gives the bees room to pass over the top of the comb frames to get to their winter store. Next lay a quilt on the top of each hive. Now lay honey board on top of quilt. Set two hives in each clamp. Pack dry sawdust all around the hives and over the top. Fasten cover on top of clamp, so the wind will not blow it off; set a piece of board twelve inches wide and two feet long over each entrance of clamp and slant so as to prevent the snow from drifting in the entrance of your clamps. The bees are now all right until next spring. Never go near your bees in cold weather after they are packed for winter. I have known one jar or rap against the hive to kill the bees. I leave my bees in clamps till fruit blossoms appear. By this time the bees have been breeding up in strength and the hives are well filled with young bees to take advantage of the first flow of honey. When taking hives out of clamps, set hives just in front of entrance of clamp, and every bee will find its own hive when returning from a flight. There will be no mixing up of

bees and fighting; all will be quiet. No more spring dwindling of bees; no more cellar wintering for me. I might just say we all have our own peculiar system of running a bee-yard, and we all must work out our own salvation along this line.

I seldom feed any colonies in the fall, as I run my bee-yard altogether for section honey. Thus most of my colonies have honey enough for winter stores, and I do not need to feed. I am aware those bee-keepers who run their bee-yards for extracted honey for all they are worth do sometimes have to feed very heavily. For my part, I do not want anything to do with extracting honey, as my hives are all made and constructed for section honey. I have packed hives of bees in clamps with different kinds of packing, such as clover, chaff, dry shavings, leaves and dry sawdust. I found less dead bees on the bottom boards of those hives packed with dry sawdust than in any of the others. No place for mice and rats to get in and disturb the bees. I would drive one hundred miles with my team to a sawmill for sawdust before I would pack my bees with anything else. I have sawdust in my clamps twenty-five years old just as nice as it was when I first used it. Keep your clamps well covered, so as not to get your sawdust wet, and it will keep all right for years. I know most of our practical bee-keepers winter their bees in cellars. Well, dear bee-keeper friends, if you have good success wintering in cellars, stick to your cellar until you find out a better plan. I have wintered my bees outdoors in clamps packed in dry sawdust for twenty-five years with good success, and seldom lose any. All that is necessary is to have good prolific queens in your hives and plenty of honey to carry them safely through the winter. I met a man the other day who keeps a few hives of bees, and asked him if he would subscribe for the Canadian Bee Journal. What do you think he told

me? He said: in the old-fashioned way of honey to extract using frame hives. I lost all my bees such men: Still keep right on way. Don't invest you see advertisement to work for you grass with the field of peas with on in the good one thing I want let your children mer and keep watch your bees, and go to the v

The ladies of walk up to my and sometimes I of Italian bee ca heads to prevent them, and so or stung. Well, you a small bottle of for the purpose o to ease the pain. belong to the Ep worked very hard the beautiful villa to them alone we victory gained. T whiskey rubbed c bees, especially if Mr. Editor, if you or bee stings, do will rub no more tips.

Now, Mr. Editor so much on your or goodness' sake and I will try and next time. You l articles about bee-l forty years ago, bu along this line of almost forgotten th somehow get thin



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me? He said: "No! When I kept bees in the old-fashioned box hives I had lots of honey to eat. As soon as I commenced using frame hives and read bee journals I lost all my bees." I would just say to such men: Stick to your old box hives; keep right on in the good old-fashioned way. Don't invest in any new implement you see advertised. Do not engage a man to work for you who cannot mow your grass with the scythe, nor thresh out a field of peas with the flail! Keep right on in the good old-fashioned way! But one thing I want you not to do: Don't let your children go barefooted all summer and keep them out of school to watch your bees, for fear they may swarm and go to the woods!

The ladies of Arkona sometimes take a walk up to my place to visit my bees, and sometimes I have not got a supply of Italian bee caps to slip over all their heads to prevent the bees from stinging them, and so one or two of them get stung. Well, you know, we have to keep a small bottle of whiskey in the house for the purpose of bathing the spot stung to ease the pain. Some of those ladies belong to the Epworth League and have worked very hard to carry local option in the beautiful village of Arkona; in fact, to them alone we give the credit for the victory gained. They do not like to have whiskey rubbed on when stung by the bees, especially if stung on the lip. Now, Mr. Editor, if you have any other remedy for bee stings, do let us have it, and we will rub no more whiskey on the ladies' lips.

Now, Mr. Editor, if I have intruded too much on your space and good humor, for goodness' sake pardon me this time, and I will try and cut my paper shorter next time. You know I used to write articles about bee-keeping for the papers forty years ago, but have not done much along this line of late years and have almost forgotten the art of writing. I somehow get things all mixed upside

down, but I know, Mr. Editor, you can fix it all right side up in the Bee Journal. I congratulate you on your style and the improvement you have made in the Canadian Bee Journal.

#### HONEY PRICES

The Honey Exchange Committee of the Ontario Bee-keepers' Association met in Toronto on Friday, July 31st. Reports were received from over 250 points in the Province and the general outlook is better than in 1907. While the number of colonies is still low, due to the terrible losses from the cold springs of 1907 and 1908, there will be a medium crop of both extracted and comb honey. The crop is much better distributed and the local consumption will be greater.

Prices are ruling higher in the United States and other exporting countries, and the quantities imported from these sources will likely decrease in competition with the Ontario honey at more moderate prices than 1907. Bee-keepers are urged to cultivate their local markets as much as possible.

The following prices are suggested for this year's crop:

No. 1 Light Extracted (wholesale), 10c to 11c per lb.

No. 1 Light Extracted (retail), 12½c to 15c per lb.

No. 1 Comb (wholesale), \$2.00 to \$2.25 per dozen.

No. 2 Comb (wholesale), \$1.50 to \$1.75 per dozen.

A later report to cover buckwheat honey will be issued.

Yours very truly,

WM. COUSE, Streetsville

W. J. CRAIG, Brantford

H. G. SIBBALD, Claude.

P. W. HODGETTS, Sec.

Toronto, Aug. 1st, 1908.

### NOTES AND PICKINGS FROM A BEGINNER

In my last set of Notes and Pickings I told you my friend Jock had again lent me another number of the C.B.J. But as he is now likely gone down to Quebec to welcome the arrival of Champlain, Jacques Cartier and Montcalm, and witness the shooting of Wolfe, he very kindly sent me word that I could get the loan of his July C.B.J.

On page 245 I note what you remark about what Jacob (not Alpaugh) said about those rubberoid quilts. I have them, but never attempted to experiment with them, as I thought it better to let Jacob try his hand at that first.

And so the Minister of Agriculture has decided those Eastern bee-keepers are all ignoramuses, and don't know foul brood when they see it, and has decided to send an expert from Highland Creek down among them during buckwheat bloom to teach them a few lessons. Good! I knew the Minister could do nothing wrong—infallible, I mean. But he himself learned a lesson on the 8th of June last that he should not forget, and it was not those of the East who taught him that lesson, but his own dear pets of South Perth.

And Canada has imported during the year 1908 (and we are little more than half-way through yet) 621,150 pounds of honey, valued at \$35,405 (page 247). What about a coöperative society to do our purchasing, and let the selling take care of itself.

And so the parties who are credited with having shipped the nasty stuff from Brantford to Vankleek Hill have now got their revenge (page 248).

Yes, brethren, do try a small ad in the Want and Exchange column, and make the hard-worked Editor smile, and at the same time yourself also (page 250).

Long live that venerable writer, Mr. E. F. Robinson, of Victoria. What a kindly feeling there would be among the bee-keepers of our Province if only the spirit of good-fellowship existed in their ranks, and my earnest hope is that Mr. Robinson shall live long enough to weld the brotherhood of man so firmly and closely with a few of his able contributions that it will be forever a bright, sunny day among all bee-keepers (pages 250, 251 and 252).

Oh, yes, the Central Canada Fair has always endeavored to use its patrons right, and no doubt but it will maintain its good reputation this year again (pages 260 and 261).

Have you ever used a running stream as a watering place for bees? It knocks the bottom out of the bottle every time (page 261).

And so the foul brood inspectors are again out in full force, except in Middlesex, Elgin, Perth and Huron and the Far East. Well, well! How gratifying to know that, although those Eastern fellows are practically excommunicated from their Western brethren, yet they have decided to stand by us once more and send us down an expert foul brood teacher to teach us what to do. Good! I always knew there were some wise men at the helm (page 261).

Now, Mr. Editor, as I don't know you by any other name at present, isn't that Jacob (not Alpaugh, but the other Jake) a right good translator of German into English? I am sure that translation of his should put to blush some of those swell German bee-keepers about Brantford who profess to know it all. We imagine we have met Jacob some time, and his writings indicate the hearty handshake of the man from the north. Long may he be spared to the bee-keeping fraternity (pages 262 and 263).

A glance over page 264 would indicate that there is not much need of a coöperative

operative society plus crops of Société d'Apiculture Québec! This formation of the protection and improvement of apiculture, and means to stand against the foul brood, which is doing great ravages in Quebec. Brethren, I congratulate you on the motion and seconded by the thanks of the Society for the great work of the Doctor in the Society, and that I was well taken, the new Society will remain at the bottom of the bottle every time (page 261).

What a pity a turn out as well as the meeting Mr. Miller formed our own society we must congratulate the services of Mr. Miller. Now, as Mr. Miller, a modest man, we think of him—only there are not a few of them (page 268). The light is getting dim in the reservoir.

### THAT ETERN QUI

I am wondering if the housewives are there that almost "what shall we have for change?" The Europeans—I am sure strictly speaking the Europeans—have

operative society to dispose of our surplus crops of honey.

Société d'Apiculture de la Province de Québec! This is as it should be. The formation of the Society is for the protection and instruction of its members in apiculture, and to take the necessary means to stamp out the dread disease, foul brood, which, it is claimed, is making great ravages in that Province. Our Quebec brethren deserve to be heartily congratulated on their movement forward, and the motion proposed by Mr. Péloquin and seconded by Mr. Dufault, tendering the thanks of the Society to Mr. Comiré for the great assistance given them by the Doctor in the formation of the Society, and that free, without any charges, was well taken, and I am sure that the new Society will flourish while Mr. Comiré remains at the desk (pages 266 and 267).

What a pity all samples of honey don't turn out as well as that sample on page 267.

We think we once had the pleasure of meeting Mr. Miller, and then and there formed our own opinion of the man; and we must congratulate the good bee-keepers of Brantford in having secured the services of Mr. Miller at their meeting. Now, as Mr. Miller is, we think, a rather modest man, we won't just say what we think of him—only we think it is a pity there are not a few more of us just like him (page 268).

The light is getting bad, so I will say adieu.

**THAT ETERNAL BREAKFAST QUESTION**

I am wondering how many of our good housewives are this evening pondering over that almost "eternal question" of what shall we have for breakfast for a change? "

The Europeans—perhaps I should say, more strictly speaking, the "continental" Europeans—have practically solved

this problem, and we believe that Americans are more and more coming to view things as they do. I know some of us are wedded to our beefsteak breakfast and what not that our forefathers have dieted on for so many decades, but more and more, especially among professional and business families in our cities, the much more healthful custom of a light morning meal is coming to be the rule rather than the exception. The continental breakfast consists of a cup of coffee or chocolate, as preferred, and a crisp roll or slice of fresh graham bread, with some fruit, do you ask? Well, yes, sometimes, when it is in season. But frequently fresh fruit is not always to be had, and one soon tires of jams and preserves.

The Europeans have, however, been long used to meet this necessary need with extracted honey. This article is always found on the breakfast table, even in hotels, and is eaten the year round. Besides being a most healthful and nutritious article of food of a most wholesome nature, it is something that can be had at any time. Well-ripened honey can be kept in a temperate, dry place indefinitely and even improves with age, in that it becomes thicker, thus having more body, aroma and flavor. There is something very satisfying about a breakfast on bread and honey, with, say, chocolate or coffee or even hot milk if it be preferred. This may be varied by having hot biscuits occasionally or corn bread or graham gems. On the cooler winter mornings hot buckwheat cakes and honey prove a most agreeable variation. With our national pure food law, there is no reason why we should not now be able to get anywhere and at all times this new and important, shall I say, breakfast food.

**Honey Labels.**—Place your order for Honey Labels, Letter Heads, Bill Heads, Envelopes, etc., with The Hurley Printing Co. Satisfaction guaranteed.

**CANADIAN HONEY EXPORTS**

In a recent issue of the Farmers' Advocate (July 2nd) Mr. Holtermann gives to the readers of that Journal an abstract of the total amount of honey imported into Canada during the ten years ending on the first six months of the present year, 1908, which no doubt was much appreciated by the readers of that journal, and we find you have supplied the readers of your Journal with the same information in your July issue, which should be of much importance to every bee-keeper in Canada. Now, to help

along the good work of imparting information to all, I would ask you to kindly give the information below also to your readers, which will show them how much honey has been exported from Canada during the same period, and which will also give the value of, and the rates of duty levied on honey imported into the above-mentioned countries from Canada. The figures can be relied upon, as they come from a most reliable source—the Department of Trade and Commerce, Ottawa.

W. J. BROWN.

L'Original.

**Statement Showing Amount of Honey Exported From Canada During Each Fiscal Year, 1899 to 1908.**

(From Canadian Returns)

**QUANTITIES IN POUNDS**

Fiscal Years	Great Britain	United States	Bermuda	British Africa	France	Holland	Nfld.	Total
1899	305,181	5,885					27	311,095
1900	14,821	3,940						18,761
1901	16,497	5,779				4,000		26,276
1902	6,192	14,786					125	21,103
1903	14,562	7,549		500			60	22,671
1904	27,930	13,836					10	41,776
1905	6,842	13,189					529	20,560
1906	29,077	13,144			9		730	42,960
1907 (9 mos.)	650	2,945		24			230	3,849
1908	1,794	3,255	10				50	5,109

**VALUES**

Fiscal Years	Great Britain	United States	Bermuda	British Africa	France	Holland	Nfld.	Total
1899	\$31,009	\$ 555	\$ .....	\$ .....	\$ .....	\$ .....	\$ 3	\$31,567
1900	547	562						1,109
1901	1,732	617				399		2,748
1902	601	1,490					13	2,104
1903	1,264	711		50			9	2,034
1904	2,685	1,310					2	3,997
1905	681	1,252					66	1,999
1906	2,494	1,208			1		99	3,802
1907 (9 mos.)	71	308		4			28	411
1908	337	401	1				11	750

Rates of duty levied on honey imported into the above-mentioned countries from Canada:

- Great Britain—Free.
- United States—20c per gallon.
- Bermuda—10%.

British Africa—2½d. per lb, or about 4½c per lb.

France—15 frs. per 100 kilogs, or about \$1.32 per 100 lbs.

Holland—2½ guilders per 100 kilogs, or about 46c per 100 lbs.

Newfoundland—35%.

Department of Trade and Commerce, Ottawa, July 7th, 1908.

**BEE DISEASE**

(By Exp)

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BEE DISEASES IN MASSACHUSETTS

(By Burton N. Gates, Expert in Apiculture.)

The Two Known Bee Diseases

Two contagious diseases of bees are now known. These attack the developing brood and so reduce it that the colony soon dwindles from lack of young bees to replace the old. They are known, respectively, as American foul brood and European foul brood.

AMERICAN FOUL BROOD

The cause of this disease is definitely known to be an organism, Bacillus larvæ White. It is what has been heretofore frequently designated simply as "foul brood." The nature of the disease is described by Dr. E. F. Phillips, in charge of apicultural investigations in this Bureau, as follows:

When the larvæ are first affected they turn to a light chocolate color, and in the advanced stages of decay become darker resembling roasted coffee in color. Usually the larvæ are attacked at about the time of capping, and most of the cells containing infected larvæ are capped. As decay proceeds these cappings become sunken and perforated, and, as the healthy brood emerges, the comb shows the scattered cells containing larvæ which have died of disease, still capped. The most noticeable characteristic of this infection is the fact that when a small stick is inserted in a larva which has died of the disease, and slowly removed, the broken-down tissues adhere to it and will often stretch out for several inches before breaking. When the larva dries it forms a tightly adhering scale [of characteristic and diagnostic shape and] of very dark brown color, which can best be observed when the comb is held so that a bright light strikes the lower side wall of the cell]. Decaying larvæ which have died of this disease have a very characteristic odor, which resembles a poor quality of glue. This disease seldom attacks drone or queen larvæ.

EUROPEAN FOUL BROOD

This is the disease which appears to be most prevalent in Massachusetts, prob-

ably having swept in from New York State, where it was formerly known as "black brood." Its presence is less easily diagnosed by superficial examination than is American foul brood. It is described by Dr. Phillips as follows:

This disease attacks larvæ earlier than does American foul brood, and a comparatively small percentage of the diseased brood is ever capped. The diseased larvæ which are capped over have sunken and perforated cappings. The larvæ when first attacked show a small yellow spot on the body near the head and move uneasily in the cell. When death occurs they turn yellow, then brown, and finally almost black. Decaying larvæ which have died of this disease do not usually stretch out in a long thread when a small stick is inserted and slowly removed. Occasionally there is a very slight "ropiness," but this is never very marked. The thoroughly dried larvæ form irregular scales, which are not strongly adherent to the lower side wall of the cell. There is very little odor from decaying larvæ which have died from this disease, and when an odor is noticeable it is not the "glue-pot" odor of the American foul brood, but more nearly resembles that of soured dead brood. This disease attacks drone and queen larvæ very soon after the colony is infected. It is as a rule much more infectious than American foul brood and spreads more rapidly. On the other hand, it sometimes happens that the disease will disappear of its own accord, a thing which the author never knew to occur in a genuine case of American foul brood. European foul brood is most destructive during the spring and early summer, often almost disappearing in late summer and autumn.

Damage From Bee Diseases

The damage from an epidemic of bee disease is as difficult to estimate as is the damage from an epidemic of small-pox, of typhoid fever, or of malaria in a human community. The loss of colonies is but one small item; there is the resulting loss of crop, the resulting lack of increase in the number of colonies of bees, and that demoralizing effect on the industry which tends to cause bee-keepers to go out of business. Besides this there

Table with 2 columns: Nfld. and Total. Rows include values like 27, 311,095, 18,761, 26,276, 125, 21,103, 60, 22,671, 10, 41,776, 529, 20,560, 730, 42,960, 230, 3,849, 50, 5,109, 3, \$31,567, 1,109, 2,749, 13, 2,104, 9, 2,034, 2, 3,997, 66, 1,999, 99, 3,800, 28, 411, 11, 750.

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is a crippling of commercial queen rearing, a check on the trade in bees, and a decisive effect on the manufacture and sale of bee-keepers' supplies. All these factors must be considered in an estimate; and, what is more, the damage is accumulative. It cannot be calculated by the year and then totalled; the progressive loss must be figured.

In New York State, where European foul brood has been combatted for nearly a decade, and where it is now well suppressed, it has been estimated that the damage from loss of bees alone, in a very limited area, in 1899 and 1900, was at least \$45,000.

In Ventura County, Cal., where American foul brood flourishes, a thriftless bee-keeper had 151 colonies, which, from neglect, were reduced to 14 colonies in a little over twelve months' time. One hundred and thirty-seven colonies had died or were nearly dead. But there are many more and even sadder cases, were there space to relate them.

#### The Spread of Bee Diseases

Both types of foul brood are highly infectious; the way in which they are spread might be compared to the spread of typhoid fever in human communities. Honey is the common carrier of this infection, just as milk and water are the agents which frequently spread typhoid fever.

In diseased colonies of bees, practically every part of the hive becomes contaminated with the germs of the disease. Consequently, when disease is found in the bee-yard, every precaution must be taken that bees from healthy colonies do not come in contact with any part of the diseased colonies or hives. Honey, being so irresistible to the bees, is, of course, the main thing to be guarded. Since diseased colonies soon become weakened, from the lack of young bees to replace those dying from old age, they are less likely to maintain guard against robbers,

which are a great source of danger in the spread of infection. Immediately on discovery, diseased colonies should be treated.

#### FEEDING HONEY

In these days of widespread bee disease it is dangerous to feed any honey to bees; it is far preferable and less dangerous to supply them, if they need stores, with a syrup of sugar and water, half and half. It is safe to feed honey to bees only when it has been vigorously boiled for at least a half hour; and, as Dr. Phillips has recently stated, in order to avoid risk, "it is better to make this an hour." In boiling, the honey should always be diluted with equal parts of water in order to prevent scorching.

#### DISINFECTION OF TOOLS AND HANDS

All tools used in manipulating diseased bees, as well as the operator's hands, should be thoroughly disinfected before opening a healthy colony.

#### DEPLETED HIVES FROM GREEN-HOUSES A SOURCE OF DANGER

In Massachusetts particularly there is another source of infection which is difficult of control. Each year several hundred colonies of bees are placed in green-houses by those who grow cucumbers under glass. In the adverse conditions of the cucumber house the hive soon becomes depleted and is promptly thrown on the rubbish pile. If the hive originally came from a foul-brood region—which is not improbable, inasmuch as the green-house men buy their bees wherever they can get them—all the bees within a radius of several miles of the rubbish pile are exposed. More than once the writer has seen from two to a half dozen such hives cast out on the rubbish heap. While there is no intention of endangering neighbors' bees, it is as criminal to throw out of doors any hive in which bees have died as it is to shake the bedding or

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#### PURCHASING

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throw the waste of the sick room from the window. Discarded hives and their contents, if the cucumber grower does not wish to render the wax, should be thrown under the boiler.

PURCHASING BEES AND QUEENS

In purchasing bees the buyer should be as certain that he is getting stock free from disease as is the farmer, who purchases cows, that these have no tuberculosis. A region where the disease is not found, or where it has been successfully suppressed can be reinfected by one careless purchase. For instance, speaking of New York State, Mr. Chas. Stewart says:

Just as we [the inspectors] were feeling that we had nearly stamped it [the disease] out and were masters of the situation, we discovered that at least one, if not two, fresh importations had been made in a section of the State where no trouble of this kind [European foul brood] formerly existed.

To some degree this applies to purchasing queen bees. It is usually safe, however, to introduce a queen if she is removed from the cage in which she is hatched and is introduced unaccompanied by her escort of workers. The candy which is shipped with queens should never be put into a hive.

STRAY BEES

There is one agent over which the beekeeper has no control and which should cause him no anxiety if a considerable territory is freed of the diseases. It is a well-known fact that under certain conditions, as, for instance, in storms and heavy winds, bees enter hives other than their own. Obviously, then, such bees in their interchange of hives may spread the infection. This only emphasizes the urgency of cleaning the disease out of a whole State, or better, out of a block of States, as New England. Coöperation is the key to the situation.

Brood Diseases Can be Controlled

Enumeration of the methods by which disease is spread should not convey the idea that these diseases cannot be combated, for it has been thoroughly demonstrated that by judicious and persistent manipulation both of them can be successfully controlled and suppressed. The rapidity with which they spread, however, makes coöperation of bee-keepers throughout the State or States essential. Sixteen States and Territories now have legislation and inspectors designed to protect the bee-keepers from the spread of these infectious diseases. The State nearest to Massachusetts is New York, where the annual loss of bees alone is shown in the following figures:

Previous to 1899, in a limited area, the loss of bees alone is estimated at .....	\$39,383
In 1899, when concentrated effort to suppress bee disease was begun, it amounted to.....	25,420
In 1900 .....	20,289
In 1902 .....	10,853
In 1903 the loss of the previous year was halved, making it....	5,860
In 1903 it was.....	4,741
In 1904 it was again divided by two, being .....	2,220
In 1905 there was again a reduction of nearly 50 per cent.....	1,725

Total loss of bees, covering about ten years.... \$110,491

In other States the encouraging results of inspection and persistent effort to suppress the inroads of disease are similar.

INSPECTION

Inspectors are not alone police officers. They are educators, up-to-date bee-keepers giving instructions in modern methods of bee-keeping, thoroughly experienced in treating foul brood, and a great stimulus to progress. They are necessarily exacting and thorough; but they are not out to seize and condemn; their aim is to help the bee-keepers, to assist them in a coöperative effort to eradicate disease, and to promote bee-keeping. Of course,

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the individual can do much for himself by keeping his own yard clean and free from infection; but he is in constant danger of reinfection from his neighbors, if they fail to cooperate with him.

#### A Brief Account of Treatment for Brood Diseases

Those who are most experienced in the suppression of brood diseases are agreed that "shaking," which is practically "shook swarming," and modifications of this process are the only successful methods.

#### SHAKING

Shaking is briefly this: As soon as a colony is discovered diseased, and at a time when there would be no robbing, it is shaken on the old stand into a hive containing new frames with narrow strips of foundation. In this way none of the contaminated honey is deposited in the new cells. Should the disease reappear, which is sometimes the case, the operation must be repeated. In order to prevent the bees from swarming out, the queen may be caged in the hive for a few days or the entrance closed with a piece of queen-excluding zinc. Care should be taken not to scatter parts of the contaminated hive, particularly the honey, where bees can get at them.

#### DISINFECTION OF HIVE MATERIALS

Honey, unless it has been boiled as above described, should never be fed back to bees. Wax, however, after being rendered and manufactured into foundation, is commonly used without apparent danger. It is customary in the East to put bees back into hives which have formerly contained diseased colonies, after they have been thoroughly cleaned of all bits of wax and honey. In the West, however, the hives are either burned out with oil, with a blue-flamed torch, or are disinfected with strong chemical disinfectants. All frames should be burned, since it does not pay to clean them.

#### LAYING WORKERS—WHAT TO DO

I have been having a little experience with a colony of bees, as follows: I hived a swarm with a virgin queen. In due time I examined the colony and found that the virgin had been lost. I at once gave them a ripe cell, which was soon hatched, and virgin No. 2 accepted, but she also was lost. I then introduced virgin No. 3, and she was also accepted, but before she was old enough to be fertilized, laying workers put in their appearance. I caught two of them at the job and pinched them. At the same time I saw by the appearance of the virgin that she had just returned from her wedding trip, as the organs of the drone were still protruding from her abdomen. At this date the laying workers are still on the job, and so is the queen. If you want to see a hive bang full of eggs, come over. What will become of this colony if left to themselves, and what could be done to get things going as they should? I once had a colony with laying workers, and I removed it from its stand, put a hive with drawn comb in its place, then carried them about thirty rods from the yard and scattered them all over the field, but the laying workers came back with the bees.

H. D. McINTYRE.

Galt, Ont.

[We do not think this hive will amount to anything. It could be doubled up with another strong hive—but there would be danger of having the queen of this hive destroyed, and if this should happen, you two hives would then be in possession of the laying workers. We think it best, therefore, not to do this. The bees of this colony are all old. For this reason it does not amount to much. It would be best to destroy it. If your heart will not permit you to destroy it, act as follows: Take the bees a couple of hundred yards from their stand and shake them all over the combs, and put the hive and comb

Want an

Advertisement received at the words, each a Payments strict amounts are to keeping. Write sheet from any side of the page many times ad. must reach us each month.

**FOR SALE**—(tracting), and bush, good wat stable (frame), cut 5 to 6 tons trees. Good re. 6 miles, Lavan Railway. Cash. BLAKE, Donal

**WANTED**—C State probable q up, etc. FOST Limited, Brantf

**HONEY WAN** your honey if I c and if first-clas State price want to put it in. G sels, Ont.

**HONEY WANT** ity of first-class to arrange for itainers, 5 and 10-exchange for Ho Honey late in the MAN, Brussels, t

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**Want and Exchange Column**

Advertisements for this column will be received at the rate of 35 cents for 25 words, each additional word one cent. Payments strictly in advance, as the amounts are too small to permit of book-keeping. Write copy of ad. on a separate sheet from any other matter, and on one side of the paper only. Say plainly how many times ad. is to be inserted. Matter must reach us not later than the 23rd of each month.

**FOR SALE**—Bee-yard, 75 Hives (extracting), and 195 acres land; maple bush, good water, log house, new bank stable (frame), outdoor bee cellar; can cut 5 to 6 tons wild hay; 75 young apple trees. Good reasons for selling. Station 6 miles, Lavant, Kingston & Pembroke Railway. Cash, eight hundred. CHAS. BLAKE, Donaldson, Ont.

**WANTED**—Comb or Extracted Honey. State probable quantity, quality, how put up, etc. FOSTER & HOLTERMANN, Limited, Brantford, Ont.

**HONEY WANTED**—I can handle all your honey if I can have it in good time, and if first-class Clover or Basswood. State price wanted. I can ship empties to put it in. G. A. DEADMAN, Brussels, Ont.

**HONEY WANTED**—I will want a quantity of first-class Honey, and would like to arrange for it now. I can supply containers, 5 and 10-lb pails or 60-lb tins, in exchange for Honey. I do not handle Honey late in the season. G. A. DEADMAN, Brussels, Ont.

away, and leave their old stand vacant. The bees will go back and find no hive. Many will die. Some may make their way into other hives. These may do a little work on buckwheat, but their lives at most will be short. You say that queen No. 3 is laying, as well as the workers. It would be a pity to lose her. Perhaps she might replace an old queen. If you do not need her for this, let her work out her own salvation after shaking. Where bees are found queenless a frame of brood should be given them at once—regardless of whatever plan you may adopt to give them a queen. The presence of brood will prevent the development of laying workers. The bees will remain peaceful—you may then let them raise a queen, or give them a ripe cell, or introduce a laying queen. Never leave a hive without brood.—Ed.]

Make your wants known in the Want and Exchange column.

**HEADQUARTERS**

National  
Bee-Keepers Association

OCTOBER 1908

**THE WAYNE  
HOTEL AND PAVILION**

DETROIT, MICHIGAN

Only first-class hotel in the city overlooking the beautiful Detroit River. American and European Plan. Popular Rates.

J. R. HAYES, Propr.

Though Printed crooked the Fact is STRAIGHT.

**Gunn, Langlois & Co. Limited**

MONTREAL

Is the best firm in Canada to sell your Honey to.

**WRITE THEM**

WHAT TO DO

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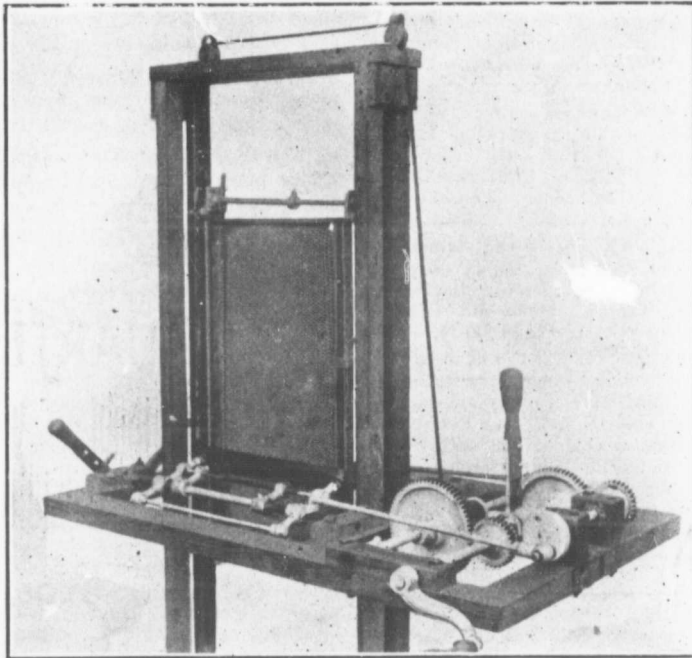
## UNCAPPING MACHINE

WM. M. BAYLESS, of Brantford, Canada, the Inventor

CUTS CAPPING OFF BOTH SIDES AT ONCE

**B**RANTFORD is no mean city in the matter of inventions. It is the birthplace of the telephone, by the famous Bell. It is exceedingly gratifying to the Canadian Bee Journal to announce

became known as the Goold, Shapley & Muir Company, makers of bee supplies, windmills and gas engines. They have also produced a new type of cement-mixer. It is with this Company that Mr.



Uncapping Machine—Style A

that our city is able to contribute something to the development of the bee industry.

Some years ago, while in the employ of the E. L. Goold and Company, Mr. Wm. L. Bayless invented and perfected the reversible honey extractor. This Company was afterwards re-organized, and

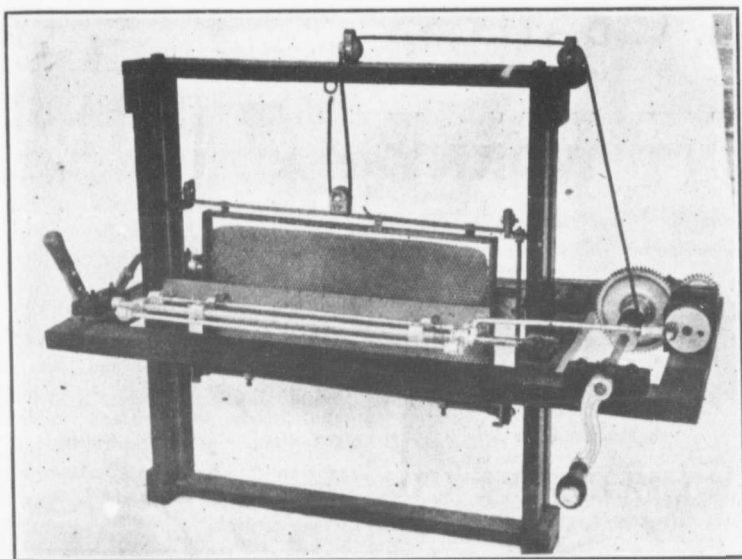
Bayless is at present employed. Owing to a disastrous fire some time ago, the Company disposed of the Bee Supply business to the Ham & Nott Company, of Brantford, manufacturers of screen doors and windows, woven wire beds, etc., and are devoting all their energies to the manufacture of their other lines. They

have retained For some less was work uncapping. spare moment tirely his own he has at last very ingenious believe he has yond a doubt two ways, as trations, A an comb from en

will take the comb uncapping from the bar. The machine crank, and all par and leather rope used on sewing r made of good cast and forward with while the frame m ward, as the will direct. The knives will cut as the cc

have retained the services of Mr. Bayless. For some time before the fire Mr. Bayless was working upon a new machine for uncapping. It was done chiefly in his spare moments, as the enterprise was entirely his own. It can be truly said that he has at last got it perfected. It is a very ingenious yet simple device. We believe he has the correct principle beyond a doubt. The machine is built in two ways, as will be seen by the illustrations, A and B. One will uncap the comb from end to end, while the other

ward or downward. It is so adjusted as to cut a very thick comb or a thin one, or a comb the thickness of which varies. All these variations are absolutely under the control of the operator. The comb must be a little wider than the top bar in order to use style A effectively. This is the machine that cuts from end to end. Style B will cut any thickness of comb, provided that the end bars are not too wide. But where top bars and end bars are made with a view to the use of this machine, it may be freely said it will



Uncapping Machine—Style B

will take the comb lengthwise and cut the uncapping from the bottom up to the top bar. The machine is operated by a small crank, and all parts driven by cog-wheels and leather rope belting, similar to that used on sewing machines. The knives, made of good cast steel, work backward and forward with a good cutting motion, while the frame moves downward or upward, as the will of the operator may direct. The knives are double-edged, and will cut as the comb passes either up-

uncap anything in the shape of a Langstroth. In fact, the machine can be built to suit any particular-sized frame which may be a special hobby with any particular bee-keeper. To Mr. Bayless belongs the discovery of the "principle" and "action." This may now be adapted to any size of frame.

We desire to say that Mr. Bayless has not written this article, nor dictated it in any way. He is an extremely modest man, and as yet has made no effort to

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## Italian Queens

Bred from Imported Stock direct from one of Italy's best Breeders, and selected stock of fine Honey Gatherers.

	ONE	THREE	SIX
Untested	\$1.00	\$2.75	\$5.00
Tested -	\$1.50	\$4.25	\$8.00

## WM. L. BAYLESS

43 Grande St. BRANTFORD, ONT.

## DON'T WORRY

About how you will dispose of

### ALL YOUR HONEY

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WRITE US

We Are Extensive Dealers.

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MONTREAL, CANADA

## Money in Poultry

If you know how to get it out. We show the way. On our regular staff are the world's most famous poultry experts. Amongst them Prof. A. G. Gilbert, Dominion Experimental Farm, Ottawa; Prof. W. R. Graham, Ontario Agricultural College, Guelph; Rev. J. N. Williams, B.A., England; H. S. Babcock, Providence, R. I. Dozens of other well known poultry men and women write for us, telling of their experience. 48 to 72 pages monthly, full of interesting and instructive reading matter and high class engravings. All poultry—nothing but poultry. Mailed anywhere in Canada, one full year for 50c. or three years for \$1.00. 30th continuous year of publication. Address

### CANADIAN POULTRY REVIEW,

The People's Popular Poultry Paper.  
184 Adelaide St. West, Toronto, Ont.  
Standards and other books free for a little work.

place his device upon the market; in fact, we believe he scarcely realizes what a good thing he has got. He will, however, protect his machine with a patent. When in the city a short time ago, Mr. Wm. McEvoy and Mr. A. Comiré, of Quebec, called upon Mr. Bayless to see the machines. Mr. F. P. Adams and the writer accompanied them. Mr. and Mrs. Bayless received the party cordially. The machine was shown and closely inspected. Mr. McEvoy was enthusiastic in his praises, and ordered one on the spot. We unhesitatingly declare that we believe the machine will be a success.—Ed.

### N.B.K.A. NOMINATION NOTICE

Each member of the National Beekeepers' Association is requested to mail, by postal or letter, to N. E. France, Platteville, Wis., on or before Sept. 30, 1908, their nominations for candidates for the offices named below, to be voted on at regular December election:

President, Vice-President, Secretary-Treasurer and Manager and three Directors.

Oct. 1st the Manager and one disinterested member will count the nominations and publish results in all American bee papers. Each member should early send in their nominations.

### THE HONEY BEE

(Continued from Page 274)

The third member of the commonwealth is the drone or male—a big, noisy and lazy fellow, not even being able to take up arms in defence of the food that is stored for his welfare, for he has no stinging, the deficiency of which recks his own ruin in the end. He gathers neither honey nor pollen, never being known to alight on a flower, preferring to be all ways on the wing seeking queens, or in the hive feeding. He has no pollen baskets, no wax glands, his tongue is not



## Big F In

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NOTICE

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age 274) e commonwealth big, noisy and ng able to take he food that is for he has no which recks his gathers neither being known to erring to be ab ig queens, or is s no pollen bas s tongue is no



## Big Fortunes Are Being Made In Minnesota Iron Lands

Yes. Not only big fortunes but little ones. The smaller people are getting a "show" at the great profits. Farmers, merchants, and others who have money in the iron-bearing lands of Crow Wing County, Minnesota, are getting profits in cash that exceed their fondest hopes. These iron-bearing lands are money makers for those who take out ore. They are situated in the Cuyuna Iron Range which lies along the Northern Pacific Railroad between Deerwood and Brainerd.

### End of Ore in Some Old Sections

Although \$1,500,000 in dividends were distributed this year to the stockholders of only one company in Northern Minnesota, still the indications are that the iron-ore in older sections is getting scarcer and scarcer every year. New mines will have to be opened in greater numbers than before in other sections.

### Your Opportunity—Our Proposition

This then is your opportunity. Many consider it the chance of a lifetime. We control a quantity of iron-bearing land in Township 46, Range 29, Crow Wing County, Minnesota. It is but 3 1/4 miles from Deerwood, a town on the

Northern Pacific Railroad between Du- luth and Brainerd.

### A Rich Strike Nearby

A short distance North of this property a prominent ore company has sunk a shaft and is now mining. In every direction drills have disclosed valuable finds of iron ore. Within 80 rods of this land drills have blocked out forty million tons of iron ore. The above ore company referred to has offered to supply us with money and take half the profits. We prefer, however, to develop it ourselves and divide the profits among those who invest with us in this valuable land. Consequently, we believe it will be an excellent opportunity for you to receive good dividends on your investment.

We are an organized corporation, capital \$150,000.00. The price per share is \$10.00 each. Our prospectus and other literature give full description of the property with pictures, guarantees, references, map, and everything that it is possible to put on paper which reflects an honest, straight-forward and reliable investment.

A visit to these lands will well repay you. Send for above prospectus quick, and ask us any questions if you feel inclined to. We will give you an honest, straight-forward answer.

**IRON PRODUCING LANDS CO.,**  
808 Bank of Commerce Bldg., Minneapolis, Minn.

suitable for gathering honey. He is physically disqualified for any work pertaining to the hive. He is absolutely of no use whatever except to impregnate the young queen, for which act he suffers the penalty of death. So, should he fulfil the duties assigned to him, his life may be merry, but assuredly short—not more than a month, probably. To compensate for this curtailed existence, he takes plenty of time to mature, as it is twenty-four days from the laying of the egg before he emerges a perfect insect. He is, as with the other inmates, three days

in the egg, but six days in the larva, and fifteen in the pupa state. In a state of nature there are often hundreds of drones in a hive, and this condition calls forth the inference from the great naturalist, Mr. Darwin, that it is an imperfection of Nature to produce so many drones when only a few are actually needed (Darwin, 164-2), but had Mr. Darwin been a practical apiarist, he would have learnt the great necessity of many drones, to reduce to a minimum the chance of the loss of his queen, through being caught by birds, driven by high winds, or beaten down in

## CENTRAL CANADA EXHIBITION

AT OTTAWA, SEPTEMBER 18th to 26th, 1908

**D**ISPLAYS will far excel those of any previous year. A Grand **PURE FOOD EXHIBIT** to be made by Canadian Manufacturers.

**H**IGH-CLASS VAUDEVILLE PROGRAM will be given daily in front of the Grand Stand, in addition to the **HORSE RACES**.

**T**HE NIGHT ENTERTAINMENT will consist of the latest Comic Opera, "**WHAT HAPPENED THEN?**" by the famous **DE WOLFF HOPPER** and All-Star Company. Popular Prices will Prevail.

**A** GRAND DISPLAY of **PAINTINGS AND LADIES' WORK** will be made to signalize the opening of the Handsome New Fireproof Building now being erected at a cost of \$12,000.

**T**HE SPECIAL ATTRACTIONS in front of Grand Stand in the afternoon will include the latest European Novelty, "**DEL ORO'S PERFORMING COWS**." This attraction is billed to appear in Ottawa for the first time in America. There will also be a most sensational **AUTOMOBILE RACE** on a specially-constructed incline, the contesting chauffeurs being two daring young women.

**T**HERE will be **BALLOON RACES** daily, with a double **PARACHUTE DESCENT** from each Balloon, by the famous **PROF. HUTCHISON** and companion.

Get the Official Programme when issued next month

**T. C. BATE,**  
President.

**E. McMAHON,**  
Secretary.

Aug. 1908

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**CHEAP**

rain or hail storms, which so frequently happens in summer-time; besides, the more drones raised the less chance of her fertilization by her own son, which would bring about the degeneration of the race. And I may mention here that the queen is never fertilized in or near the hive, so as to avoid as much as possible this in-and-in breeding. Nature has ordained it thus so as to keep up the stamina of the race. Should the queen have to absent herself long from the hive, on account of scarcity of drones, the chances of her loss are much increased, and should this unfortunate loss happen, the colony would be ruined, as there are no eggs remaining wherewith to raise another. However, the bees provide against

this calamity by raising several queens preparatory to the swarm leaving the hive. Under normal conditions the young queen returns to the hive, fertilized for life, in about a quarter of an hour. This mating but once during her life, so as to reduce the chances of her loss to a minimum, and that this fecundation shall be just sufficient to last during her youthful vigor, all hews a wisely-adjusted economy, and surely this wise and careful preservation of the bee must point to an importance far beyond mere honey gathering.

The drone is only raised normally during the swarming season, or in the time of plenty. As soon as the flowers cease to yield nectar they are tolerated no

**CANADIAN NATIONAL**  
**Aug. 29 EXHIBITION Sept. 14**  
**T O R O N T O**

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From the Paris Salon and other Old-World Galleries.

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With 900 Performers.

International Dog Show International Cat Show

**8,000 Live Stock on View**

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**CHEAP FARES FROM EVERYWHERE**

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longer. They are bitten and driven from the hive by the workers, and it is now that their stingless and defenceless condition is manifested. But so it was intended, that they might be more easily exterminated (and here is shown a wise economy) to preserve the stores for the more useful members of the family, the pollen gatherers, fertilizers and beautifiers of nature.

Mr. Darwin has also failed to fully comprehend the wisdom of the barbed sting, inferring that it is not yet perfect in structure, as the insect loses its life in its own defence (Darwin, 163), but the bee was intended for the use of, and to be subservient to, man, and hence was not permitted to inflict pain a second time, after once cautioning the intruder. If the sting were allowed to be withdrawn, as with the hornet, etc., the bee surely would have indulged in a second and perhaps many more punishments.

I have referred to an occasional fourth inmate of the hive, which is termed a "fertile worker." This pest makes its appearance sometimes in a hive that is beyond the possibility of raising a queen. This worker is one supposed to have been raised in close proximity to a queen cell and to have received some of the "royal jelly" by mistake. Through the action of this food, her ovaries are more developed than in the other workers; she can, in fact, lay eggs, but will deposit them here and there in a very irregular manner in worker and drone cells, sometimes two or three in each cell, and these eggs always produce drones only, as it is impossible for her to become fertilized, so abortive are her organs of reproduction. She is, like Darwin's missing link, neither queen nor worker, but a little of both, and, like the said lost link, very difficult to find, as she is in no way different in appearance from the worker.

## ITALIAN QUEEN BEES

Well Developed! Hardy! Prolific!

I have selected a yard of One Hundred of my choicest Italian Colonies, and intend to run this yard exclusively for Italian Queens during the present season.

This stock has been run for the production of section honey, and has given me splendid results for a number of years back.

The bees are pure Italian, having the distinctive characteristics of that race—good-sized, well-marked, and easily handled.

They winter well—clustering quietly on their combs in the cellar.

They build up quickly in the Spring—the queens are prolific, and the brood well looked after by the workers.

They are good honey-gatherers—having given me good crops even in poor seasons.

MR. WM. McEVoy, who has ordered a large number of these queens each year, for several years back, writes:—"I don't consider that your Queens have cost me a cent. They more than pay for themselves every time."

I am already booking orders from extensive bee-keepers who have tried the stock in former years and are well satisfied with it.



F. P. ADAMS,  
Aparist  
P.O. Box 113  
Brantford, Can.



F. P. ADAMS,  
Aparist  
P.O. Box 113  
Brantford, Can.

### — PRICE LIST —

Untested, each \$1.00	Six, \$5.00	Twelve, \$ 9.00
Tested, each \$1.50	Six, \$8.00	Twelve, \$15.00

Safe Delivery Guaranteed

F. P. ADAMS - BRANTFORD, ONTARIO