Canadian Bee Journal

INDEX 1911

ILLUSTRATIONS

CONTRIBUTORS AND CORRESPONDENTS

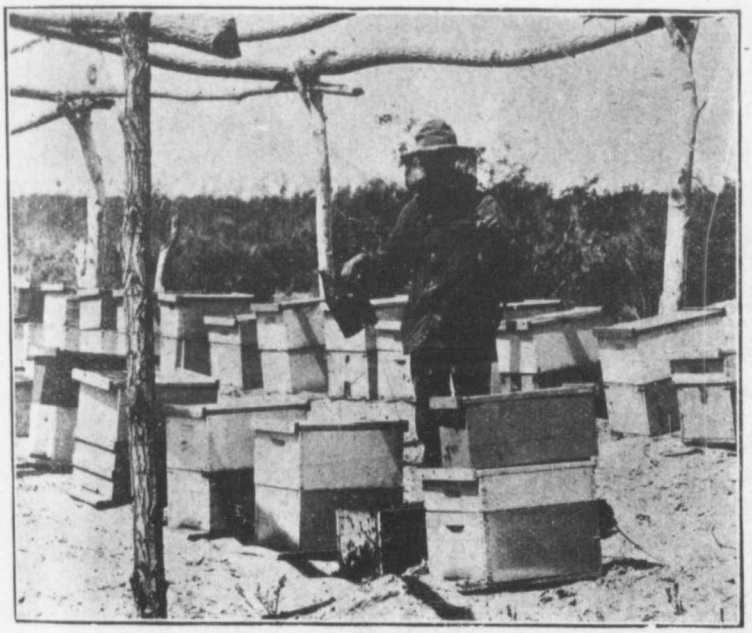
CA
BE

Vol 19, No. 1.

Mr.

THE CANADIAN BEE JOURNAL

Vol 19, No. 1. JAN. 1911 $1.00 Per Annum



Mr. H. N. Simmons, Yuma, Arizona.

The Canadian Bee Journal

Devoted to the Interests of Bee-Keepers

JAS. J. HURLEY, Editor

Published monthly by
The HURLEY PRINTING CO.,
Brantford, Ont.

TERMS

$1 per annum: two years, $1.50, payable in advance. These terms apply to Canada, United States and Mexico; to all other countries, 12 cents per annum for postage.

Discontinuances—Any subscriber whose subscription has expired, wishing the paper discontinued, will please notify us by post, otherwise we will assume that its continuance is desired, and that it will be paid for. If the paper is to be stopped at the expiration of the time paid for, it should be so stated when giving the order.

Receipts for Money—The receipt of the Journal will be an acknowledgment of receipt of money to new subscribers. The receipt of renewed subscriptions will be acknowledged by postcard.

How to Send Money—You can send money at our risk by P. O. Order or bank cheque or draft, and where none of these means are available, bills and postage stamps by registered letter. Money sent any other way is at your risk. We pay no exchange or express charges on money. Make all express orders, cheques or drafts payable to **The Canadian Bee Journal**, Brantford, Ont.

ADVERTISING

We are in no way responsible for any losses that may occur in dealing with our advertisers, yet we take every precaution to admit only reliable men in these columns.

Rates of Advertising

Time	1 in.	2 in.	3 in.	4 in.	1 col.	page
1 Mth ..	$2.00	$3.00	$3 50	$4.50	$6.50	$10.00
2 Mths	3.00	4.50	5.50	6 50	11 00	17.00
3 Mths	4.00	6.50	7.00	9.00	15.00	25.00
6 Mths .	6.00	9.00	12.00	15 00	25.00	40.00
12 Mths .	10.00	16.00	20.00	25.00	40 00	75.00

Clubbing List for 1910

To Old and New Subscribers: Our Clubbing List for 1910 includes the following Remarkable Offers

WE WILL SEND

The CANADIAN BEE JOURNAL

WITH

The British Bee Journal, $1.50 ..	For	$2 35
Gleanings in Bee Culture, $1	For	1 95
The American Bee Journal, $1 ..	For	1 75
Bee-Keepers' Review, $1	For	1 75
Irish Bee Journal, 36c.	For	1.25
The Herald (Montreal)	For	1 50
Montreal Weekly Witness, $1	For	1 75
Montreal Daily Witness	For	3 00
Northern Messenger	For	1 35
World Wide, $1.50	For	1 85
Family Herald and Weekly Star $1	For	1 85
Canadian Poultry Review, 50c.....	For	1 40
The Breeders' Advocate, 50c.	For	1 40
Farmers' Advocate, 1.50.....	For	2 25
Weekly Sun, $1	For	1 75
News (Daily) Toronto	For	2 20
The Horseman (Chicago)	For	3 50

Mail and Empire for $1.50

The Canadian Bee Journal

Brantford :: Canada

The Canadian Bee Journal

PUBLISHED MONTHLY

JAS. J. HURLEY, EDITOR, BRANTFORD, ONTARIO, CANADA

Vol. 19, No. 1. JANUARY, 1911 Whole No. 551

The mild weather we have had during the early part of January will be very helpful to the bees wintering outside. In fact the winter so far has been very satisfactory.

* * *

Mr. A. A. Ferrier writes us to the effect that he has found the greatest demand for honey during the past season that he has ever before experienced. His sales to date are upwards of thirty-five thousand pounds.

* * *

We have an enquiry from Hamilton, asking for information as to who is handling dark grades of honey. It is impossible for us to answer enquiries of this kind as we are not in touch with the markets. A small ad. in our advertising columns would bring the information speedily.

* * *

The Brant Bee-keepers' association will hold its annual winter meeting on Wednesday and Thursday, Feb. 8 and 9. The convention will assemble at 2 o'clock on Wednesday afternoon at the Court House, City of Brantford. A good programme is being prepared. The association desires us to extend a cordial invitation to all bee-keepers and others interested to be present. A large attendance is looked for. These conventions in the past have always been pronounced successes, and we eventure to predict that this will be none the less so. Mr. W. J. Craig is looking after the programme, and gives us assurance that he will have a good one. Mr. Morley Pettit, Provincial Apiarist, will be present with his lantern, and entertain the convention on Wednesday evening. The Agricultural Department will send a couple of delegates. We will, therefore, look forward to meeting a large number of our readers on the eighth and ninth of February.

* * *

Mr. W. A. Chrysler, chairman of the committee having in charge the plans for the organization of a co-operative association, writes us that the committee expects to be successful in arranging matters so as to handle the crop of 1911. We feel quite sure that the affair will be brought to a successful issue when in the hands of Mr. Chrysler and Arthur Lang—they are hustlers.

* * *

The letter appearing elsewhere from Mr. Balmer, Burlington, dealing with the saving of queens of weak colonies, where such are doubled up, and also early spring feeding is a very valuable one. We trust that many of our readers will take particular note of it. Mr. Balmer is one of our most successful bee-keepers and rides about from yard to yard in that beautiful auto, a picture of which we presented a few months ago.

* * *

The committee of the Ontario Bee-Keepers' Association re Co-operation, asked for a grant from the funds of the Association of $50.00, for preliminary expenses. Mr. Hodgetts, the Secretary of the Association, immediately arose and stated that he doubted if the funds of the association could properly be expended for such a purpose, as it was the intention of the Government that its funds should be used for educative purposes only; and not in the promotion of

any business enterprise. Mr. Hodgetts was right. But is this the proper status of an association of independent self-respecting men? Would it not be better that the association controlled its finances iself, and not lean too much on the government for its support? The government has a certain well defined field of operation in apiculture as well as in the other branches of agriculture, and in this we believe it has done its full duty. But an association of bee-keepers should pay its own way and preserve the independence of its members.

* * *

Each member of the O.B.K.A. receives the C. B. J. as a premium for his membership. This we believe has been a long-standing arrangement. The membership is now 321, according to the Directors' last report. This constitutes but a small portion of our subscrip ion list. While the arrangement is perfectly satisfactory to us, it must not be construed by anyone with a little authority that it in anyway compromises our absolute independence. It is well that this should be distinctly understood. We believe that good work for the bee-keepers of Ontario—and for Canada, too—can be done by this association—but it must be kept healthy and independent.

* * *

That our Co-operative campaign is taking hold, the following letter gives strong evidence. Great things may be accomplished in the future if we but take hold with confidence and determination:

Montreal, Dec. 29, '11.

I notice in November copy of Canadian Bee Journal that you are thinking of organizing a Co-operative Company for the benefit of bee-keepers. I think this would be a splendid thing, and would be pleased to act as your agent for such a company in Montreal. I think I could sell considerable honey here as I would run a honey and fruit store, and supply the grocers, etc. I would be able to place considerable stock also, as I am well known here, and I intend going into the bee business for myself in the immediate future. Kindly mention my name to the board and you might also say that in the event of my getting the agency I would take stock in the company myself. I am yours truly, B.

The above letter is a private one, therefore, we are not at liberty to give the writer's name at present.

* * *

Among the numerous specialized industries which are taking root and which promise a large measure of success on many of the irrigation projects of the Reclamation Service is the production of honey.

During a recent trip covering nearly all of the reclamation projects, the Statistican of the Reclamation Service at Washington, D.C., made an investigation of this industry. On a large number of the projects the apiaries were only just being established. Those which had been in operation a year or more almost without exception reported an abundance of food for bees, favorable climatic conditions, and a very fine grade of honey for which there was a good demand. The white sage honey was an especial favorite on the coast.

As the cultivated acreage increases on the projects, adding large areas of alfalfa and clover, orchards and small fruits, the food supply will take care of more bees. The development of agriculture of course promotes the growth of towns and villages, and creates a home market. In most sections the supply has not kept up with the demand. By co-operation among apiarists to produce best grades and to create new markets through intelligent advertising, bee culture will become one of the most profitable industries in the desert country. As everything in the arid country is tending to specialization, the bee-men must get to-

gether on a plan similar to that now in operation aong the fruit growers, establish high standards, and by rigid regulation ensure the marketing under special label of only first-class honey.

There is a wide field for the bee-man in the West, and nearly all of the projects of the Government offer opportunities which are worthy of consideration.

J. J. H.

J. E. Hand's enthusiasm is something to be envied. He describes in "Gleanings" a system of bee management which is to reduce our craft to "mere child's play." "We have at last discovered principles," he says, "by which bees may be controlled with the same precision that the expert engineer controls his engine, and with an economy of labor that renders the new system well nigh automatic in operation. Results that formerly necessitated an almost endless routine of shaking and brushing bees, interchanging hives and brood chambers, clipping wings, etc., are now obtained in the highest state of perfection in a much easier manner." "The only problem that I can now think of in connection with bee-keeping is, 'what are the writers upon apicultural subjects going to do for subjects to write about?'" Optimism such as this is characteristic of bee-keepers generally and it is very pleasing to witness the spirit in which the man who thinks that he has discovered "a good thing" gives his idea freely without thought of any personal benefit to himself. We take off our hat to you, Mr. Hand.

* * *

The executive of the O.B.K.A. are alive to the importance of the matter of Co-operation. We were unable to attend the recent convention, but have before us the stenographer's report of the proceedings. We notice that two lengthy speeches were delivered on the subject, and regarding the matter as one of vital interest to bee-keepers generally we will re-printed them in full in the February number of the C.B.J. The late president of the Association, Mr. W. Couse, spoke on: "May We Co-operate Further in Selling than Through the Crop Report." Mr. Couse informs us that the starting point of co-operation is the co-operation of the individual bee-keeper with his grocer—supplying and keeping him supplied with honey! Again, arranging with some wholesale firm in "the West" to handle the combined produce of a number of bee-keepers and "not fretting very much about the markets" is said to be co-operation "in every sense of the word!" Mr. Couse appears to forget that the word "co-operate" carries with it a specialized significance. Perhaps he knows more about the subject than he tells us.

* * *

The special committee on Co-operation were instructed to perfect their plans and present at the next annual meeting a definite scheme upon which the members could vote. They were granted $50 for the purpose of enabling them to form themselves into a provisional directorate for the purpose of taking out a charter. We believe the committee intends to make things move a bit now.

* * *

We understand that the Secretary raised some question as to whether the grant of $50 could properly be made from the funds of the Association, inasmuch as the Government contribution was made for educational purposes. The Government would apparently claim the right to exercise a sort of veto in these matters.

* * *

The second of the two speeches referred to above was that by our Editor. Mr. Byer in the American Bee Journal refers to it as a "most masterly address'," and states that Mr. Hurley "clearly showed that he had given the matter a lot of earnest study.'

* * *

Mr. Byer's own views are given as follows: "As stated in the past, while thoroughly in sympathy with a co-operative

movement of some nature, yet I feel that with present good prices ruling, it will be difficult to get enough bee-keepers interested to make the scheme a success. All the fruit growing and other co-operative organizations have been **forced** by circumstances to their present status. Whether the bee-men will be wise enough to co-operate without being forced to do so, remains to be seen."

* * *

Perhaps Mr. Byer is correct. We sincerely hope not. Personally we do not believe that bee-keepers are so blind to their interests that it will be difficult to get them interested in the proposed organization. They will not wait until forced by circumstances to co-operate.

* * *

Some of us seem to be at sea on the question of Foul Brood nomenclature, and the sooner the matter is cleared up the better. On this side of the Atlantic it is generally assumed that Cheshire and Cheyne were on the wrong track, and were working on what is sometimes described as the "European type of disease." Whether that be true or not, when English bee-keepers mention Foul Brood they refer to what is known over here as **American Foul Brood.** European Foul brood is known as black brood in the old country.

* * *

Re eliminating the swarming instinct by selection (Gleanings 787). The swarming instinct is the natural instinct of reproduction and perpetuation of the species. It is only when queens are hatched and a swarm issues that real and complete reproduction takes place in the case of the honey bee. Is not W. G. Flower mistaken when he states that the natural instinct to reproduce by sitting has been bred out of the Leghorn and other breeds of hens? On the contrary the modern Leghorn is capable of more rapid reproduction than formerly. The duty of sitting on and fostering the eggs does not constitute the act of reproduction. W. W.

BEES AND IMMUNITY TO DISEASE.

Wm. White.

With all the benefits that precise scientific knowledge has conferred on the bee-keeping industry, but little advance has been made in the direction of keeping foul brood under control. Bee-keepers are up against a stiff task. It is well sometimes to pause and see just where we stand.

The only effective treatment so far discovered is that of removing from the diseased stock all matter subject to possible infection—larvæ, honey, comb, etc.—a course of procedure, which from the bee's point of view is perhaps somewhat of the nature of a surgical operation. This, the McEvoy treatment, in the words of C. P. Dadant "is accepted everywhere as positive."

At one time it was considered possible that a means of curing foul brood might be found in the use of appropriate drugs, and many bee-keepers, especially in England, still profess to see in the feeding of medicated syrup, an important adjunct to the first method of treatment. The idea, however, is fast dying out, for it has been shown that drugs, necessarily of a poisonous nature, in order to produce fatal results on the bacteria, must be applied in such quantities, that they produce poisonous effects also on the creature under treatment.

It would seem, therefore, that our only hope lay in the efficaciousness of the first of these two methods. There is, however, a third—that applied by nature in restoring a condition of equilibrium between disease and forms of life susceptible to discase. G. W. Bullamore (Gleanings Jan. 1), refers to the subject in an excellent article on "Natural Selection and Diseases of Bees." He says: "The power to resist bacterial invasion is an attribute which varies with the individual; and, when present to a marked degree, constitutes immunity." * * "When a dis-

ease visits a distr
all the very suscep
The immune, if an
recovery perpetuat
sive epidemics wil
revert to suceptibil
last established in
though propagated
stocks, is not suff
hibit the produ
swarms."

Bee diseases hav
memorial and in cc
ing has been carr
for many centuries
the process of
tended to produce
susceptibility is s
the bees to maint
fully against bact
selves are acquair
with individual ap
tive bees have d
munity.

Without travers
covered by Mr. B
haps be permitted
the natural proce
living tissues, subs
by pathogenic ba
of showing that
possible and may
petuated in the
tissue, from its ve
bacterial life, for
sistant forces whic
from growing or
There are presen
agents perpetuall
attacks. The pri
tain poisons prod
the purpose of c
parasitic organism
the active powers
very effective me
combat between t
ease germs is far
here. We must
merely stating tha

ease visits a district for the first time, all the very susceptible stocks are killed. The immune, if any, and those capable of recovery perpetuate the species. Successive epidemics will weed out those that revert to suceptibility, and a balance is at last established in which the disease, although propagated at the expense of the stocks, is not sufficiently virulent to inhibit the production of honey and swarms."

Bee diseases have existed from time immemorial and in countries where bee-keeping has been carried on as an industry for many centuries, it would appear that the process of natural selection has tended to produce races of bees in which susceptibility is so reduced as to enable the bees to maintain themselves successfully against bacterial attacks. We ourselves are acquainted with districts and with individual apiaries in which the native bees have developed a partial immunity.

Without traversing the ground already covered by Mr. Bullamore, we may, perhaps be permitted very briefly to refer to the natural processes that take place in living tissues, subsequent to their invasion by pathogenic bacteria, with the object of showing that immunity to disease is possible and may be encouraged and perpetuated in the case of bees. Living tissue, from its very nature, is hostile to bacterial life, for it possesses certain resistant forces which prevent most bacteria from growing or multiplying within it. There are present, in fact, very active agents perpetually engaged in repelling attacks. The principal of these are certain poisons produced in the tissues for the purpose of checking the growth of parasitic organisms, and together with the active powers of special cells, form a very effective means of defence. The combat between these forces and the disease germs is far too complex to describe here. We must content ourselves with merely stating that the chance of the victim's death or recovery is decided by the issue of the fight. The point that we desire to emphasize is that these resisting forces are subject to variation. The native bees of various countries, as we have already mentioned, by the process of natural selection, have become to a certain extent immune to bee-disease. This immunity at the same time implies a widespread prevalence of disease, which again usually results from ignorance. Nature's methods of selection after all are very clumsy; and we believe it is possible for the bee-keeper to attain to the same end by the exercise of those nice powers of discrimination that the stock breeder has to put forth in his profession. We do not go to the length of advising bee-keepers to bring in queens or stocks from infected areas. Yet we feel it greatly desirable on the part of those located in districts where foul brood is prevalent to watch carefully for those stocks possessing, or appearing to possess, the greatest degree of immunity, if, indeed, any such can be found. In localities where foul brood exists as an epidemic, it is almost an impossibility we conceive for any stock to escape an attack. Numerous colonies, may survive, exhibiting no signs whatever of disease, and these we should consider as having proved themselves worthy of the honor of being selected as the progenitors of the future generations. The universal use of Italians, careful selection, and the vigorous application of the McEvoy treatment to all diseased colonies, will solve the Foul Brood problem.

POINTS FROM PRESIDENT YORK'S ADDRESS.

To Co-operate or Not to Co-operate?

The question as presented by President York at the Albany Convention:

If bee-keeping is ever to be put on a business basis in this country there must be co-operation in marketing the honey crop.

Bee-keepers are not selfish; they do not want more than their product is worth; but I insist that they do want, and deserve a fair price * * * and this they are not getting to-day. I believe it is their own fault.

These are "get-together" times, and bee-keepers have lost much during the past decade in not being properly organized so as to protect their own interests, and realize a proper return for their efforts in the production of honey.

Why not plan for the largest success, rather than be satisfied with something small, or less than can be obtained if properly done? While we are doing at all we might as well do things right.

If we can have one or two energetic up-to-date business men devoting their whole time to the management of this organization, there is no reason why they should not know the condition of every large honey market on this continent and thus be in a position to supply the markets properly; and bring about a more equal distribution of honey than at the present time, when often some of the markets are over-loaded and others are unsupplied.

Not only will better methods of production be encouraged, but more honest grading and packing will be compelled.

No one will attend to our business for us; we must do that ourselves, or take the consequences.

The consequences are often rather serious.

The questions to be settled are: Shall we do it? Are we big enough to undertake this great work? or shall we drift along as we have been doing in the years gone by?

W. W.

ANOTHER BEE-KEEPER FROM ENGLAND.

Dear Sir,—I am advised by the British Bee-keepers' Association to write to you for information respecting bee-keeping in Canada. I am an English bee-keeper just out, and I desire to know the best kind of hive used in Canada. Can I obtain full particulars for making same? Also what is the best kind of bee to keep? At present I am working at my trade, but eventually hope to obtain my living solely from bee-keeping.

Yours truly

T. C. B.,

Stratford, Ont.

[We are pleased to welcome T. C. B. to Canada. There are many signs of a coming influx of British bee-keepers into this country. There is room for all the Old Country can send us, provided, of course, they know their business.

We strongly urge our correspondent to make himself thoroughly conversant with the conditions affecting bee-keeping in Canada. He will find that as is the case in England, there are districts especially favorable to bee-keeping, and he would do well to keep on the outlook for a desirable locality.

As regards the hive, we should suggest that T.C.B. purchase a ten-frame Langstroth hive, which he could use as a pattern. This hive is of much simpler construction than those of English make, and our correspondent would have no difficulty in constructing it himself. He should remember that shallow supers are not used on this side to any great extent for extracting purposes, the extracting combs being of the same dimensions as the brood combs.

Start with Italians and stick to Italians. We have nothing but good to say of the black. In England we used to work amongst them, sans veil, sans mits, and bare armed. But the black bee of the American continent appears to be a hybrid, and has a deservedly bad reputation. Aim at keping your stock as pure as possible by re-queening.

Join the Ontario Bee-keepers' Association. Secretary, P. W. Hodgetts, Toronto.—W. W.]

DISINFECTING HIVES.

Mr. Hopkins and D. M. Macdonald Defend Their Position.

To the Editor of Canadian Bee Journal:

Sir,—Referring to a letter on the above subject from a "New Zealand Reader" in your October issue, in which your correspondent mentions my name pretty freely, and criticizes my remarks on disinfecting, I will preface my reply by observing that it is very unusual to find a criticism in any of the bee journals from a person hiding behind a nom de plume, though in this instance the identity of the writer is very thinly disguised. As a rule I take no notice of anonymous correspondence, but in this case most of the statements are so glaringly inaccurate and misleading that I feel it my duty to correct them.

In order to show how little reliance is to be placed on any of his remarks, I will refer to what he says concerning my knowledge of Foul Brood, which, to say the least, is utterly ridiculous, viz., "Not having had much to do with foul brood himself (myself) he draws upon other authorities," etc. His extreme self assurance, characteristic of youth and inexperience, has here drawn him into an egregious blunder, as the following will show.

I had my first real battle with the disease in my own commercial queen rearing apiary in 1888-9, when I at once ceased supplying queens. This apiary consisted of 40 apiaries of a splendid Italian strain, the result of seven years select breeding, all of which I lost through disease. We knew nothing better then than the "drug treatment," which my critic, knowing nothing about it, mixes up with disinfecting of hives. I did not resume my queen trade until about four years after when I arranged for all my queens to be raised on an island 50 miles from Auckland, where there was no disease.

After visiting all the apiaries in the district I was then living in, my honest belief is that there was not a colony in any of them free from disease, and I believe all of them died out. This I think was a pretty extensive experience for a beginning, and this was about the time your correspondent was born. Then again, I was, during the next few years, several times through all the largest Waikato apiaries when that district was rotten with disease, and I had more or less dealing with all of them. Since then I have never been out of touch with disease until I retired from my government position some months ago. So much for the reliability of your correspondent, and now regarding disinfecting.

When a person assumes, as my critic has done, to know all there is to be known regarding this debatable question upon which so many differ, and the settlement of which appeared to be as far off as ever, it shows, I contend, a lack of that logical sequence of reasoning so necessary to the formation of sound judgment.

With regard to my own knowledge of the matter, I confess at once that I really do not know whether disinfecting of hives does good or not, and the question at present being unsettled, I have to rely upon my own judgment as to which course to follow. Reasoning by analogy, I take what I believe to be the safest, and follow the general rule adopted in all germ diseases by medical men, and disinfect. It is impossible to settle such a question satisfactorily by a rough and ready method, there are too many contingencies to reckon with; it can only be done by careful bacterial research. As for disinfecting being objected to on account of the extra trouble, this is really nonsense, for the person who is really anxious to rid his apiary of disease is only too ready and willing to do anything reasonable. Contrary to your correspondent's asertion that disinfection is not carried out in New Zealand, I know from the number of letters received, and from

actual observation that it has been largely practised. In my Bulletin I have advised disinfection, but there is no question of compulsion; bee-keepers are as free as I am to follow their own judgment, or inclination.

If I have erred, I have done so in good company, and I respect the opinions of practical men like Mr. McEvoy, and others, who hold different views, as they are doing the same as myself—acting on their judgment.

I need only further remark, that among many others whose opinions on the advisability of disinfecting are worthy of consideration are Dr. G. F. White, expert in bacteriology, who has specially studied the bacteria of the apiary; Prof. Imms, B.A., M.Sc., who investigated the Isle of Wight disease; Dr. E. F. Phillips, in charge of apiculture United States of America; the Department of Agriculture, Ireland; T. W. Cowan, author British Bee-Keepers' Guide Book; Root, Chesshire, and in fact all authors of standard works recommend doing so. Finally, I may observe that in tackling D. M. Macdonald, he (your correspondent), is up against something tough.

I shall not take notice of any further anonymous correspondence on the matter, and with apologies for the length of my letter,

I am, yours, etc.,

J. HOPKINS.

Auckland, New Zealand, Dec. 14, '10.

—

A Question of Veracity.

When I wrote about disinfection in New Zealand I had before me: (1) A communication from the Chief Apiarist, (2) a report from an Inspector, (3) the latest official "Bulletin," (4) the Annual Report of the Department of Agriculture, a work of 600 pages—all official documents. These you can balance against your Mr. Nemo's contribution, which came to hand only the other day.

In above Report, page 71, I read: "The bees from 72 hives were shaken off their frames, the combs being taken away altogether. Five days after the bees were again shaken on to full sheets of comb foundation. At the same time **all the floor boards had been scraped and disinfected as were also the hives."** Yet your nameless correspondent says "disinfection is unnecessary and superfluous, and almost unknown in New Zealand."

The "Bulletin" mentions "disinfection" four times on page 53 alone.

Mr. Hopkins says, "The McEvoy treatment when **'properly carried out'** is an effective cure." He advises "thorough disinfection" or "singeing the inside by fire."

D. M. MACDONALD.

SOME OF MY EXPERIENCE.

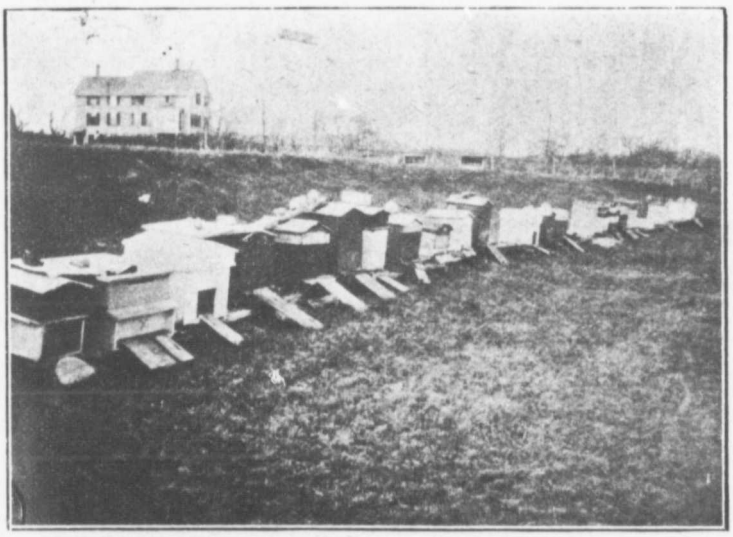
Indexed

William McEvoy.

In the spring of 1864, I bought two old box hives of bees, and started into bee-keeping in a small way. I found that box hives were not the thing, and in 1866 I changed from box to frame hives. Through natural swarming I got my increase during the early years in the business, and as we had no foundation at that time, the bees had to make all the combs, and as no buckwheat was grown in my locality, all the comb making had to be done in the clover season, and finished before basswood ended. I had some ups and downs in wintering for a few years after I started, but was fairly successful through seeing that every colony had abundance of stores in the fall to last them until clover began to yield. For several years before 1887 I had been very successful at wintering bees packed on the summer stands. But hearing of many bee-keepers booming the celars at that time (1887) caused me to experiment on a large scale and prove for myself which system would pay me best. I arranged for the use of a good cellar

and put half of the colonies into it about the 20th of November, 1887. The other half of the colonies had been packed on the summer stands about the 1st of October with forest leaves. All the colonies that were wintered in the cellar and all that were packed on the summer stands came through to spring in fine condition, and it was impossible to see any difference **early** in that spring (1888) between the colonies that had been wintered in the cellar and those that were packed on the summer stands. When going through the spring the colonies that were packed on the summer stands gained on those that had been wintered in the cellar, and by the 1st of June had almost double the bees in their hives. The honey season of 1888 was one of the poorest we ever had, but poor as it was I got about half a crop of clover honey from the colonies that had been packed on the summer stands, and while that was small I was thankful for it, because I got no honey from the colonies that had been wintered in the cellar. This experiment that I tried on a large scale proved to me that colonies well prepared and packed early in the fall on the summer stands will give best results in this latitude than any cellar, no matter how good it might be.

Woodburn, January 9, 1911.



PARTIAL VIEW OF MR. JOHN L. BYARD'S APIARIES.

The hive marked X contains a queen on which he won a $5.00 prize at the Southboro Grange Fair, Sept. 23rd, 1910.

EIGHT OR TEN FRAME—WHICH?

Indexed

I noticed in the last number of your journal that the question of eight or ten frames is receiving attention once more. Now, as I am in favor of the eight frame I would like to ask a few questions:

1. Is it not easier to handle a yard of bees in eight-frame hives?

2. Can't you build up a colony in

spring faster by lifting up two or three frames of brood and filling out with empty and partly empty combs, and putting another hive body on top?

3. Does not the heat from the lower body help to warm the upper one more than it would a larger one?

I don't know but locality may make a difference, but I think here in Worcester County, Mass., I prefer the smaller hive. Then again when the flow starts, remove the upper body, put on the super and up goes the honey. No dummies to handle; your brood chamber full of brood and all white honey in super!

Those removed combs of brood make increase, strengthen weak colonies, etc. But with this plan you must have young queens every year, or the crowding will cause the swarming fever. At least that has been my experience.

I enclose a picture of the Foxdale yard, packed for winter. You will notice several styles of outside cases that have come with the bees I have purchased. The one marked with a cross contains the prize queen that won the $5.00 prize at the Southboro Grange Fair, Sept. 23, 1910.

JOHN L. BYARD.

Marlboro, Mass.

Indexed

D. A. JONES DEAD.

Founder of The Canadian Bee Journal Passed Away After Brief Illness.

For Nearly Half a Century He Worked for His Town—Held the Office of Postmaster During Most of His Residence—Was Charitable and Kind and Is Deeply Mourned.

Died, at his residence in Beeton, Sunday, November 20, 1910, David Alanson Jones, in his 75th year.

Although it was known he was very ill, the news of the death of Mr. D. A. Jones on Sunday morning came as a shock to everyone in town. He had always been an active and energetic man, both mentally and physically, and for some months was troubled with a weakness of the heart, and the immediate cause of his death was angina pectoris.

Deceased was born in the Township of Whitechurch, and spent his younger days on his father's farm. In the year 1864 he came to Beeton and in partnership with his brother (Senator L. M. Jones) built a store and commenced a general mercantile business which was continued for a number of years, when his brother withdrew from the business and went to Brantford, and Mr. Jones leased the store, leaving him free to form a company and start the business from which Beeton derived its name and which gained him the title of "The Bee King of Canada." The company was known as the "D. A. Jones, Limited," and a large factory was erected for the purpose of manufacturing all kinds of bee supplies, and also sashes and doors. Employment was given in this factory to a number of men the year round. Also in connection with their factory several apiaries were located in various parts of the township and during certain seasons the bees were moved to "Jones Island," on the east shore of Georgian Bay. While at the head of this firm Mr. Jones travelled extensively, making a trip to Palestine and Cyprus to study the condition of bees and to see if they would be suitable to this country. He was the first one to import the Italian queen bees into America, and also shipped bees to all parts of the world. Students came here from various parts of Canada, the United States and the Old Country to study the management of bees. He was the sole exhibitor of honey at the first Industrial Exhibition at Toronto, and was a past president of the Canadian Bee-keepers' Association. When he was actively engaged in this industry he also published The Beeton World, the Canadian Bee Journal and the Canadian Poultry Journal.

During his early residence here he bought a tract of land which now comprises part of Beeton. This land was surveyed into plots and he laid out the streets of the village and planted the beautiful shade trees which now adorn the streets and will stand as monuments to his energies for some time to come. His whole aim was given to the building up of the town. How much the community owes to him it is impossible to estimate. His many charitable acts and

kindnesses will never be forgotten, but he is gone and another name is stricken from the ever-lessening roll of our old settlers. His very last act in life was to send a consignment of clothing contributed by himself and others to poor settlers in Parry Sound district, with whose conditions he was personally familiar.

In politics Mr. Jones was a strong Liberal and on two or three occasions he conducted exploring parties in the north country for the government, penetrating the wilderness from the main line of the C. P. R. near Sudbury, and on one trip going through Hudson's Bay as far north as Baffin's Bay, enduring great hardships.

He had been a life-long Presbyterian and contributed largely toward the erection of the Presbyterian church here. When the contents of the will is made known it is expected that all religious denominations and the citizens generally will be benefited by a provision made for the erection of a mansoleum in the cemetery.

He had been postmaster here almost continuously since his arrival in town, 46 years ago.

Shortly before coming to Beeton he married Jessie Macpherson of Whitby, who predeceased him only two and a half years. A little over a year ago he again married, his second wife being Frances Barton, of Toronto, who survives him. He had no family. One sister, Mrs. Dougherty, of Manitoulin, and one brother, the Hon. Senator M. L. Jones, of Toronto, are also survivors.

The funeral was held on Tuesday afternoon. The services at the house was conducted by his pastor, Rev. H. D. McCuaig, assisted by Rev. Crawford Brown, of St. Andrew's Church, Toronto; Rev. J. W. Fox, and Rev. O. J. Nurse, of town. Interment was made in the Presbyterian cemetery.

The pallbearers were: Messrs. W. J. Bell, J. T. Barton, R. J. Barton, R. Semple, Wm. Camplin and W J. Anderson.

Among the relatives from a distance who attended the funeral were: Senator L. M. Jones, Rev. Crawford Brown, P. Jones, W. H. Dickson, George Dickson, Dr. S. Barton and J. Dougherty, of Toronto; J. Button, F. Button, E. Button, L. Dougherty, and M. Sylvester, of Stouffville.—The Beeton World.

SAVING QUEENS OF WEAK COLONIES—METHOD OF SPRING FEEDING.

T. Balmer.

It will be noticed in most all bee journals that all bee-keepers are advised to double up weak colonies in the fall, first killing one queen, or letting the queens fight it out. There is no need for destroying young queens in the fall. I have a number of wire screens that I use for introducing. They are made of wire screen, cut the size of the hive with $\frac{3}{8}$ x $\frac{7}{8}$ pieces of wood round the edges; a piece of tin fastened on the corners to make them stiff, making them resemble a queen excluder. Give the bees a little smoke, take the lid off one, put on the screen, place the other on top, minus the bottom board. If the weather be warm, leave them two days, or in cool weather, four days or a week, it will do no harm. Then prepare another hive with a division board in the centre—be sure to have it fit so no bees, or queen, can get past it, without going round by the entrance. I have never known a queen to pass round by the entrance. Move the hives of bees back, place the empty hive with division board on the old stand. Now lift out a frame with a queen on, and place it on one side of the division board, and the other frame with the other queen on the other side of division board, the rest of the bees can be shaken so half the bees can fall on each side of the division board, and give them what frames you wish, or each lot of bees can be placed by themselves; I have had equal success both ways. In closing the entrance, be sure that the division board will be in the centre of the space left open. I have always found both queens in the spring with an equal number of bees. If a person finds a queenless colony in the spring all he has to do is to take out a frame with the queen on, and place it in the center of the queenless colony, without

any other ceremony, as bees will always accept a queen in spring without any introducing, especially if she be on a frame of brood and bees. Now, lift out the division board and adjust the frames, or the queens can be left in the one hive until it becomes too strong, then make a nucleus of one and run the other for honey.

As all bees are now placed in winter quarters, (or should be), it might be well to exchange ideas and practices through the Bee Journal, about spring work, as we are all willing to grasp at kinks and short cuts. I will start the ball rolling herewith.

Spring Work.

The first thing is to see that all have enough stores. If a bee-keeper knows in the fall that there is no excess of pollen clogged combs in any one hive, as a practical bee-keeper will, he can go along hefting each hive, instead of opening every hive, and chilling the brood. When I find any that is too light, a little piece of wood or stone is placed on the hive to mark it, and then take a large milk pan (or anything smaller), half full of syrup, and a tin cup, and go to those requiring feed, lift the cover, pull back the cloth, until I am able to see the cluster, take out the frame next to the cluster, place one end of the frame in the pan of syrup, hold the other end in my left hand on an angle of about 45°, dip up the syrup with the cup and distribute it along the upper end and let it run down the comb; it will fill every cell as fast as I can pour it on; slip the frame back into the hive. Do the same with the other side of the cluster, if required.

I have been using this plan now for eight years, and I doubt if there is any plan to equal it for early feeding, if there is I have not seen it in print. It is done quickly, saves the bees all their energy, without running much risk of chilling brood. The above plan is used providing I have no sealed stores to give.

Later on comes stimulative feeding after fruit bloom. I have very little of that to do here, but when I have, as was the case last year, about the best plan, to my notion, is to place feed boxes in different (sheltered) places, and give as much feed (warm), about 10 a.m. as they will clean up by 3 p.m., so they will all be home rejoicing at 4 p.m., before the evening begins to get cool.

BEE-KEEPING IN SOUTHERN CALIFORNIA.

Editor of Canadian Bee-Journal:

Dear Sir,—Having been requested by many bee-keepers of our fair province of Ontario for my opinion and views regarding the bee-keeping industry of Southern California compared with the Province of Ontario, Canada, (there is also an Ontario in California, but it is only a county), I considered it my duty as a Canadian and also as a member of the O.B.K.A. to take up the pen once more, although having years ago dropped it for want of time.

About one year ago I landed in the Golden State, and took up my abode in the fair city of Los Angeles, (the city of the angles), and I assure you, gentle reader, it was a vast change from Eastern Ontario. Beautiful sunshine, fruits and flowers on every side. All the languages in the universe are spoken in Los Angeles. I would take the train and run out twenty to seventy-five miles and back, each trip in a new direction for several days in an endeavor to select a pretty and convenient location for a new home, without taking any particular notice as to bee pasturage. Finally I located near Watts, in Willow Brook on the P. E. R. R., about half way between Los Angeles and Loney Beach, nine miles to either city—a lovely spot in a fine community— and sent for Mrs. B. to come and enjoy our new home in sunny California. But as her health

failed her she w
our home in
to my bee-keepi
was short lived
colonies of prett
which I took for
be pure bred in
follow me and st
the yard.

I received a
pound of honey
other black stuff
buckwheat honey
enough. So I n
of this Province
have ever been t
that part of Cal
tion of honey. H
I do believe that
the great orange
years an abunda
vest, as in my ra
very fine looking
the pleasure of
leading bee-keepe
annual meeting in
Prof. Cook, Mr.
others, as also o
L. Cogshell, of
my next letter I
reasons why I
adapted for bee-
California, and
meet my Waterlo

So wishing all
and Prosperous N
Brother Hurley.

B. C. A GOOD

When to Feed M
Pollen—Should

Could you kind
next issue upon t

(1) How and w
bees?

(2) When bees
stands in winter,
so arranged that

failed her she was obliged to return to our home in Chard again. As to my bee-keeping experience there it was short lived and no profit from 17 colonies of pretty little yellow bees, which I took for Italians, but proved to be pure bred imported. They would follow me and sting me two acres from the yard.

I received a surplus of about one pound of honey per colony, or some other black stuff—blacker than Laing's buckwheat honey, and that was black enough. So I must say that any part of this Province of Ontario that I have ever been through, is far ahead of that part of California for the production of honey. However, I must say that I do believe that along the foot-hills near the great orange groves, there is some years an abundant crop of honey harvest, as in my rambles I have seen some very fine looking apiaries and I also had the pleasure of meeting nearly all the leading bee-keepers of California at their annual meeting in Los Angeles, including Prof. Cook, Mr. Benton and scores of others, as also our old time friend, W. L. Cogshell, of New York State. In my next letter I will try and give my reasons why I consider Ontario better adapted for bee-keeping than Southern California, and then I will expect to meet my Waterloo.

So wishing all your readers a Happy and Prosperous New Year, not forgetting Brother Hurley.

W. J. CHARD.

B. C. A GOOD HONEY COUNTRY.

When to Feed Meal as a Substitute for Pollen—Should Bees Face the South.

Could you kindly inform me in your next issue upon the following points:

(1) How and when is rye meal fed to bees?

(2) When bees are packed upon their stands in winter, should the opening be so arranged that the sun strikes into the hive in the warmest part of the day?

So far it has not frozen here except a little at night.

One of my hives is so placed and the others is not. In the first the bees were flying to-day in large numbers, while none came out of the other.

I notice in your November number a reply to correspondent from "Devon," England, in which B. C. is depreciated as a bee country. If Mr. Robinson, the authority, of Victoria quoted, is speaking of coast conditions, would say that the Victoria climate is not representative of the whole of B. C. The Kootenay and Okanagan for instance, have ideal climates, and wherever the country is well cultivated the pasture is abundant for bees.

I can refer you to successful bee-keepers in West Kootenay.

Among the advantages of this country are: Absence of disease; scarcity of bees, hence good price and demand for honey, owing to small local production.

Hoping that B. C. will not be ignored in future.

J. C. CAMPBELL.

[1. Meal should be fed to bees only where there is an absolute need. There must be a dearth of pollen before this plan is resorted to. A good plan is to spread it out on a sheet or horse blanket outside near the bees on a day when they can fly freely. They will take it up when no other pollen is to be had.

2. By all means let them face the south, when it is possible, or south-west In the early days of March, however, when the sun shines brightly, while yet the air is cold, it is best to shade the entrances, as many bees come out on such cold days and get chilled, and thus are unable to return to the hives. But later on in April and May, the sun at the entrance is very helpful.

Thanks for your valuable information in reference to British Columbia and the Okanagan Valley, as a good honey country.—Ed.]

SOME ADVICE TO BEGINNERS.

Indexed James Sackville.

Some little time ago I told you I might some time send you a little contribution for your journal, and encouraged by your friendly invitation, I now sit down to the pleasant task.

It is about thirty-five years since I comenced bee-keeping. My father paid $5 for a "Thomas Hive," and the right to make them; and he did make quite a number, frames and all, by hand. This five dollar hive would now be thrown on the bon-fire pile.

I have been reading bee books and journals for many years; and feel that I owe a debt of gratitude to the many writers who have helped us with a little of their maturer experience, and frendly hints; and it would be a pleasure to me could I drop a word that would be an encouragement or help, to some who are just beginning to grope their way amid the maizes and mysteries of bee-keeping. So I will just touch upon a few, of what appear to me to be the most important points in my experience, and perhaps a few of the most disastrous mistakes, and blunders to be avoided.

A beginner should try and find out what kind of a hive will suit him best, and then have them all alike, unless he wishes to experiment with some other kind—as for example the Danzenbaker hive for comb honey. With a large number of colonies, so that you can have a dozen or 20 hives with frames of the same dimensions together, it is not so bad. The brood frame is the all essential thing to have alike. You may have 8 frame, 9 frame or ten frame without any inconvenience; but to have a variety of brood frames, (or extracting either), that are not interchangeable, is a great nuisance, and often a vexation. I like the Danzenbaker for comb honey, (only you must have extra combs of honey reserved for winter; because they store nearly all above); but for extracting I rather agree with Friend Hutchinson in giving a place to the old standard Langstroth hand-spacer.

To have a lot of unnecessary drone comb is a great waste of bee-energy, and a corresponding loss in honey. To avoid this use full sheets of foundation, and when D. C. has been built in brood combs, cut it out with a thin sharp knife, and fit neatly in its place worker brood. First cut out drone comb, then lay the comb on the piece to be fitted in, and mark and cut exactly, and the bees will often finish up the job so nicely that you can scarcely discern the joining.

Now, for a few of the mistakes or blunders; but first I will give you the **root** or **cause**, and then some of the fruit, or effects following.

First cause—Neglecting to do the right thing at the right time.

Second cause—Want of care, and thoroughness, in doing the necessary things.

Effects—Poor colonies allowed to remain that should have been doubled up or re-queened.

Queenless colonies allowed to remain till laying workers begin operations.

Queen cells hatching out, and valuable queens killed or absconding with swarms.

A lot of unnecessary drones hatching out consuming a lot of valuable honey, and deteriorating the stock in the yard.

Covers with cracks, letting the rain in, that ought to be rain-proof.

Supers full of honey, and bees idle, or preparing to swarm.

Valuable queens killed in introducing —with many other items, which I will leave for my brother and sister bee-keepers to fill in.

I like the Italians; as a rule they are quiet, and gentle to handle, good workers and contented in the cellar, (of course there is a great difference in col-

onies); but some of the "crosses," (some say the drone determines the temper), are well named "nervous little brats"; and "cross" is a very mild description of their temper. Generally they are great honey gatherers, and equally good robbers; and the only remedy I know of when they get beyond endurance, is to nip off the queen's head, and introduce a more peaceable mother.

There is something very fascinating about the bee industry, when once the "fever" smites you, and you seldom recover till you secure a few colonies; and then, often, the spell only holds you the more firmly.

Dr. Miller says: "There is no danger of monotony in our calling," and that after nearly 50 years he still lies awake nights studying new bee problems, as he did more than forty years ago. I often think that here is a field that our young men and women, who are asking the question: What shall I choose for an occupation? would do well to turn their attention to. Scattered all over the country are the rich clover and buckwheat fields, and vast plains, bedecked with plants, and flowers, with honey yielding trees of the forest, yielding their precious nectar, and often "blushing unseen," and "wasting their fragrance on the midnight air," only waiting for the skill and care of the bee-keeper with his or her attendant industrious hosts, to gather what would otherwise be lost, and then again to distribute "their luscious horde" in the homes of rich and poor, bringing an increase of wealth, health, and happiness, and leaving himself a good share of the same.

And if it is not a "get-rich-quick" business, there are other compensations, fully known only to the enthusiast, and often swelling the pocket-book quite as much as some other less pleasant, and more laborious occupations. And then there is a pleasure that far-exceeds the other, when the devout heart can look up from the unfathomable mysteries of nature to nature's God, and with the Psalmist exclaim: "O Lord! how manifold are Thy works? In wisdom hast Thou made them all; the earth is full of Thy riches." And then to think that this "High and Lofty One" is the same that descended to Bethlehem's manger; whose holy feet trod this sin-cursed earth, as He "went about doing good"; whose blood mingled with the sweat that burst from His burning brow, and flowed by the "wicked hands" of sinners, for whom in love He willingly "poured out His soul unto death, and was numbered with the transgressors," and then to say from the heart:

"Me to retrieve from Satan's hands,
Me from this evil world to free,
To purge my sins, and loose my bands,
And save from all iniquity;
My Lord, and God, from heaven He came;
I dare believe in Jesus name."

"Lamb of God, when we behold Thee,
Lowly in the manger laid,
Wand'ring as a homeless stranger
In the world Thy hands had made,"
When we see Thee in the garden,
In Thine agony of blood,
At Thy grace we are confounded,
Holy, spotless, Lamb of God.

When we see Thee as the victim
Bound to the accursed tree,
For our guilt and folly stricken,
All our judgment borne by Thee,
Lord we own with hearts adoring,
Thou has loved us unto blood,
Glory, glory, everlasting,
Be to Thee, Thou Lamb of God."

Bewdley, Ont., Dec. 23, 1910.

KIND WORDS.

I enclose money order to renew my subscription to The Canadian Bee Journal.

I enjoyed very much your talks at the "National" meet, and wished there were others who felt as enthusiastic.

Congratulating you on the fine paper you are publishing, in which I got suggestions last year that I believe will help me greatly this coming season, I am,

Yours very truly,
JAMES A. SMITH,

Hartford, Conn, Jan. 14, 1911.

AGRICULTURAL AND EXPERIMENTAL UNION—JANUARY, 1911.

Apicultural Division—Results of the Experiments on the Control of Swarming

Morley Pettit, Provincial Apiarist.

The Apicultural Division of the Agricultural and Experimental Union was established in 1889. The first co-operative work done by it was in 1891, under the direction of Messrs. Holtermann, Husband and Haight. An experiment on the use of comb foundation in sections was sent to twenty-four bee-keepers. Twelve reports were received that year. The experiment was continued in 1892, but was not reported. In 1893 a self-hiving device for swarms was sent to twenty-five experimenters. Eleven reports were received. In 1894 the experiments were continued with the self-hiver, and some five-banded Italian queens were distributed for testing. In 1895 nine reports were received on the merits of the five-banded Italians. No co-operative experiments were conducted from that time until 1910.

At the beginning of that year the Apiculture Department was organized at the Ontario Agricultural College for instruction and experimental work. Steps were immediately taken to conduct co-operative experiments. A prospectus and application blank were sent to the mailing list of bee-keepers. In this it was stated that for the present at least, not material but methods would be distributed, and the first method to be tested would be one for the Control of Swarming. Applications were received for this experiment from three hundred bee-keepers representing nearly every county in Ontario, as well as most of the other provinces.

This most gratifying response can be attributed partly to the wide-spread interest there is at present in the work of the Experimental Union, partly to the interest in bee-keeping as a business which is awakening all over the country, but more especially to the fact that the experiment announced, "The Control of Swarming," is one in which every progressive bee-keeper is interested.

There are three great problems in bee-management in this country, viz., Brood Diseases, Wintering, and Swarm Control. While the first two are very real, the swarming problem comes home to every bee-keeper whether he realizs it or not. If his bees build up strong enough to gather a good crop of honey they are sure to develop the swarming impulse if left to themselves. If he cannot control this impulse to swarm the bee-keeper must either spend a great deal of time watching for and hiving swarms, or else lose enough swarms to take the profit off his bee business. If he has any other work the swarming is more than likely to take place at the most inopportune time, e.g., when he is busy in the hay field at the back of the farm, or when he is on the way to church. Now all this is very expensive and quite unnecessary.

There is nothing on the farm which requires so little care in proportion to the returns as the bees. This is why they are so often kept at a loss; because the care they need is so small that it is utterly neglected. They require only a little attention, but what they do require they must have. It is to call attention to this bit of work, and to help fit it into its proper place among the other farm duties, that these co-operative experiments are undertaken.

The management of an apiary for honey must be approached in the same business-like manner as the management of a dairy herd for milk. There is no more "luck" or "chance" in the one than in the other. Scientific principles govern both. Failure in either is due to some definite cause, which must be discovered and mastered before success can be attained.

The first principal in handling any live

stock is to be master of the situation. One cannot get full value from a horse until it is completely under control. It is the same with bees. To be a successful bee-keeper one must be a BEE-MASTER; not in any cruel sense any more than with a horse. To manage a horse one must know a horse from A to Z. To manage bees one must study their habits and disposition, and learn as far as possible why and how they do things. This takes time, but it is well spent.

Experimenters were fully warned of the difficulties connected with this sort of experimental work. Because of the great number of variable factors to be considered, experiments in Apiculture are, of necessity, quite complicated. The necessary equipment, however, is very simple, consisting of a good smoker to control the bees, a veil to protect the face, a hive-tool of some sort for prying loose frames or supers, and a quantity of empty combs or wired frames with full sheets of foundation. It is necessary also to have an average of at least two extracting supers for each hive.

To control swarming, one must inspect the bees often, so as to know their condition all the time. This requires system, Here again a comparison may be drawn. Other live stock require attention two or three times a day, seven days in the week, 365 days in the year and 366 days in Leap Year. It is different with bees. We don't have to feed them or groom them, or milk them or gather their eggs, we don't have to clean their stables or fumigate their coops, or give them a ball or a drench; but we DO have to give them SOME attention regularly, and as certain hours are set aside for the feeding and milking, so a certain day in the week or a part of that day should be set aside for the apiary work.

For the Experimental Group an even number of colonies is chosen, preferably not less than ten nor more than twenty. They should be as nearly uniform as possible in every way, having reference to quantity of bees, brood and honey, race of bees, age of queens, style and color of hives, etc. The group is divided into two equal uniform lots, styled lot A and lot B. Throughout the whole season lot B is managed the same as the experimenter would have managed all his bees if he had not heard of the experiment. Lot A is managed according to instructions.

Let us suppose that Monday is "Apiary Day." On the first fine Monday in April or May the hives are overhauled and the experimental group chosen, and divided into the two lots. Every Monday after the beginning of fruit-bloom each colony of Lot A is examined to note the progress of its development, and give necessary treatment. As soon as each brood chamber is full of bees an extracting super is put on. All strong colonies should have supers in fruit bloom. As the strength of each colony increases the entrance is enlarged, until about the begining of the clover flow in June when all, except weaklings, should be given an entrance the full width of the hive and an inch and a quarter deep. At that time each colony should have a super, and before it is half filled with honey another placed between it and the brood chamber.

There are two things which one must learn in order to control natural swarming:

1. **The conditions which usually cause it.** These must be learned so that when one sees them one will know that the bees are almost sure to get the swarming impulse soon if they have not got it already. When found they must be removed as far as practicable.

2. **The preparations a colony generally makes before it swarms.** When these are known in every stage, the apiarist must know, at whatever stage he finds them in a hive, what to do to stop them, and keep the colony contentedly at work without swarming.

There must be no confusion between preparation for swarming and causes of swarming. Preparations are not causes. To hinder preparations without removing causes is useless. To remove after preparation are well under way is not nearly so satisfactory as to prevent the causes even before they occur.

Some of the **causes** of swarming are the following: A crowded condition of the super or brood chamber, a continuous but slow flow of nectar, too much hot sun and not enough ventilation for the hive.

The **preparations** for swarming are as follows, and in the order named: Drone brood, queen-cell cups, eggs in cell cups, larvæ in cell cups, capped cells.

The method of management to prevent natural swarming consists in judiciously from week to week studying the conditions of each hive, as a doctor studies each individual patient, and letting alone or giving treatment as each case requires. Experience enables one to do this rapidly and without the detailed examination which the novice must use. A knowledge of the habits of bees is necessary, and will be acquired by this work. For example, bees never prepare to swarm when there is no honey coming in. Bees never try to rob when there is honey coming in. Yet one experimenter displayed his ignorance of these facts by stating that he was sometimes prevented from examining all the hives for the swarming impulse by the bees trying to rob. A doctor might as well say he could not examine a child for infantile paralysis because it was running about so that he could not catch it.

In the weekly examination when conditions which would cause swarming are discovered, they must be removed or counteracted in some other way. When preparations for swarming are found the factors known to be opposed to swarming must be increased, and the preparations removed if far advanced.

The essentials for swarm control are room, ventilation and shade, given in time. These all can be given in various ways which are fully described in the circular of instructions sent to experimenters.

Reports on the experiment were received from sixty-two beekeepers, and a number of others wrote saying that for one reason and another they were unable to take up the experiment this year but would be in better shape for the work next year.

The ones who reported are pretty evenly distributed over Ontario and represent all classes of bee-keepers, from the one-hive man to the man with 250 hives. The figures show a marked increase in the number of hives kept by them. In Spring, 1909, they aggregate 1,774 hives, an average of 28.6 hives each; Fall 1909, aggregate 2,384 hives, an average of 38.5 hives, each; Spring, 1910, aggregate, 2,155, an average of 34.9 hives each; and Fall, 1910, aggregate, 2,991, an average of 48.3 hives each. Thirty-seven experimenters began the season of 1910 with not more than 25 hives, fourteen had between 25 and 50 hives each, five had between 50 and 100 hives each, and six had over 100 hives.

The style of hives most commonly used is the 8-frame Langstroth; thirty-six experimenters used this style. Ten use the ten-frame Langstroth; five use the Richardson hive; three the Jones hive, and eight use miscellaneous varieties, mostly of their own make. Thirteen said they were not satisfied with the hive they were using, and if starting again they would use a large hive of standard make, nine choosing the ten-frame Langstroth, three the twelve-frame Langstroth, and one the Richardson.

As to the races of bees, the Italians are given the preference. Forty-nine experimenters have Italians and their crosses, eleven have Blacks and two have Carniolans. There is as much room for

difference of opin
as of other stock
that some races a
tain diseases that
ample the disease
Brood, which is
tions of Ontario.
Italian bees can
Black bees, which
commonly kept by
bee-keepers, are si
istence in these s
while the Italians
piling up large cr

The honey crop
menters for 1909
128,621 pounds, a
average of 72.5 p
197,533 pounds, a
91.3 pounds.

This increase c
partly by the fac
1910 was some bet
and partly by th
given to the bees
aroused by the exp

Unfortunately a
bee-keepers failed
periment, because
same as the one
unavoidably reduce
from the Experimer
given farther down

One thousand sev
nine pounds of bee
an average of .81
This is an importan
production which
and wasted. The p
into commercial for
culty, but this ma
come; and the resu
to 50 cents per pou

It is encouraging
taken in this work
keepers; thirty of
menters have had
than ten years. T
teen from 11 to 20 y

difference of opinion about races of bees as of other stock, with the exception that some races are more subject to certain diseases than others. Take for example the disease called European Foul Brood, which is epidemic in some sections of Ontario. Only certain strains of Italian bees can resist this disease. The Black bees, which unfortunately are so commonly kept by the rank and file of bee-keepers, are simply wiped out of existence in these sections of the country, while the Italians of the right strain are piling up large crops of honey.

The honey crop reported by experimenters for 1909 is, in the aggregate, 128,621 pounds, a per-colony-spring-count average of 72.5 pounds. For 1910 it is 197,533 pounds, a per-colony average of 91.3 pounds.

This increase can be accounted for partly by the fact that the season of 1910 was some better than that of 1909, and partly by the increased attention given to the bees because of interest aroused by the experiment.

Unfortunately a number of the best bee-keepers failed to complete the experiment, because their method was the same as the one described. This has unavoidably reduced the average returns from the Experimental groups, which are given farther down in this report.

One thousand seven hundred and forty-nine pounds of beeswax was reported—an average of .81 pounds per colony. This is an important by-product of honey production which is largely neglected and wasted. The process of rendering it into commercial form presents some difficulty, but this may be cheaply overcome; and the result is worth from 30 to 50 cents per pound.

It is encouraging to see the interest taken in this work by the younger bee-keepers; thirty of the sixty-two experimenters have had bees for not more than ten years. Then there are fourteen from 11 to 20 years, ten from 21 to 30 years, and eight have had bees for over 30 years.

With reference to the difficulties encountered in their bee work, the one most frequently noticed is that of **wintering.** Twenty-two experimenters have reported that this is their chief difficulty, eighteen have most trouble with **swarming,** and nine are troubled with **lack of time,** to look after the bees. These can likely nearly all be turned over to the swarming difficulty, as that is what takes the most time in the busy season. Some are so fortunate as to have no troubles whatever.

About twenty reported that they had a method of their own for the control of swarming. Half of this number have practiced a similar method to that described in the experiment. Four experimenters have various methods of dividing colonies when they get nearly strong enough to swarm. This method is really artificial swarming and is not prevention of swarming. It gives increase as well as honey, but always at the sacrifice of honey. There is no question that "in union there is strength," and the working force of each colony should be kept together for best returns in honey. Three experimenters stated that they gave plenty of room at the proper time and had no trouble. This is really all that the method described for the experiment amounts to, except that it includes systematically watching for the proper time to give the needed room both upstairs and down. It also gives a weekly drill on internal conditions of the hive, and a knowledge of the habits of bees, which is so necessary for successful bee management. It is surprising what a number of men have kept bees for years and have never seen a queen bee, and would not know the difference between healthy brood and diseased brood. One experimenter attempts swarm control by removing queen cells and finds this method not always suc-

cessful. Removing queen cells after they are built is about as good as locking the stable after the horse is stolen.

What might be called full reports were received from twenty-five experimenters. The average number of colonies which these experimenters used in experimental groups is 11.7 Each group accordi g to instructions was divided into two lots, Lot A and B, having an average of 5.8 colonies in each lot. Of the colonies in Lot A, 18 per cent., cast first swarms. Of the colonies in Lot B, 33 per cent. cast first swarms. It will be seen from this that while the experimenters could not be expected to entirely prevent swarming the first year, they have met with a marked degree of success in controlling the swarming impulse, reducing it from 38 per cent. to 18 per cent.

As a result of this control of swarming and the extra attention given to the colonies of Lot A, the average return in honey was 83 pounds per colony as against 75.3 pounds per colony of Lot B. In addition to this there was an average number of seven combs per colony built in Lot A, and five combs per colony in Lot B. Of those who carried the experiment through, ten experimenters said that the colonies of lot A, are in better shape for wintering than Lot B. Thirteen said they could see no difference and two failed to report on this point.

Perhaps the most interesting part of these results is the report on the benefits derived by the experimenters from the work. Some of these are the following

"Closer attention and practical experience." "Your method saves half the work." "Much more intimate knowledge of bees." "I do not know, I want to try this again. It is hard for me to drop my method or to think some other system is better until I try it again." "More interest." "More knowledge." "I have the bees under my own control." "Better knowledge of bee-keeping." "More honey for more work." "More system in work." "Increased knowledge." "Learn to systematize." "Saves watching for swarms."

Some who were unable for various reasons to carry out the details of the experiment stated they have received benefit. One man says that he has derived no benefit whatever. He examines the bees in the spring to see if they are all right and lets them alone. It is interesting to note from his report that his returns in honey are far below the average of those who gave their bees attention.

After having made the test carefully according to direction, six experimenters though their own method was just as good, if not better. Two were uncertain and wanted to try it again. Seventeen out of the twenty-five said they very decidedly prefer the method prescribd in the Experiment.

Upon the whole the response has been very gratifying even though the number of atisfactory reports is small. The estimate of good done by the wide distribution of a circular describing how to control the most unruly impulse of these faithful workers is not limited to this visible result. Bee-keepers were taken by surprise and quite unprepared. Any number of men wrote that by the season of 1911 they will be ready to go ahead with the experiment.

The plan is to send out the same experiment to those desiring it in the spring, and also experiment No. 2, which will be for the prevention of natural swarming in the production of Comb Honey.

84 YEARS AND STILL AT IT.

You have not heard from me for a long time. The last paper I sent you never appeared in the Journal. I suppose it was too long a paper and would intrude too much on your space, and as it did not contain much bee matter you chucked

it in the waste basket. I am 84 years old now, and still keeping bees. Two years ago last spring I advertised my bees for sale in The Canadian Bee Journal. I had a score of bee-keepers write me wanting to buy. I sold all but ten colonies for a fancy price. I was told ten colonies would be no good. I said I would keep them. The result was I increased those ten to sixteen, the first first season. They all stored plenty of honey to winter, and gave me a lot of section honey as well. I packed them in clamps outside with dry sawdust. They all came out in the spring in good shape. The second season I increased to 25 colonies. They all stored plenty of honey to winter on, and gave me about 50 lbs. of section honey per colony. These 25 colonies all wintered—did not loose one. The third season—last season—I got no increase; nevertheless, the 25 old colonies stored honey enough to winter without feeding and gave me about 50 pounds of section honey per hive. It was not a good honey season with us last year. We have these 25 colonies packed up as usual and we expect they will come through all right in the spring. So you see the old pioneer bee-keeper is interested in keeping a few bees yet.

Bees around this vicinity stored about two-thirds of a crop, with but very little increase.

GEORGE OTT.

Arkona.

One of the Yards of Mr. A. A. Ferrier, Renfrew, Ont.

CONSOLIDATED REPORT OF INSPECTION OF APIARIES FOR 1910.

Under Province of Ontario Foul Brood Act Prepared by Morley Pettit, Provincial Apiarist, Ontario Agricultural College, Guelph.

(Continued from Page 380 Last Month)

No. 9, Halton, Peel and Dufferin. Inspector, Arthur Adamson, Erindale.

"There are a great many farmers, who keep a few bees, that need educating along these lines. I find a great many, in fact, most of them, very anxious to learn. In my mind it would be a good idea to have meetings through the country during the winter and get these people interested. I think it would assist the inspector also in his work.

"I think the 'certificate of health' for shipping honey might work well. One apiary that I inspected in the Town of Oakville, late in the summer, was badly diseased, evidently caused by diseased honey brought into the town. There being no disease near; this is the only way I can account for it.

"Number of days inspecting 18, number of apiaries inspected 71, number of apiaries diseased 25, number of colonies diseased 105, number of colonies inspected 2,414."

In addition to the inspector's report, we have the following valuable communication from H. G. Sibbald, the former inspector.

"I do not think that Foul Brood is on the increase in the district allotted to me for inspection work in 1908 and 1909. What I deplore is that many, most of those once having the disease amongst their bees, fail to entirely eradicate it. It keeps breaking out again and again. The financial loss is hard to figure out. It takes time for each bee-keeper whose bees are diseased slightly to watch for it —time to cure—time to melt wax, disinfect, etc. There is also the almost total loss of the colony treated for that season. If there are 300 infected colonies each season, the honey loss would be $1,500, and time quite as much more.

Requiring a "certificate of health" before selling bees or moving them from one district to another would do good.

"The best suggestion I could make as to the carrying out of the inspection work, would be to have the inspectors burn more, and have the provisions of the act more rigidly enforced. My own experience with the disease leads me to the conviction that the sudden death cure is the only sure cure and the cheapest in the end. "Why try to cure so anxiously when increase can be gotten so easily from sound clean stock."

No. 10, Simcoe and Muskoka. Inspector, Henry Johnson, Craighurst.

"I visited 113 apiaries and found that 23 of them had diseased colonies. The number of hives in apiaries visited were 2,153; total hives examined 1,197; total number of hives diseased were 148. Destroyed 12 hives not worth cleaning up, people were all well pleased. I found that a good many people had made sales which had Foul Brood. In some cases I told the man to move the bees back and clean up at once. I only went to one neighborhood were I wasn't called and found Foul Brood there. I visited every apiary, from the time I left home until I got back. I found one hive of A. F. B. in Muskoka. The apiaries are very scattering in Muskoka. Since the season was over I have heard of other localities where Foul Brood was."

No. 11, Ontario, York, Victoria, Durham—Inspector, J. L. Byer, Mt. Joy.

"The season was very unfavorable in the early part, that little work was done at that time. About 14 days were put in, only places that I was requested to visit receiving attention. No attempt at systematic work was attemped—indeed such a thing was out of the question. Nearly all requests were attended to, but little re-visiting was done in September. Foul Brood is under control and nearly wiped out of Victoria County, I believe. Durham had but little of the disease. Ontario County has, generally speaking, not very much disease, and what I know of is pretty well under control. One exception to this statement is a section of country north and west of Uxbridge town—everything has about rotted down there and no apiaries worthy of the name are left. York county has lots of the disease—some in almost every part of the county. Number of apiaries visited 48; number of colonies 782; number examined 568; number diseased 103."

No. 12, Peterboro, Northumberland, Hastings and Prince Edward.—Inspector, W. Scott, Wooler.

"I travelled over the same ground as last year. I found that all the bees had been treated, except one apiary, but very little Italianizing had been done, consequently the disease returned in every apiary and destroyed some of them completely. I found the disease spreading very rapidly; it was more than doubled since last year. The disease now covers fully 400 square miles; besides two outbreaks in Prince Edward County, also two in Hastings County, one in Roden

Township, and on
ship. I think if
encourage the be
ahead of the dise
great deal of loss
effect the Italian
the blacks. I thi
prevented some, i
the moving of be
of the inspector.
the past season,
broken out, caus
bees from a disea
diseased one. Ha
vented it would
two years to trav

I may say that
large an estimate
by disease in my
these figures will b
year as European
ing very rapidly.
covered about 100
present date it co
besides an outbre
County, also in
Ivanhoe.

**No. 13, Lennox an
and Leeds—Ins
ley, L**

"Reports that he
had been reported
which the owner
This year there
and the 12 colonie
and yielded a larg

"Mr. Checkley f
who did not supp
their bees. This
ered a fruitful sou
ports that this ha
in his district."

**No. 14, Renfrew,
Inspector R.**

"The following i
I worked as inspe
days. During tha
apiaries, containing

Township, and one in Huntingdon Township. I think if the Department could encourage the bee-keepers to Italianize ahead of the disease, it would prevent a great deal of loss as the disease does not effect the Italians nearly so badly as the blacks. I think the disease could be prevented some, if the law would forbid the moving of bees except by permission of the inspector. I found three cases, in the past season, where the disease has broken out, caused by the moving of bees from a diseased territory to an undiseased one. Had this moving been prevented it would have taken it probably two years to travel of its own accord.

I may say that $5,000.00, is not too large an estimate for the loss sustained by disease in my district, last year, but these figures will be greatly increased next year as European Foul Brood is spreading very rapidly. Last year (1909) it covered about 100 square miles. At the present date it covers 400 square miles, besides an outbreak in Prince Edward County, also in Hastings County near Ivanhoe.

No. 13, Lennox and Addington, Frontenac and Leeds—Inspector, J. B. Checkley, Linden Bank.

"Reports that he found an apiary which had been reported diseased last year and which the owner had refused to treat. This year there was no disease present and the 12 colonies had increased to 41, and yielded a large surplus of honey.

"Mr. Checkley found many bee-keepers who did not supply water and salt to their bees. This negligtnce he considered a fruitful source of disease. He reports that this has been a banner year in his district."

No. 14, Renfrew, Lanark and Carleton—Inspector R. J. Stead, Lanark.

"The following is my report for 1910. I worked as inspector of apiaries for 24 days. During that time I inspected 87 apiaries, containing 2,093 hives. I found European Foul Brood in 16 apiaries, and in 181 hives; almost all the Foul Brood I found was in the Townships of Gloucester and Fitzroy, and the City of Ottawa and the Town of Arnprior. I told the parties having Foul Brood that I would visit them again to see that my instructions were followed out, but I did not have time to do so.

"I consider the financial loss caused by European Foul Brood will amount to $2,000.00, in the territory I have inspected this summer, and I have only been over half of my territory. I would suggest that an Act be passed compelling every person keeping bees to take out an annual license and the money so derived go towards paying for the loss of diseased bees and hives destroyed by the inspectors, and have the inspectors destroy all infected black bees and badly infected Italians."

No. 15, Russell, Prescott and Glengarry—Inspector, Alex. Dickson, Lancaster.

"I found my territory free from disease, but at the same time my advice is to continue the inspection work. It is surprising how glad they are, as a rule, to have their bees inspected. My territory is very large. I should be allowed more time to do the work justice. From the following figures given, it will give you an idea of my work: Number of colonies 5,225; number examined by me 1,348. With only five or six exceptions all had them in frame hives. The inspector of this territory should be allowed at least 28 or 30 days."

No. 16, Grenville, Dundas and Stormont—Inspector, Homer Burke, Tayside.

"I must say that I only put in two days work this year, and I visited the sections where Foul Brood was the season before. The year before I visited nearly all the sections in my district and found no disease. Now what we want is to stamp the disease clean out of the province, and as we only have so much

money for inspection work, I think we should use it in the sections where it is needed most. I do not know of any better plan for stamping the disease out than what the department is now taking, only spent most where it is needed most."

Points to be Noted.

1. The Quarantine Stations recommended by two of the Inspectors.

2. Indifference, ignorance and carelessness which might be overcome by education, short courses, and more particularly apiary demonstrations.

3. The suggestion to tax or license bee-keepers. I have maintained for some years that bees should pay taxes like any other property.

4. More rigid enforcement of the act.

5. Inspection of bees coming into the country.

GERMAN TRANSLATIONS.

Regress of Bee Culture.

Jacob Haberer.

In the last fifty or seventy years, bee culture has made enormous progress in theory and practice. Many important questions have been solved since 1845, when Dizerzon made the discovery that worker bees are able to lay eggs which produce drones, from which he drew the conclusion that the drones are reared from unfertilized eggs. Many new inventions have come into practice since. The moveable frame, the artificial comb foundation by Mehring; the honey extractor by Major Krushker—all these contributed to a greater result in the culture of bees. A great many workers in bee culture both in science and practice have been produced, and a high standard is reached by the press on apiculture. And still a regress in the bee industry has to be noted. The number of colonies in the German Empire was in 1873, 2,333,584; 1883, 1,911,797; 1900, 2,605,350, 1907, 2,594,690—a reduction of 10,660 colonies in 7 years. In Luneburg, where the largest number of colonies are kept, that is compared with other parts of Germany, they had in 1873, 75,279; 1883, 62,000; 1892, 62,083. By travelling through the country, one can notice many played out bee stands. Another proof of the regress is, that Dr. Wurenhurst, member of parliament, asked the House to take measures to prevent the bee industry from going still more backward. Reasons for the regress are:

1. The waste land is getting less, as every foot of land is going under cultivation, and the honey producing plants have to give room for other culture plants, numerous honey producing weeds are entirely eradicated by better cultivation of the land, (an honor to the farmer—J. H.); sugar beet culture is changing good bee pasture into bee deserts; twenty years ago it was a rule not to cut the grass before about June 24th; now the hay is often under roof by June 10th.

2. Foreign honey is lowering the honey price, but this would not do so much harm, because foreign honey is mostly of a poorer quality and can't compete well with our own. If only our bee-keepers would work more in harmony and keep up the prices. In a French periodical Lefevre gives the following prices for 40 years back:

Extra fine honey in 1850, 200 francs; 1899 125 francs.

Light honey in 1850, 133 francs; 1899 90 francs.

Vegetable wax in 1850, 190 francs; 1899, 120 francs.

Foreign beeswax in 1850, 450 francs; 1899, 320 francs.

Native beeswax in 1850, 500 francs; 1899, 350 francs.

(I suppose this is per hundred pounds. —J.H.)

3. The increasing manufacture and sale of artificial honey keeps the prices down; therefore, many go out of the bee business, as it does not pay them any more.

4. Dishonesty among many individuals and doubtful productions, caused distrust and the honesty of a bee-keeper is always taken into consideration.

5. Better prices for other agricultural products will induce many to drop bee-keeping.

6. As at present the material and management of the bee business is more expensive, more knowledge, more work and attention is necessary. Poor honey seasons and the so often needed sugar-bags, discourage many in following bee culture, which is at present considered an expensive matter.—From an article by E. Schicketunz, Zinna, in Leipziger Bienenzeitung, October, 1910.

Conventio

In addition to
J., page 328, ab
exhibition, a few
tion of the Germ
garian Bee-keeper
Budapest, Hungar
also be of interest
keepers present w
tion and hospitali
culture exhibition
were sent by sixty
by 83; tools and s
and wines by 18
and uses of wax
photographs and i
70 exhibitors; but
been quite up to c
hibition, it is sta
golden yellow bees
paper, but got a
Many papers were
new interest. Wel
quet with 450 par
the staat furnished
sides the best win
ment wine cellars.
bee king and pre
tion, Baron Bella
the champaigne fr
sufficient for anot
special excursion tr
school in Goedoel
cursion boat to ot
was furnished by t
hospitality was eve
the bee-keeper
Bienenzeitung.

P.S.—Would it
many of our bee-ke
convention? Reme
wines have a worl
for one, would like
as it will be not fa
and of a good glass
object at all.—J. H

From Schweizer
fact that in South
the Italian bee is
exists in the worst
light on the Ameri
in German journals,
are ahe most immu
disease statistics sh
fact. In Canton Te
bee is bred, and ri
reached the highest
sociation territory.
yard of a comercial
was discovered in t
July of the remain
were healthy, 36 s

Convention at Budapest.

In addition to the remarks in C. B. J., page 328, about the London Honey exhibition, a few items from the convention of the German Austrian and Hungarian Bee-keepers, which took place at Budapest, Hungaria, Aug 20-23, might also be of interest. The number of bee-keepers present was over 1,000. Reception and hospitality was excellent and bee culture exhibition very fine. Live bees were sent by sixty exhibitors; bee hives by 83; tools and supplies by 61; honey and wines by 186; honey preparations and uses of wax by 77; bee literature, photographs and instruction articles by 70 exhibitors; but the lectures have not been quite up to correspond with the exhibition, it is stated. The American golden yellow bees were mentioned in one paper, but got a poor reputation again. Many papers were read, but of not much new interest. Well praised was the banquet with 450 partakers, and to which the staat furnished part of the cost, besides the best wine out of the government wine cellars. The great Hungarian bee king and president of the convention, Baron Bella Hmbrozy, contributed the champaigne from his cellars, almost sufficient for another convention. Also special excursion train to the bee-keepers school in Goedoeloe, and also an excursion boat to other important places was furnished by the government. Great hospitality was every where extended to the bee-keeper guests.—Luxemburger Bienenzeitung.

P.S.—Would it not be interesting for many of our bee-keepers to attend such a convention? Remember the Hungarian wines have a world-wide reputation. I for one, would like to attend next year, as it will be not far from my old home, and of a good glass of wine I would not object at all.—J. H.

From Schweizer Bienenzeitung: The fact that in South Switzerland, where the Italian bee is domestic, foul brood exists in the worst type, throws a queer light on the American reports circulated in German journals, that the Italian bees are ahe most immune to foul brood. Our disease statistics shows just the contrary fact. In Canton Tessin only the Italian bee is bred, and right there the disease reached the highest percentage of the Association territory. For instance in a yard of a comercial bee-keeper foul brood was discovered in the spring of 1909; in July of the remaining colonies only 13 were healthy, 36 suspicious and 54 diseased. In Canton Wallis, the German bee is also bred besides the Italian, but in smaller number. The reporter of Wallis writes that four-fifths or eighty per cent. of the diseased colonies are Italians or their bastards and that the native bees resist the foul brood far better than the Italians.—Rheinishe Bienenzeitung.

National Bee-Keepers' Association

(Organized in 1870.)

Objects.

1. To promote the interests of bee-keepers
2. To protect and defend its members in their lawful rights as to keeping bees.
3. To enforce laws against the adulteration of honey.

Membership Dues.

One dollar a year.

Officers and Executive Committee.

President—GEORGE W. YORK, Chicago, Ill.
Vice-President—W. D. WRIGHT, Altamont, N. Y.
Secretary—LOUIS H. SCHOLL, New Braunfels, Tex.
Treas. & Gen. Mgr.—N. E. FRANCE, Platteville, Wis.

Twelve Directors.

G. M. Doolittle, Borodino, N. Y.
Jas. A. Stone, Rt. 4, Springfield, Ill.
R. A. Holekamp, 4263 Va. Ave., St. Louis, Mo.
Wm. McEvoy, Woodburn, Ont., Canada.
M. H. Mendleson, Ventura, Calif.
R. C. Aikin, Loveland, Colo.
R. L. Taylor, Lapeer, Mich.
E. D. Townsend, Remus, Mich.
Udo Toepperwein, San Antonio, Tex.
J. E. Crane, Middlebury, Vt.
E. F. Atwater, Meridian, Idaho.
R. A. Morgan, Vermilion, S. Dak.

Are YOU a member? If not, why not send the annual dues of $1.00 *at once* to Treas. France, or to the office of the American Bee Journal, 146 W. Superior St., Chicago, Ill.? It will be forwarded promptly to the Treasurer, and a receipt mailed to you by him. It is the desire of the officers to increase the membership to 5000 by the end of 1910. Every progressive bee-keeper should be a member of this, the greatest bee-keepers' organization in America.

Want and Exchange Column

Advertisements for this column will be received at the rate of 50 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.

AGENTS WANTED—Whole or part time; liberal terms; outfit free. Over 500 acres in trees. Write at once. "The fruit tree specialists," Thos. W. Bowman & Son Co., Limited, Ridgeville, Ont.

SITUATION WANTED—By a young man who has successfully passed examination after taking course of lectures and practical work in Apiculture at the Ontario Agricultural College. Anyone desiring help of this kind for the season of 1911, kindly correspond with Morley Pettit, Provincial Apiarist, Ontario Agricultural College, Guelph, Canada.