

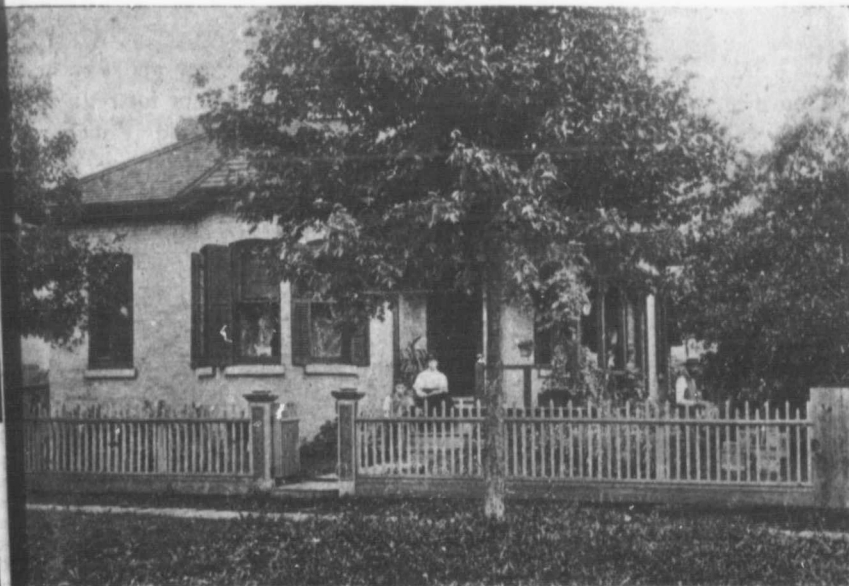
The
Canadian Bee Journal

Devoted to the Interests of Bee-keepers

Vol. 16, No. 3.

MARCH, 1908

\$1 Per Annum



R. H. Smith's Residence, St. Thomas, Ont.

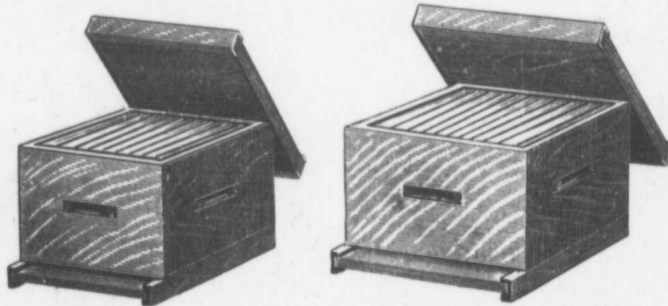
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THE HURLEY

The Canadian Bee Journal

Devoted to the Interests of Bee Keepers

JAS. J. HURLEY, EDITOR

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

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The Canadian Bee Journal
Brantford, Canada

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Vol. 16, No

Mr. J. C reports the bees, and time.

Mr. G. calls our attention to an occurrence in Thin Syrup page 62, which should have been more than sound

Friend By translate our changes. We does. There our French this work. sian exchan to place in here any R in the West a home pap exchanges. would like t

It is our death of Mr. Robertson, w on Sunday, Mr. Nolan w as for man; ent of the there he an and conduct ears since Robinson, an

MAR. 1908.

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The Canadian Bee Journal

Published Monthly

Vol. 16, No. 3.

MARCH, 1908

Whole No. 517

Mr. J. G. Dickinson, of Allenwood, reports that he has fourteen hives of bees, and all are living at the present time.

Mr. G. A. Deadman, of Brussels, calls our attention to an error which occurred in his article on "Thick or Thin Syrup." In the fifteenth line, on page 62, occurs the word "soured," which should have read "sound." We must have been a little more sour than sound when reading the proofs.

Friend Byer regrets his inability to translate our French and German exchanges. We regret it as much as he does. There ought to be a number of our French readers who could take up this work. We also have some Russian exchanges which we would like to place in some one's hands. Are there any Russian people keeping bees in the West who would be glad to see a home paper? We have also Italian exchanges. Which of our readers would like to receive them?

It is our sad duty to record the death of Mr. James Nolan, of Newton Robertson, which sad event took place on Sunday, February 16th. The late Mr. Nolan was 70 years of age. He was for many years an esteemed resident of the township of Tecumseth, where he and his son Dennis farmed and conducted an apiary. A few years since they moved to Newton Robinson, and went exclusively into

bee culture, at which they had great success, and became widely known throughout Canada. The funeral took place on Tuesday, February 18th, to Bradford R. C. cemetery. The bereaved family will have the sympathy of a very wide circle of friends among the bee-keepers of Canada.

Herbert Keirkham, of Goos Cotton Mill, Vladimer, Russia, writes us as follows: "I enclose a sample of Russian foundation, which is made on a Lomakino foundation machine. It is said in the Pehotovadsvr that the American machine (Root's) makes the Russian bees grow less in size, and that therefore the Russian machine is to be preferred. I thought this might interest you." Well, well! Is this to be taken seriously, or is the joke so deep that we cannot see it? Editor York, wouldn't this make you dizzy? Can Editor Root enlighten us? A sample of the foundation made by the Russian machine was enclosed in the letter. So far as we can observe, it is not unlike that made by the Ham & Nott Co., of this city, by the Weed process. Our Russian friend further says: "I see in the January C.B.J. that you are going into court for unpaid subscriptions. Does this include me or not?" No, my friend, it does not include you. Our experience in our own courts forbids us to attempt anything in a Russian court. We find you are on the subscription list as a contributor. We would be pleased to

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hear from you a little oftener, and a little more at length, and with a little more clearness. We find the C.B.J. has been loaded up with dead timber. Liven up a bit.

* * *

We are this month devoting considerable space to an old and highly-esteemed bee-keeper, in the person of Mr. F. A. Gemmill. We believe it better to say the good things we have to say of a good and useful man while he is in the flesh, rather than wait till he is dead. As one of the units of the bee fraternity of this country, Mr. Gemmill has added his share to its progress.

* * *

Edwin France, the father of Mr. N. E. France, passed from this life February 7th, aged 84 years. He was quite vigorous for a man of his age. A fall from a load of buckwheat straw resulted in injuries which caused his death. Mr. N. E. France will have the sympathy of Canadian bee-keepers.

* * *

Those of our readers who are interesting themselves about the two-queen plan would do well to read closely the following from the pen of Mr. C. P. Dadant, whose criticism is sharp and to the point:

"The only purpose for which an additional queen in a hive might prove profitable would be to secure a greater force for the harvest. In order to do this, it would be necessary to introduce the additional queen early enough in the season to rear bees that would be profitable by being on hand at the time of the honey crop. It takes 21 days for a worker-bee to hatch, from the time the egg is laid. This worker is not a field laborer until from 14 to 19 days later, in normal circumstances. Thus a queen must be intro-

duced to the hive from 35 to 40 days previous to the time when her first workers are expected to be of use in the fields. If the additional force which she is expected to produce comes near the end of the honey crop, she will be furnishing a lot of consumers that will lose more than they will make. So it is very plain that an additional queen, supposing her to be at once accepted and not molested by either the bees or the mother-queen of the colony, which is always very doubtful, must be introduced very early in the season, if we expect her to help the harvest. Instead of believing that the queen is the cheapest and easiest supplied capital of our apiaries, I believe that she is the most important, and the most difficult to supply, at the time of year when such capital is needed. I therefore strenuously object to jeopardizing such capital by making introductions that are at best a forcing of Nature's ways, and of only possible success."

* * *

Mr. James Storer comes to the assistance of Mr. Balmer, and says he has observed that the bees remove honey from the outside frames to the centre of the brood nest in the fall of the year. Any others?

* * *

A Bee-keepers' Association for the Province of Quebec, similar to that of our Ontario Bee-keepers' Association is now, we are glad to say, an assured fact. It is intended also to ask the Provincial Government to pass a Brood Act. We heartily congratulate our Quebec friends on the action they have taken. We can assure them their Association will accomplish as much for the bee-keeping interests of their province. The following letter from A. O. Comiré, M.D., Agent

Abénaquis, Laurent, Comté d'Y planatory:

"Dear brood was of Quebec have had disease du years. To this terrible tention of a bee-keepers have forme you herewit held in St. the column could under could som ports of our munications ers in the F

"St. Fran

We were above, and c Comiré that from him of has observed that the bees remove tongue or in honey from the outside frames to the desire is to centre of the brood nest in the fall of Journal wha representativ With this ai

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Abénaquis, Gérant Cie Téléphone, St. Laurent, Sec.-Treas. Soc. d'Agre. du Comté d'Yamaska, is sufficiently explanatory:

"Dear Sir,—Until recently foul brood was unknown in the Province of Quebec; but, unfortunately, we have had some experience with the disease during the last couple of years. To protect themselves against this terrible disease, and for the protection of all their other interests, the bee-keepers of the Province of Quebec have formed an Association. I send you herewith a report of a meeting held in St. Hyacinthe, for insertion in the columns of your Journal. If you could understand the French language I could sometimes send to you the reports of our meetings, and a few communications concerning the bee-keepers in the Province of Quebec.

A. O. Comiré.

"St. François du Lac."

We were very glad to receive the above, and can assure our good friend Comiré that we shall be glad to hear from him often, whether in his own tongue or in that of the English. Our desire is to make the Canadian Bee Journal what its name implies—truly representative of the entire Dominion. With this aim in view, we will open a French Department in the C.B.J., in which the officers of the new Association may address their French brethren in their own tongue at any time, and upon all matters of apicultural interest. We have every facility for doing this, and trust the French bee-keepers of the Province of Quebec will regard the C.B.J. as much their paper as do the bee-keepers of the other provinces. We will be glad to render any assistance that we can to aid their Association.

Notes and Comments

By J. L. BYER

There is considerable difference of opinion among bee-keepers as to whether hot water is an advantage or not when using the uncapping knife. Personally, there was a time when we thought we could not get along without a pan of hot water to place the knife in when it was not in actual use, but the past couple of years have convinced us that it is not really necessary. W. Z. Hutchinson has declared his preference for the hot-water accompaniment, and T. F. Bingham, he of knife and smoker fame, gives his view of the matter in a recent issue of the Review. Among other things, Mr. Bingham says:

"If one could use a knife that would weigh five pounds, made of copper, gold or lead, hot water would be of value in uncapping. The knife would not need a keen edge, or a thin edge. Heat it up to 200 degrees, and wax caps would melt off quickly, without a cutting edge of any sharpness, and the five pounds of the heat-conducting metal would utilize the heat to advantage, while a knife weighing less than one pound would be constantly coated at the edge with wax. Water is of value in which to place a Bingham knife when not in use, while extracting, to dissolve the honey that partially dries and hardens if the knife is allowed to rest while turning the extractor. This is especially true if the combs and air are at a low temperature, but the water should not be hotter than 80 degrees. Water at that degree dissolves the honey from the knife and leaves the edge clean and keen and wet, without melting the combs so as to coat up the edge of the knife. Any water in the summer, when extracting is easily done,

is warm enough for easy and clean work, if the knife is a good one so as to be sharp and in fine order. Not all the knives in use can be sharpened to perfection by every bee-keeper. . . . The sharpening of a knife is a work of art. Bingham knives, that he makes, depend on the fineness of the steel for their cutting ability and quality and for holding an edge at a low temperature. Beveled knives should be sharpened almost entirely on the beveled side. I have found an ordinary scythe stone, kept wet, to be the best to sharpen my knife. Select a fine smooth stone from a lot that are straight and smooth, and keep it exclusively for the purpose. No knife can be sharpened nicely on an uneven stone. One might suppose that such a stone would not give an edge fine enough for the purpose of uncapping, but it does on the knives I use. My opinion is, that with a good knife well sharpened, hot water is vastly worse than useless in uncapping sealed combs."

No doubt there is a deal of truth in what Mr. Bingham says relative to some not understanding how to sharpen a knife; in fact, I am no expert in that line myself. Nevertheless, I am inclined to think that the quality of the knife is often to blame for the trouble. About the time Mr. Bingham first began to make his knives, my grandfather and great-uncle both purchased a knife from the maker direct. These two knives are still in the neighborhood, and I can, with little trouble, keep them in first-class order. Not so, however, with three or four other so-called Bingham knives purchased by myself during the past seven years; even professional knife-grinders cannot put a decent lasting edge on them. The two

knives mentioned are not in my possession, and the parties owning them will not sell them, else I would soon have them, even if I had to pay double the price of new knives. I may as well admit that Mr. Bingham's article in the Review has aroused my curiosity and led to some correspondence, and I hope ere another season to have some knives as good as those two of twenty years ago

While the writer cannot agree with Mr. McEvoy as to the advisability of re-queening each colony every year yet there is a great deal of truth in what he and Mr. Hand have to say in February C. B. J. While my experience has proven to my satisfaction that nearly all queens are as good the second year as in their first, after the second year a large percentage begin to fail. While it is my aim to replace all queens of this age with young stock, yet my intentions are not always carried out, and I freely admit that we have lost considerable in the past by having too many queens in our apiaries. I have an idea that there are others in the same category, and, this being the case, radiation in the articles on the subject, as, for instance, those of Messrs. McEvoy and Hand, should prove of real benefit to the fraternity. One paragraph in Mr. Hand's article is especially good, and should be written in letters of gold and hung up in a conspicuous place in every apiary. I refer to the following:

"We may talk about feeding, and spring stimulation, and juggling with combs, all of which may be all right in their place, but we can't dodge the fact that our success or failure is more dependent upon the queen than upon all else."

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Speaking of stimulative feeding re-
 minds me of what Mr. Holtermann
 has to say in Gleanings relative to
 the discussion of the subject at the
 convention in Toronto in November
 last. He says: "Messrs. Wm. Mc-
 Evoy, S. D. House, E. Dickenson and
 R. F. Holtermann were about the only
 pronounced advocates of stimulative
 feeding." As I said at the conven-
 tion, and now repeat, there is a whole
 lot of misunderstanding as to what
 constitutes **spring** stimulative feeding.
 For instance, let us analyze the posi-
 tion of the four gentlemen named,
 who, as friend Holtermann says,
 displayed remarkably sound judg-
 ment in their views and convictions
 upon the question." Mr. McEvoy has
 declared, publicly and privately,
 scores of times, that any feeding for
 stimulative purposes before fruit
 bloom was worse than useless, as
 three old bees would be worn out for
 every extra young one reared. Mr.
 Dickenson may not be quite so radi-
 cal, but I have reason to believe that
 he is pretty much in sympathy with
 friend McEvoy on this question. Mr.
 House is a believer in **spring** stimu-
 lation in the sense of the word as in-
 terpreted by Mr. Alexander, and as
 far as friend Holtermann is concern-
 ed, honestly I do not know just how
 he stands on the question. The point
 I wish to make clear is that there
 were many bee-keepers at the con-
 vention, the writer among the num-
 ber, who are thoroughly in accord
 with the idea that it is advantageous
 to feed the bees during the dearth
 that occurs between fruit bloom and
 winter, in most localities. Whether it
 is wise to feed during the unsettled
 weather in the early spring is another
 question; certainly my limited experi-
 ence has decidedly proved otherwise.
 During the past summer, while out

on inspecting trips, evidence was col-
 lected as different yards were visited,
 and although the early spring was
 one of the worst on record, in not a
 single case was the benefits of early
 stimulation apparent. In the com-
 paratively few yards visited that were
 in good condition, each of these api-
 aries had had abundance of stores,
 the bees were well protected and given
 a severe letting alone right through all
 the bad weather preceding fruit
 bloom. Mr. Sibbald told me that this
 had been his experience to the letter.
 Possibly the peculiar season may have
 had a different effect than would be
 the case in other years, but I am very
 doubtful on the subject and more than
 ever convinced of the truth of the old
 saying, that early spring feeding is
 apt to act like a two-edged sword.

From the foregoing, you will, Mr.
 Editor, have a pretty good idea of my
 notions as to "Spring Management,"
 a subject you desire to have discussed
 in this issue of the C.B.J. Feeling
 sure that my bees have abundance of
 good stores, are warmly packed in
 winter cases, I desire nothing more
 than to leave them alone till fruit
 bloom. By providing water easy of
 access, many bees will be saved that
 would otherwise be lost while flying
 long distances during a period of cold
 winds in search of what they must
 have if brood-rearing is to go on pro-
 perly. Left alone in the condition
 described, if the bees have wintered
 well, even with the large hives I use,
 the majority of colonies will need
 supers to ward off swarming during
 fruit bloom; i.e., if any nectar comes
 in from that source. How do I clip
 the queens when no hives are opened?
 Perhaps you will be surprised when I
 say we do not practice clipping queens
 in March or April, but prefer to leave

that work till fruit bloom or golden willow at the earliest.

Page 50, February C. B. J., I am made to say that Gleanings is aiding in the crusade against allowing the glucose interests to label their product "Cane Syrup." Of course, this should be "Corn" syrup. Even a corporation having the temerity of the Glucose Trust would not dare use the word "cane" when speaking of their product.

SPRING MANAGEMENT

M. B. HOLMES, Athens

As we swing out into the month of March, there comes to every student in apiculture an ever-increasing desire to know how "our pets" are wintering. Being no exception to this general rule, I have this day yielded to the impulse, and, along with the other "students" of this very fascinating pursuit, we "had a look." Our cellar repository seems a very comfortable place for the stock, and the mercury has remained quite steady during the winter at 46 degrees, with variations of three degrees following very high or very low temperature outside.

We found the colonies looking very snug as they clustered down to the bottom board, and so quiet and motionless that the individual unaccustomed to bees would almost suppose they were dead. We noticed three colonies which seemed to be wearying of the cellar (being in repository since November 8th), and were spotting the hives a little. The hurried investigation was, however, quite satisfactory, and we look forward to the date of "setting out bees" with a degree of confidence and pleasure.

Perhaps a word or two in reference to setting out, etc., may be helpful to

some beginners, and the seniors will, no doubt, be content to "pass it unnoticed" if happily the other fellows are helped. Well, as soon as the snow is off our yards we take the first bright, calm morning with temperature at about 50 degrees and rising, to begin operations. Hive covers are distributed so as to be convenient to bees when carried out, a few extra bottom boards are scattered through the yard, and we are ready.

As each colony is carried to its summer stand, the bottom boards are changed, giving all a clean floor at once, and while we are doing this, we carefully note conditions of each colony as regards stores for use until bloom appears, condition of bees, condition of queen, etc., then tuck them up snug and warm as possible, giving only as much entrance space as the bees demand. In this connection, we have observed that a very liberal covering of newspapers, before placing hive lid in position, serves a very useful purpose as a conservator of heat. Having satisfied ourselves that conditions are about right, we think it important that an Alexander feeder be attached to each hive, so that feed may be given quietly on the evening of every day which has been dark, cold or cloudy, so that bees could not go out after supplies. The frequent opening of hives just to satisfy curiosity should not be tolerated, and if hive manipulation must be done, a date should be, if possible, chosen when weather is warm enough for bees to fly freely.

And now, Mr. Editor, I'll ring off and shall try and not detain you so long when I "call up" again.

D. MEUSER, Elmwood

After the cellar-wintered bees have been put out on their summer stands

and the hiving flight fully. Cl move all with work hive has always rer plenty of nest. See protection rains in th will be p country to ing around tered on t June 1st. the needs will be pler as there is fields. See water-in a shelte Bees must honey and order to h for the hon Use plenty old hives t out the rain wind that v rimental t spring. The of managem to time in tl must choose quit his loc would say, keepers in c and should through the contributions Editor to me ver.

JAMES

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eniors will, pass it un-ther fellows as the snow e the first th tempera-nd rising, to vers are dis-ient to bees xtra bottom gh the yard.

l to its sum-boards are an floor at ing this, we of each col- or use until of bees, con- n tuck them sible, giving ppace as the nnection, we r liberal cov- fore placing s a very use- ator of heat s that condi- think it im- er feeder be- so that fee- the evening s been dark es could ne- The frequen- satisfy curio- d, and if hiv- done, a da- chosen whe- n for bees t-

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and the bees have had a good cleans- ing flight, examine each hive care- fully. Clean off the bottom board, re- move all drone combs, and replace with worker combs, and see that each hive has plenty of unsealed stores, always remembering to give the queen plenty of room to expand the brood- nest. See that the hive has plenty of protection from the cold winds and rains in the early spring. The weather will be plenty cool enough in our country to warrant leaving the pack- ing around the colonies that were win- tered on their summer stands, until June 1st. Contract the entrances to the needs of each colony, as there will be plenty of robbers about as long as there is nothing to be got in the fields. See that there is plenty of water—in a shallow tub or trough set in a sheltered place in the apiary. Bees must have water, in addition to honey and pollen, to rear brood, in order to have plenty of worker-bees for the honey harvest when it comes. Use plenty of paint and putty on your old hives this spring. It will keep out the rain and many a cold gust of wind that would otherwise be so de- sirable to brood-rearing in early spring. There are plenty of systems of management appearing from time to time in the C.B.J., and each reader must choose the system that will best suit his locality. In conclusion I would say, there are plenty of bee- keepers in our Dominion that could and should give their experiences through the C.B.J. Send along your contributions, brethren, and help the Editor to make the Journal the best ever.

JAMES STORER, Lindsay

In response to your invitation in February Journal, page 46, respecting spring management: By the first of

April it will be nearly six months since the most of us saw the inside of a hive full of bees. Seems to me, unless bees were properly prepared for winter about the last of Septem- ber, and given enough stores to last them till fruit bloom comes, the chances for a honey crop are not very bright. Spring feeding, in my opinion, excites the colony, and causes bees to go out in unseasonable weather. In this locality, bees that are wintered in cellar are put on their summer stands the first or second week in April. Pollen begins to come in about the 14th of April, but more seasons not till near the end of the month. Knowing that your bees have suffi- cient stores, no good purpose, except curiosity, can be served by pulling the bees' house down about them till warm weather sets in. About the middle of May, when fruit bloom comes in, we should start and over- haul every hive and clip the queen's wings, and, if necessary, stimulate with feed, or remove honey if there is too much in the hive. Any bee-keeper having 200 colonies can find employ- ment and not many leisure moments if he gives his bees the proper care from May to September, and most of seasons make a comfortable living.

Like Mr. Balmer, I have often no- ticed bees remove honey from the out- side frames to the centre of brood nest in the fall of the year.

My ninety colonies in the cellar at home seem to be wintering nicely. No spots on the fronts of hives so far. Out-yard, having about eighty col- onies, was in good shape about six weeks ago. In sending reports to bee journals, bee-keepers sometimes make too much of a show at the beginning of the season. The press of the coun- try then copies the reports and say that we are sure of a good honey crop,

and it will be cheap. Unprincipled dealers know how to make use of this knowledge.

The Journal is improving, and gives a good deal of pleasure to peruse it.

WM. BEUGLAS, Plattsville

Complying with our Editor's request in January C.B.J., page 21, for a description of our plan of spring feeding, I might say that I do not do a great amount of feeding at this time of year, and never before bees can fly freely, unless it is a rare case. We are favored in this locality with a variety of early bloom in the way of soft maple, aspen, a considerable variety of black willow, elms, etc., which keep the bees busy on fine days. However, before this bloom is on hand, and weather is fine for bees to fly, I fill six or a dozen atmospheric feeders, holding ten pounds each, and place these in sheltered nooks around the bee-yard.

Now, Mr. Editor, let me whisper, or our friend J. E. Hand may sit up and take notice. You know he says that spring feeding is a two-edged sword, cutting both ways, and a dangerous weapon in the hands of amateurs. Well, perchance he is right. So is Mr. House of New York State, when he strongly advocates spring feeding, or, more properly speaking, stimulative feeding. But then, Mr. Editor, location makes a difference, and consequently a disagreement among successful bee-keepers along this line of spring feeding. In our mind it is not the feeding, but the result of location, that makes the difference. I understand that J. E. Hand's situation has a northwest exposure, and that of Mr. House is in a sheltered valley; therefore different results would be obtained, according to difference of situation or exposure to cold winds. My

yard has the shelter of natural forest on the west and north, and especially on the north, with evergreen hemlock. Consequently I am not afraid to do feeding in this way. I think it keeps the bees at home in the shelter in place of having them roaming over the country and getting lost.

Some may ask why we give so much feed at once. Perchance a few colonies may have consumed an abnormal quantity of winter stores, and these particular colonies will work with a vim that others will not display when sufficient stores are on hand to keep them going. To meet the emergency of those that may be short of pollen, I take a peck of chopped grain and mix a quart or two of wheat flour with it, then put the whole in a heap into a wide, shallow box, and set in a sunny place in the bee-yard. I find that some colonies will carry this meal into their hives in preference to touching the liquid feed.

I do not open hives in spring to see if they contain enough stores to keep the bees going, as some recommend. The majority of my hives are never opened until I want to give the queen another brood section to lay in, or a honey super on top, as the case may require; or if we may have the misfortune to have a few weak colonies, then we double, a la Alexander. I like to choose a suitable day and evening, when the bees are all good-natured. Then I proceed as follows: Remove the cover from the strong colony, then put on a queen-excluder; over this lay a sheet of paper, leaving a few perforations uncovered where the entrance would be. This may be done by tearing a piece out of the edge of the paper. Then set the weak colony on top of paper, close to the entrance to top hive; cover up warm.

(Continued on page 117.)

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F. A. GEMMILL

Forty-Five Years a Bee-Keepèr

IMPORTER OF FIRST ITALIAN QUEEN IN CANADA

Interesting Reminiscences

To have been more or less interested in bee-keeping for forty-five years, and still actively engaged in the pursuit, is the experience of Mr. F. A. Gemmill of London, Ont. He is still very much interested in apiculture, and allows no important convention to pass without being in attendance. We had the pleasure of meeting him at the last convention of the O. B. K. A. in Toronto, and again at the recent convention of the Brant District, in Brantford. It was here that we learned something of his career, and thought it worthy of special men-

tion in the C.B.J. There is also another reason why Mr. Gemmill should be specially remembered by the beekeepers of Canada. He is practically the father of the foul brood law of the province of Ontario. It was in great part owing to his persistent and well-directed efforts that the matter was brought before the Ontario Government and its importance pointed out. He was one of the first to become convinced that if the bees of the province of Ontario were to be saved from extermination the Government would have to take hold of the matter, and, by the appointment of inspectors, with certain powers, grapple with the difficulty. At the Oxford County B. K. Association, and also at the Ontario B. K. A. meeting at Belleville in 1890, he urged the passing of this law. He was assisted by Mr. Allen Pringle, who drafted the bill. Mr. J. E. Frith, now of Moosomin, Sask., who took a prominent part in this matter, and Mr. Gemmill, were delegated as a committee to wait upon the Minister of Agriculture, Mr. Chas. Drury, to urge the legislation, with the result that Canada became possessed of the first foul brood law in the world. Having impressed the Government with the importance of the matter, and moved it to action, he was able to supplement his initiatory efforts by saying he had the Man for the task. Much depended upon the man who was to be appointed an inspector. He was to be a man who knew and understood the disease, and could show others how to treat it. Wm. McEvoy was the



F. A. GEMMILL



LORENZO LORRAINE LANGSTROTH (Father of Modern Bee-Keeping)



Mr. Gemmill's Apiary, Showing the Old Hive

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Man! At a time when bacteriologists did not fully understand the disease, and comparatively little was known about it, Wm. McEvoy was working and studying and experimenting, and succeeded in solving the problem in a simple manner. His discovery has made his name as distinguished throughout the world as that of the venerated Father L. L. Langstroth. As the result of the passing of the Foul Brood Act, Mr. McEvoy was appointed inspector, and Mr. Gemmill assistant inspector. Other duties, however, prevented his taking a very active part as assistant inspector. He left the work very largely to Mr. McEvoy.

Another of Mr. Gemmill's efforts on behalf of the bee-keeping industry was the advocating of a law to prevent fruit trees being sprayed while in bloom. The late Mr. Pringle, Mr. E. D. Smith, a prominent fruit-grower, of Winona, Ont., and himself, were appointed in 1892 to appear at St. Catharines before a meeting of fruit-growers of the Niagara district, called for the express purpose of discussing this matter. Again success crowned their efforts. This was legislated upon without opposition from the fruit-growers, who enthusiastically admitted the benefit the bees were to horticulture. Spraying fruit trees in full bloom was made illegal.

The most interesting feature, however, and one which has given rise to this sketch, is the fact that Mr. Gemmill was the first to import into Ontario an Italian queen; and, further, that that queen came from no less a person than the father of modern bee-keeping, Lorenzo Lorraine Langstroth. Accompanying this sketch will be seen a letter, dated Oxford, Butler County, Ohio, October 14th, 1864, addressed to Mr. Gemmill, acknowledging the re-

ceipt of \$10.25 for a queen which he ordered. To most bee-men this letter will be regarded as a rare treasure. It will be noticed that, with characteristic honesty, Langstroth returns the twenty-five cents overpaid.

An express receipt for the safe arrival of the above queen is also shown. Mr. Gemmill says there was no queen-shipping cages in those days, nor candy to feed them on their journey. The queen was sent in a box about four times the size of the ordinary queen cage now used. There was placed in this box a piece of comb honey, surrounded by cotton batting, to absorb the drip. The queen was introduced in the following manner: After securing the old queen, the new

Keeping)



MR. GEO. WRIGLEY
MR. F. A. GEMMILL MR. LITTLE

Oxford, Baker County, Ohio
October 4th, 1864

Mr. F. A. Gemmill }
Pt Huron, Mich. } Dear Sir,
Your favor of 10th inst is at
hand with enclosure of \$10 25
Please find enclosed 25cts which
you over paid us for send entrance
regulator & queen cage fee with
first Queen ordered -

We will ship your Queen by Express
next Tuesday A. M. Oct 18th

It don't like to send them the last
of the week to lay over on the work
day Sunday, and the Express
leaves too early, ^{in the A. M.} to send it Monday
Please advise us of the receipt
of the Queen. We trust she will
prove satisfactory -

Yours very truly
L. L. Langstroth Son -

Italian was caged—bees and all—on top of the frames. There was a hole in the cage, closed by a cork. Through this cork was passed a string, and the string was run outside the hive. At the end of two days, in the evening at 9 o'clock, the hive was approached cautiously—how cautiously we can well imagine—the string pulled, the

cork withdrawn, and the queen thus released. He says he left the hive severely alone for some weeks, and "In April I saw my first Italian bees taking a play-spell. To me it was a grand sight."

In addition to treasuring all these years the letter and express receipt, which most of us would have care-

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the name of

THE AMERICAN EXPRESS COMPANY.

Received of *Langstroth and Son* *of Fond du Lac Wis.*
1 Box sent to contain *Living Bees*
 valued at *100.00*
 Shipped *F. A. Gemmill Port Huron Mich* *Ill.*

Which we undertake to forward to the nearest point of destination reached by this company, subject expressly to the following conditions, namely: This company is not to be held liable for any loss or damage except as forwarders only, nor for any loss or damage by fire, by the danger of navigation or by any other cause, nor for any loss or damage by war, or by any other cause, nor for any loss or damage by the negligence of any person, corporation or association, upon the above described property shall or may be delivered by this company, for the performance of any act or duty in respect to the same, and the company shall not be liable for any loss or damage by fire, by the danger of navigation, or by any other cause, nor for any loss or damage by war, or by any other cause, nor for any loss or damage by the negligence of any person, corporation or association, except as forwarders only, and the company shall be deemed and taken to be the agent of this company for any such purpose, but, on the contrary, such person, corporation or association, shall be deemed and taken to be the agent of the person, corporation or association from whom this company received the property above described. Notwithstanding the above conditions, the company shall be liable for any loss or damage by fire, by the danger of navigation, or by any other cause, nor for any loss or damage by war, or by any other cause, nor for any loss or damage by the negligence of any person, corporation or association, upon the package containing the same, for over \$50 unless the just and true value thereof is hereby stated, and the company shall be liable for any loss or damage by fire, by the danger of navigation, or by any other cause, nor for any loss or damage by war, or by any other cause, nor for any loss or damage by the negligence of any person, corporation or association, upon the package containing the same, not upon any fabrics, consisting of, or contained in glass. The party accepting this receipt hereby agrees to the conditions herein contained.

L. G. McGinn *agent*

THE AMERICAN EXPRESS COMPANY
 SO A GENERAL EXPRESS SERVICE
 Delivered all the Territory of the States of
 NEW YORK MICHIGAN WESTN DENN. ILLINOIS
 KENTUCKY MICHIGAN IOWA
 MISSOURI MINNESOTA CANADA
 And connecting with other responsible Expresses, to all parts of the world.
 PROPRIETORS
 Livingston, Fargo & Co. Buffalo—Wells, Butterfield & Co. New York.

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ssly thrown away, Mr. Gemmill has
so preserved the hive into which
as introduced this notable queen. It
can be seen in the accompanying
ustration well to the front, with the
ures 1863 thereon, and underneath
the name of Father Langstroth. The

picture is one of his apiary taken
about twelve years ago, the outside
cases still on the hives, minus the
packing.

It will be noticed in the letter and
express receipt that they are address-
ed to Port Huron. Mr. Gemmill ex-

plains this by saying he lived at that time in Sarnia, and found it much safer and easier to get the queen at Port Huron and avoid customs delays and annoyances.

The accompanying cuts show Mr. Gemmill as he is to-day, and as he looked in 1869, at the age of twenty-three years, five years after the importation of his queen. When this photo was taken he was on a visit to Montreal. The first figure is himself. The tall figure in the centre is Mr. Geo. Wrigley, an old newspaper man, and the other is Mr. Little, of the firm of Robinson, Little & Co., London, who has since become Mayor of the city of London on several occasions.

He is the inventor of a wax press that did much for his fellow bee-keepers, in saving thousands of pounds of wax that had previously been wasted. Wm. McEvoy claims Mr. Gemmill was the first in our province to wire foundation into the frames, and his system of wiring was, and is to this day, the best that he ever saw.

Mr. Gemmill is not yet an old man by any means. Smart, active and energetic, still pursuing his vocation, he gives promise of many useful years, and we think we but express the wish of the bee-keepers of Ontario when we say, long may he be spared.

LEGAL POINTS

Are bees wild or domestic animals? This is a question which has been before the courts on many occasions, and which has provided some knotty problems for solution by Bench and Bar. A case involving this and other questions came before Judge Mulligan, K. C., at Attleborough County Court in July last. Both plaintiff and

defendant were Norfolk laborers, and the former claimed a pound damages for loss of a swarm of bees which, one day in May, he had seen leave his hive and settle in the defendant's garden.

He, the plaintiff, had tried to follow the swarm, but had been prevented by the defendant. While the altercation was in progress the swarm had been shaken to the ground by the defendant's son, and when at last the defendant allowed the plaintiff to enter the garden, the bees, at his approach, flew away and disappeared. The plaintiff admitted, however, that the swarm might have flown even if not interfered with.

His Honor quoted precedents to show that the owner of bees could make out property in them until he lost sight of them, and declared that the shaking of the swarm from the tree was, in his opinion, illegal. The defendant, therefore, by his illegal interference, had trespassed on the plaintiff's property in his bees. But as it could not be proved that the swarm had flown in consequence of this interference, the plaintiff could not prove damage. The case was therefore dismissed, each party bearing his own costs.

A curious case, also concerning bees, came before a justice at the little town of Warwick, in New York State. A market-gardener applied for an injunction against a neighboring bee-keeper, to prevent his "pasturing" his bees upon his—the market-gardener's—flowers and fruit. The sapient J.P. decided in the plaintiff's favor. It is expected that a commission will now sit to decide upon the best methods of identifying bees, and of impounding them when identified. T. C. Bridges, in Grand Magazine.

THERAPY

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THERAPEUTIC VALUE OF HONEY

According to Dr. Pol Demade, who writes on this subject in *La Reforme Alimentaire* for January, honey occupies, or should, at least, occupy, an honorable place in therapeutics. Since up to the present date this right has not been generally accorded to it, the Doctor draws the attention of his confreres to certain experiences of his own, and also gives his reasons for the conclusions to which he has been led. He relates that the Lady Superior of a certain convent asked his advice about a tiny, emaciated baby. The child, which lay in its mother's arms, was nine months old, and gave one the feeling that it had but to close its little eyes for death to assert itself. The infant was suffering from diarrhoea, which had refused to yield to all remedies tried; the poor little creature was emaciated to an extreme degree, with black rings under the eyes, and the lower stomach fearfully large. The poor sufferer had no appetite whatever, but was in its place plagued with almost incessant vomiting and diarrhoea. The sickness, it appears, the French and Flemings call "old man." "What," says Dr. Demade, "could a medical man hope to do with such a wretched specimen, which any breath might send into Paradise? And yet there stood the mother pressing this remnant of life to her heart, her ninth child, which she told me she loved better than all the rest. I ordered her to feed the infant on honey and water, nothing else absolutely, for eight days, and, turning to the Lady Superior, I added that if the child were still living at the end of that time, to give goat's milk and water in the proportion of 1 to 2 parts respectively. I dismissed the case from my mind, since I did not hope for

anything better than death as a release. What my astonishment was when at the end of three months I was shown a healthy-looking, well-nourished baby, with an excellent appetite and regular habits, and its stomach reduced to normal proportions, may be easily guessed. Here was my little wretched creature nothing less than metamorphosed by means of the honey. And I learnt that the mother had used my remedy to other children who suffered from stomach disorder with equally good results. I profited by her experiments, and I have since found the use of honey in any disease of the digestive organs a most valuable agent." The Doctor adds that he has tried honey as a remedy for that most obstinate of all diarrhoeas which follows an advanced stage of pulmonary consumption, and even with young animals, and has in every case been rewarded by seeing the diarrhoea stop, and a desire for nutriment take its place. The list of chemical compounds used to clear the intestinal canal, with more or less good results, some of which work other mischief, is a long one; honey, which is at once cleansing and nutritious, ought to take their place. And it may be that this is only one of the therapeutic uses out of many to which it might with advantage be put. Dr. Pol Demade argues that it should be easy for any practitioner with common-sense to recognize the reasons for this high value possessed by honey. It is, in the first place, a most extraordinary natural product. It is a sugar, but not of the ordinary kind. It is antiseptic, almost free from fermentation, and withal capable of almost instant assimilation in the organism with next to no exertion on the part of the digestive agents. Ordinary su-

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gar is saccharine, whereas honey is a glyucose. The former ferments readily, and has to be turned into glyucose by the action of the saliva or some of the other digestive juices before it can be assimilated. In the case of a healthy stomach saccharine can be dealt with at no great expense to the system; but when the digestive organs have been weakened by disease, and the whole nervous system is extra-sensitive, sugar should be withheld and honey given.

SIMPLICITY IN BEEHIVES

BY GEORGE OTT, ARKONA, ONT.

I have never been a contributor to the Canadian Bee Journal. Nevertheless, I am one of the oldest bee-keepers in Ontario, having kept bees fifty-two years. I commenced keeping bees in the old-fashioned box hives. In the fall of the year we would set out some of the best hives, with plenty of honey to winter over. We would smother with brimstone and get a few pounds of honey, mixed with dead bees, brood and pollen. The combs could not be examined—all was in the dark. Bee-keeping was an unprofitable business. With a good movable frame hive, bee-keeping can be made a profitable business, as well as an interesting business.

As soon as movable frame hives, honey extractors, foundation comb and sections were introduced, I commenced experimenting with them. I tried a good many different styles of movable comb hives. Some of those hives were a damage to me, let alone paying for the right to use them. Some of them were made without a honey-board on the top over the frames, simply a piece of cloth laid over the frames; also the honey box had no bottom. Thus, when my bees

were ready to receive honey-boxes, it was often necessary to use the smoker to quiet the bees when taking off the cloth and putting on the honey-box.

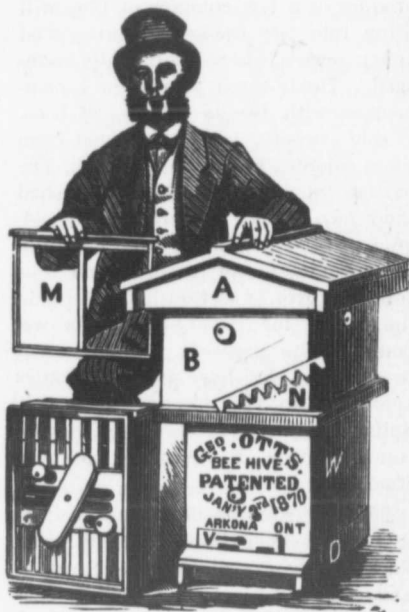
The box having no bottom, the queen would often move up into the honey-box and deposit eggs. Thus, when taking off surplus honey, there would be brood in some of the sections. I was advised to use perforated zinc between the brood chamber and honey-box. This seemed to be unnecessary expense, and was not satisfactory to me. I then made a honey-board for the top of my hive in place of the cloth. I made six holes in my honey-board, each hole three-eighths of an inch wide and three inches long, for the bees to pass up into the honey-box. I also put a bottom in my honey-box with six holes in it, to correspond with the holes in the honey-board on the top of brood hive. I also made a honey-board and put one on each honey-box. When thus arranged, the queen seldom enters the surplus to deposit eggs in the sections. I used no tins for sections to rest on. I simply took four strips of lath three-eighths of an inch thick across the bottom of the honey-box for the sections to rest on. Sometimes those frame hives I first used the comb would break loose and fall off when extracting. I was advised to wire the frames. I tried it for two seasons. I then tried a central stile in the comb frames. This stile I make one-fourth of an inch thick and half an inch wide. The bees build comb much even and straighter than they do on wired frames, and it is done with less expense.

When I first commenced using honey-boxes filled with sections I was often vexed trying to get the bees out of the surplus box. I was recommended to try bee-escapes, and they did

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not work satisfactorily. I then put a glass three inches wide in one end of my honey-board on the honey-box. No more trouble was experienced in getting bees out of the honey-boxes. I can now take off honey-boxes when filled with honey and get the bees out without using the smoker. When honey-boxes are ready to take off, I take them off about one hour before sunset. I set them on a level plank. The bees go to the top, where the glass is. I raise the end of the honey-board with the glass on. The bees all fly out next the glass. I let it down again a few minutes longer and a few more bees gather to the light, where the glass is. I raise it up again, and a few more bees fly out. In about half an hour I have the bees all out of the surplus box. A bee-keeper should never use the smoker when taking off surplus honey. The bees are inclined to fill their sacks with honey, and will puncture the cells, and thus spoil your section honey. I notice most all bee-keepers let the comb frames down too near the bottom board of the hive. The bees have no room to clean out dead bees and litter. Also the comb frames do not hang equal distances apart at the bottom. I set comb frames one inch and a half up from the bottom of my hive and fasten a notched piece of wood across the bottom for the bottom of the frames to rest in. The notches thus divide the comb frames equal distances apart at the bottom and prevent the comb frames getting out of place when hiveing or moving bees, which is sometimes very annoying. I got this hive patented thirty-eight years ago, and still use the same hive. When I first got this patented I used the honey-box without a bottom and honey-board on the top of honey-box. I now use both bottom and honey-



board. The way my hives are constructed, I have no use for perforated zinc, or wire frames, or bee-escapes. I have been very successful keeping bees since I have used this hiye. I seldom lose a colony through the winter. I winter outdoors in clamps. I work altogether for section honey. I can make more money raising section honey than by extracting. I sold my section honey this season for twenty cents per section. My neighbors who extracted their honey sold for ten and a half cents per pound. This was not a very good season with us for honey. I commenced last spring with sixty-seven hives; sold about three hundred dollars' worth of section honey; increased my stock to ninety-four, which I have nicely packed in clamps with dry sawdust, and we expect they will come out all right in the spring, as they have plenty of good honey. It is wonderful the amount of money the

product of a few colonies of bees will bring into the bee-keeper in a good honey season when intelligently managed. Thirty-three years ago I commenced with twelve colonies of bees. I sold twenty young swarms from those colonies at five dollars each. The parties who bought them furnished their own hives. I increased my colonies to twenty-three. I sold from those colonies one hundred and four dollars' worth of section honey. I sold the honey for twenty-five cents per pound. The proceeds of honey and bees sold from those twelve colonies amounted to two hundred and four dollars. If any bee-keeper in Ontario can beat this, I would like to hear from him.

The patent of my hive has expired. Any bee-keeper can use any part thereof. By experimenting with deep and shallow hives, I find the bees winter better outdoors in deep hives, as they store more honey in the top. The bees move up in cold weather and get to their winter stores more readily than when forced to go around the outside of their comb. I make my hives fifteen and one-half by eleven and one-half inches and fifteen inches deep, holding eight frames, with bottom board fastened on with hooks or clamps. As soon as bees are set out on their summer stands, loosen the bottom board from the hive, and clean out all dead bees and litter. Sometimes a lot of dead, mouldy bees will be found on the bottom, which will cause a bad smell, and the bees are worried for weeks trying to clean out those dead bees, and will not thrive when left in this shape. Also when hiveing a young swarm of bees the hive should be raised in front one inch up from the bottom for about five days, to give lots of ventilation, as bees always fill their sacks with

honey before they swarm out, and when hived will hang in the hive several days to secrete wax. If closed up with too small an entrance, and left in the hot sun, the swarms sometimes get heated up, leave the hive and go to parts unknown.

We congratulate our bee inspector, Mr. Wm. McEvoy, for the grand work he did in our vicinity last season. There were a number of colonies of bees found diseased with foul brood, and we are told that by his instructions the disease has been entirely wiped out. If kind Providence should spare his health, we would be pleased to have him visit us again next season.

OUT-DOOR WINTERING.

BY WILLIAM HARTLEY, SEAFORTH.

After reading in December number of the Honey Board, and again the reference to it in the January number, I must say I am really surprised at what appears to me to be a revival of the use of that ancient piece of bee fixture. I thought a quarter of a century ago, when I, with so many others, discarded the old Thomas hive, with its revolving bands and honey board, that its day was past. In fact, so far as I am concerned, it surely is forever. I would not accept the gift of honey boards for my eighty colonies and be compelled to use them.

That very snapping and loosening of them every time one opened a hive is enough to cause any one to discard their use, besides the canvas is warmer, dryer, easier handled and as cheap.

I will give you my method of wintering my bees and how I use canvas in my bee yard.

I winter outside in boxes holding from two to three hives (2 preferred), all faced the same way—south. These

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boxes I get from dry goods stores at about 40 cents each. I cut the top part sloping to the back to carry off the wet. Then I cut a hole (or holes) in front about six inches square from the bottom up, so as to give plenty of room for packing on the outside of the hive when placed in the box. I then make a spout, or entrance, six inches square, inside measure, but the part that comes in contact with the hive is sloped so as to be six inches long by one inch deep. That allows the packing to come down to within two inches of the bottom board and yet leaves a six-inch square hole for the bees to fly in at during the spring before they are taken out of the boxes, which is usually about May 24.

These boxes are covered with boards the length to suit the size of the box. As the snow comes on I put up a board slanting across the front of the boxes and leave my bees to themselves, feeling sure they will be O.K.

In the spring, when the snow begins to go, I keep the front of the boxes piled up with snow until the ground is mostly bare. Then on a nice warm day let all fly at once, take away the storm boards. They will not fly unless the weather is fit for them. I prefer dry sawdust got at a planing mill or stave factory for packing, but I have to use chaff or cut straw. This is not quite as warm. The mice bothers in straw, but never in loose, dry sawdust. I pack tight all round from six to ten inches deep on top of hives and put the packing down as tight as possible. My bees are put in about November 10th. I put in the hives as careful as possible, so as not to disturb the bees. I first put on a canvas one inch bigger than the top of the hive, then put on another immediately over the first, three inches bigger than the top of hive; then put on the

packing. The idea of having two pieces of canvas is that in the spring, or any time when necessary to open the hive, I remove the packing to the canvas; then take the first piece by one end and roll it off, and I have the top of my hive clean of packing. Then the second piece exposes the top of the frames as clean and dry as possible. If only one piece is used, some of the dust is sure to get into the hives. This is another reason why I object to the honey board, as it would be almost impossible to keep dust from working under the edge of it. I remove part of the packing in April, or as the weather gets warmer, and often put on top storey before I take my bees out of the boxes.

This first piece of canvas is kept on all summer, and by fall is replaced by a new one. I get this canvas cheap from dry goods men who have had it as a covering around dry goods. It costs me about \$1.00 per year for canvas.

I have wintered my bees for 25 years this way, and have not lost more than five per cent in all that time. Last spring results were about as usual up to April 1st, but I lost nine colonies after that time by spring dwindling. I want a good, well-painted, solid hive, with a good, light, flat cover. I like the tar felt cover splendidly. I run mostly for extracted honey. This last year my 65 colonies which I had left after the spring loss gave me over 3,000 pounds. I have 80 now in winter quarters, all with plenty of good sealed honey to run to May 1st. I have not fed my bees fifty pounds of sugar in ten years. I always put in plenty of sealed stores for winter. Bees are apparently wintering fine this winter.

Wishing the Canadian Bee Journal abundant success.

[We are glad to hear from you, friend Hartley, and congratulate you on your good crop last year. In reference to the honey board, it is not quite correct to say that there is a "revival" of it. It was mentioned only incidentally by ourselves, and this brought out the fact that Mr. J. B. Hall of Woodstock used it also. Its great feature lies in the fact that it allows the bees to cross over the frames in the spring when they get down to work. It also allows the moisture to pass up from the hive and become absorbed in the packing above. A by no means inconsiderate consideration. Your canvas cloth is all right if put on new each fall. The moisture will be readily absorbed. But if it is covered with propolis this will not be the case. We would advise, however, that you put three or four small cleats of about one-quarter or three-eighths inches under the canvas to allow a bee-way on top of frames. Bees wintered outside rarely suffer from spring dwindling. There must be a cause behind to produce this effect. We have a suspicion that your tops were sealed too closely and did not admit of enough ventilation. Otherwise your system is very much similar to our own. We believe that outdoor wintering is away ahead of cellar wintering, if for no other reason than that the bees have a good warm abode when they start brood-rearing. The cold wet weather of April is very hard on bees taken from the cellar and sitting on their summer stands. In their efforts to keep warm, brood-rearing must necessarily be restricted. You are very generous to your bees—if not extravagant—in giving them sealed stores. In these days of intense commercialism, when dollars are the results sought for—not always the most laudable aim, to be sure—

most men would extract these stores and feed back sugar syrup two to one, as the syrup is worth about one-half what the honey is. It is not good business to feed bees stores at 10 and 12 cents per pound, when it can be done just as well at 5 or 6 cents per pound. And be it remembered that sugar syrup is just as good as honey for stores.—Ed.]

CONTROLLING OF SWARMS

BY GEO. W. STRANGWAYS, ELORA, ONT.

The note on Mr. Miller, re "The Controlling of Swarms," reminds me of an incident that happened me in connection with one colony I had. I (being away from home) thought I would clip the wing of the queen in this colony. I did so, and then I placed a prepared hive near the entrance, perhaps about four or five feet away, and at right angles. The object was to induce the queen and swarm to hive themselves, as I had done on previous occasions. Whenever I came home my first question with regard to the bees was, "Have the bees swarmed yet?" "I don't know," generally came the answer. However, I always examined for myself. At last I found the prepared hive occupied. It could not have been hived more than one or two days. I at once set to work to examine the old stand. I lifted the cover, and, to my surprise, I heard young queens piping. "Well, well!" I said to myself, "I bet they have superseded the clipped queen. No sooner did I think of it than I was into the new swarm. Everything in nice order, but not an egg to be seen. Well, I will look for the queen. Sure enough, there she is, with both wings intact. The story is told. The clipped wing was a disappointment again.

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By G. A.
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LORA, ONT.

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Well, after all, now was my time. I sliced this two-storey eight-frame Langstroth hive into seven other single storey hives, giving each one a frame with queen cells, and in less than three weeks' time had a laying queen in each one. Extra surplus combs were supplied to fill up. In the same note Mr. Byer admits the same trouble. Now his idea of re-queening is all right, but he does not wish to own up to the method. Now those old bees and queens that you have at the end of the honey flow is one of the particular reasons why one swarm will winter better than another.

Why not let the young queen lead those old bees away to the bush? The colony will certainly be better without them; as they will only die before the winter is over. Their presence will cause the colony to become overheated if placed in the same temperature with a less populous one. This is one of the reasons why a medium-sized colony with a young queen always winters best. This applies particularly to cellar wintering.

MAKING LABELS ADHERE TO TIN

By G. A. DEADMAN, BRUSSELS, ONT.

It still seems to be a problem to many to make labels adhere to tin. They look to be there to stay, but too frequently are not. When labelling tin boxes containing possibly some ointment in our drug store, we have had the annoyance of having the labels drop off. The difficulty may be overcome by either mixing a little acid in the mucilage or by brushing the surface of the tin with acid, over which the label is to be placed, preferably acetic acid diluted. Before I was told of a better way I have labelled tin pails of honey in a similar way, using sometimes a thin prepara-

tion of glue, or gum arabic dissolved in water, and a little vinegar or diluted acetic acid added. I am glad to be able to tell you that there is a better way, for which I am indebted to Mr. Chris. Grimoldy of Owen Sound, who was told of it by a party in the canning business. It is very simple, but worth many times the subscription to Canadian Bee Journal to those who have much of such labelling to do. Simply make a flour paste, the same as for wallpaper hanging, with the addition of a little powdered alum stirred into the paste while still hot. I have never experimented to know how little of the alum would do, but, as it is not dear, I make sure and have plenty of it. You will be quite safe if you make it as follows: Take one cup of wheat flour and mix with one cup of cold water; then add three cups of boiling water, stirring constantly, and bring all to a boil. Then stir in two large heaping teaspoonfuls of powdered alum. If too thick, add a little more water. If that indefatigable worker, N. E. France, will make a note of this, I think he will find it better than what he has recommended to the members of the National

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HOW TO REQUEEN ANNUALLY AT A BIG PROFIT

By S. D. CHAPMAN in *The Bee-Keepers' Review*

It is very amusing to see some of our largest honey producers grasping at the idea of having two or more queens in each colony to build them up in the spring. Of course, we have our troubles, and one is that we cannot bring our colonies through the winter strong enough in bees to take care of anywhere near the amount of brood for which one of our queens can furnish the eggs. This is not a matter of locality, but the result of careful methods in producing good queens.

It is my purpose in this article not only to tell why that I requeen my colonies annually, but how I have brought my bees to the standard where, with the same conditions, three of my colonies are worth four colonies headed by any queens that I have been able to buy.

To start with, if I had 50 or 100 colonies of bees, and they were an inferior stock of bees, the first thing I would do to improve them would be to send to two or three queen breeders that were breeding the best strains of dark, leather-colored Italians, and purchase a queen to head each colony. After I had had these queens a year, or long enough to thoroughly test them, what do I find? Many of the colonies are poor, some are good, and a few are extra good.

If this transaction happened in anything except queens, we would say we had got a lot of culls. These queen-breeders are strictly honest men. I ordered untested queens; they sent me young queens, and they did not know but they are all good. In fact, they cannot tell what the queens will prove to be; it is not until the queens come into the hands of the honey-

producer that they show up in their true light.

Let me ask, why this vast difference? This is the point I am going after pretty soon, but first let me say that, after purchasing these queens, I need not look for any more help from the queen breeder. In fact, if I keep right on purchasing queens promiscuously, I will soon find myself going down hill rapidly, with no brakes on.

If the honey-producer ever comes into possession of a good strain of bees, it will be through his own individual efforts. In testing and choosing his bees he has many advantages which the queen breeders do not employ. Such good qualities and characteristics as hardiness, industry, gentleness and comb building, crop out only in certain individual colonies, and these are the colonies that we must save for the foundation of improvement.

We purchase a select, tested, breeding queen, as good as money can buy. From this tested queen we rear 50 or more queens. The conditions present while raising these queens are the same. They are all alike, and their chances to make good queens are equal, up to the time they are fertilized. I believe we are on sound footing up to this point.

How We Requeen.

We will take 100 colonies as a basis. About one week before the close of the raspberry flow one of my helpers and myself will go to this yard, and take away all the queens except about five. These are my breeding queens, and are used the following year to rear drones for next season's use; and, by the way, the following spring, the first time I look over my colonies, I put into these five colonies enough drone comb to make one frame of drone comb to each colony, and I expect to

raise a colonies queens; no other us two, the que

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raise all the drones from these five colonies that I need for my 100 queens; and, with my management, no other colonies raise any. It takes us two, some five or six hours to find the queens.

Now, take notice. The queens are taken away during the honey flow, and just at the time when the colonies are as heavy as it is possible to have them; and my colonies have from 16 to 24 frames, if they can use them, for a brood nest; and right here I wish to say that no better queens can be produced by any conditions or methods known to the bee-keepers of to-day.

About 10 or 11 days after taking away the queens is the time we take to weed out any inferior colonies; and shaking the bees from all the combs, and destroying all the queen cells. I then go to one of my best colonies, and take one frame that has queen cells and give it to this poor colony; and the change is complete.

This day is the day on which to make some nuclei, as we will need some queens to take the place of those that are lost. It is also the day on which to make our increase.

Those 95 queens all hatch at about the same time. The practical honey-producer, when running several yards, must have a certain line of work that fits every colony in that one yard the same day.

Many will ask the question: "When these young queens hatch, will we not have some swarming?" In taking away the last 1,000 queens, not one of the colonies has swarmed. At this time they do not hatch until just after the honey flow.

Why We Requeen.

First, for the improvement of our bees. Second, it gives us complete

control of our bees, in every yard, from start to finish.

Hardly one colony in 100 is ever queenless. Again, it is remarkable how even our colonies are at all times. This is a big thing, as all our colonies are ready for the same kind of work at the same time.

These young queens build our colonies up for winter better than old queens can, and they lay later in the season, giving more young bees for winter.

SIMCOE CONVENTION

The spring meeting of the County of Simcoe Bee-Keepers' Association will be held in Barrie on Easter Saturday, April 18, 1908. A good program will be provided, and everybody interested made welcome.

C. H. Wilson, Pres. Denis Nolan, Sec.
Hawkestone. Newton Robinson.

BOUND VOLUMES OF THE C.B.J.

If any of our readers wish their Bee Journals bound up, we will be very pleased to bind them. The charge will be 50c. We have some of each month of 1907 left over, and will supply these bound for \$1.50.

The Hurley Printing Co. would be glad to hear from any bee-keepers who may be in need of business stationery or labels of any kind. It is our intention to prepare a special label for ten and five-pound pails. We would be very pleased to receive a few samples of labels from those using them, in order that we may have a better idea of what may be required in this line. We can supply immediately letter heads, bill heads, envelopes, or anything in printing that you may need.

Letters to the Editor

NO LADDERS IN THIS YARD.

Mr. Editor,—The impulse is on. Do any of the readers feel that way after reading an article from some other contributor? Well, Mr. Byer's criticism of Mr. Taylor has called this forth. My experience with clipped-wing queens has been that many of such colonies with a grand big swarm would be led off with a virgin queen or two, the old queen having been superseded. Now for those who intend to run but one apiary I would say, if you have the time to be there every day through the swarming season, let the bees swarm, and to facilitate in catching the swarms, have some poles of different lengths up to 30 feet, or longer if necessary, or you could have a sliding pole—that is, two square $1\frac{1}{4}$ x 3-inch pieces of strong wood, with square rings made fast on the end of each piece, and with $\frac{3}{4}$ holes in one, one foot apart, and by sliding these square poles in the rings you can lengthen or shorten them at will. With the bolt through one to hold them in position, two 12-foot strips can be made to reach 23 feet. Of course, I often use just a round pole from the bush, but they must be sound. Sharpen the bottom end, or drive a $\frac{3}{8}$ round iron in the big end, leaving it extend out five or six inches. This will keep the pole from slipping. Now get an ordinary large tin milk pail, any old one; holes won't hurt, if they are not too big. Tie a piece of strong cord or rope on to the handle, with a noose on the other end to slip over the end of pole.

When a swarm issues and is partly clustered, place a few green twigs of the surrounding trees in the pail, and

you are ready. Reach up with your pail on end of pole, place the pail fair under the clustering bees, and give a chuck up, and the majority of the bees are landed in the pail. Now hold the pail with the bees back just a little, gradually clearing the limbs, and the bees will go in with a right good will. When you have them settled (don't wait for the last bee), down with the pole, slip the rope off the end of pole, and turn your pail on its side at your already prepared hive. If you notice another swarm issuing throw a cotton cloth over the captured swarm to prevent uniting. This method is quick and easy, and in all my experience I do not remember of ever killing a queen in so doing.

For out-apiaries the system of dividing I think is best, but the beekeeper that thinks he can run out-apiaries without losing an occasional swarm will find that he has made a slight miscalculation. Yes, and let him choose any old or new system that he may. In the season of 1906 I divided one colony into eight, and out of one of these one very large swarm escaped, making nine in all. I took 96 pounds of honey and fed but 20 pounds of sugar, and all eight came out good in spring of 1907. Of course, I had surplus combs, or I could not have done this, with our short seasons. I am in favor of the system of dividing for out-apiaries.

Yours,

GEO. W. STRANGWAYS.

Elora, Ont.

SOMETHING FOR BEGINNERS

Will you please allow me to ask a few questions through your Bee Journal? I have been keeping bees for four or five years, and have had very poor luck with them. No wonder, you

will say, never change in any cause I such work I think you one for a training, I far enough have likely farmer-ser brought back ing it was find that a lot of us I don't know have been foul brood, yet, or how I should be a fellow is not all a good plan to and call a get started body to tell would be I would take tion and ex how a green he sees it. when we out and how to be very ple explain the nal, and obli Franklin I

On page 20 Mr. McEvoy to Mr. Coup horns he might. He said brood up into you get him as in the su brood. Is it

will say, when I tell you that I have never changed or put in a new queen in any of my hives yet, simply because I knew nothing about doing such work, or when it was needed. I think your Journal is a very good one for a man that has had some training, but you don't go back quite far enough for a new beginner. You have likely heard about Pat, when the farmer sent him for a canthook. He brought back the old mooley cow, saying it was the only thing he could find that couldn't hook. You see, a lot of us beginners are like him—we don't know what to look for. Now, I have been reading quite a lot about foul brood, and don't know what it is yet, or how to find it. Also when or how I should put in new queens. How is a fellow to know that the old one is not all right? Would it not be a good plan to put in a beginners' page, and call a spade a spade, so we could get started right, when we have nobody to tell us anything? Now, sir, I would be very pleased if somebody would take up the foul brood question and explain just what it is, and how a greenhorn will know it when he sees it. Also, how are we to know when we ought to put in a new queen, and how to do it? Now, sir, I would be very pleased if some one would explain the above through your Journal, and oblige. JOHN SYKES.

Franklin P. O., Man.

On page 20 of your January number Mr. McEvoy gives some good advice to Mr. Couper, but to benefit greenhorns he might have given more details. He says: "I lift a comb of brood up into the super," etc. Will you get him to tell us soon what he has in the super besides this comb of brood. Is it full of empty combs or

frames of foundation? Perhaps he would also tell when or how we are to know when the right time has arrived to put supers on all strong colonies?

JAMES SACKVILLE, SR.

Bewdley, Ont.

The Above Questions Answered by Wm. McEvoy.

Foul brood is a disease that destroys the brood. In its first stage it turns yellow, and as it decays further it becomes a brown ropy matter, that will stretch like a fine rubber string if lifted out of the cell with the head of a pin. When this foul brood matter is drying down it glues itself fast to the bottom and lower side of the cell, and there it will remain just as long as the comb lasts. After the foul matter has dried down the bees store honey in these cells, and then this honey becomes diseased at once, and after that all brood that is fed any honey taken out of these diseased cells will die of foul brood.

Requeen Every Colony Every Year

Requeen every colony with queens bred from Italian stock that has given the largest yields in honey, and do this in the summer, before the honey harvest closes. The introducing method which is followed by the most of the bee-keepers is to take out the old queen and then place the cage with the new queen in over the cluster and let the bees release her by eating the candy out of the end of the cage, so that the queen can come out and go among the bees.

I buy many queens every year, and introduce them by caging the queens on some honey in the centre of the brood chamber. I make my introducing cages out of very strong wire web, a special kind. Back nearly

seven-eighths of an inch from each corner of the wire web I cut in nearly seven-eighths of an inch, and then turn the ends and sides down so as to form the cage into the shape of a box about three inches square. I then cage the queen on the comb with one of these cages and press it well in, so that no bees can get under the edges. I leave her caged this way for two days, and then lift off the cage, and if the bees meet her and start feeding her they will accept her at once. I then close up the hive. The most of colonies will accept a queen after she has been caged for two days, but a few will not just then, and she will have to be caged and tried until they will. When I lift the cage off the comb and none of the bees meet the queen and offer to feed her, I cage her again, and after another trial or two they usually do, and then all is right. Last August I had one very stubborn case, and it took me over two weeks to make these bees accept the new queen. I tried time after time to get the bees to accept this queen before I succeeded, and now this colony is one of the best in my apiary. I like this plan best of any, because I can make a sure thing of introducing every queen by this method.

Getting 16 to 20 and More Combs of Brood From 8 and 10-Frame Langstroth Hives

I see by the questions asked that I did not make myself clearly understood in my article in the January number of the Canadian Bee Journal, and will now try and make things clearer. "When has the right time arrived to put supers on all strong colonies," is one of the questions asked. The right time to put supers on is when the bees begin to whiten

the tops of the combs in the brood chambers, and begin storing more honey in the brood chambers than is required for brood rearing. When I lift a comb of brood up into the supers, I am asked to explain what I have in the supers then. I have the supers filled with the very best of all worker combs that has been bred in, and shaved to a scant seven-eighths of an inch thick. The queens like the old combs best to lay in, and will lay in more cells when they are a little short than when they are not, and for this reason I shave all combs to a scant seven-eighths with knives that have been dipped in hot water. I have all my combs sized and classed. The dark combs are all placed in hives by themselves, and the white combs are stored in other hives, and the few drone combs that I have are put in hives with the word "Drone Combs" written on. By having all the combs classed, and everything in order, I can rush the work faster in the busy time and get much better results. The dark combs are put on first, so as to get them filled up with brood; the white combs are put on later, when the honey-flow is on in good shape. I put the drone combs in the brood chamber of the colonies that have given me the most honey. By this system (which I had published in the January number of the Canadian Bee Journal) it will be seen that I get immense quantities of bees ready to do business with and secure more honey than I could if I left the management to the bees and depended on any brood chamber to give me an extra quantity of bees to do business with. The material that I got from scraping the frames and shaving all the combs to scant seven-eighths of an inch made 94 pounds of nice wax. This paid well for the time spent at

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the sizing and classing of the combs, and then left the combs of more value to me for use in the system I follow.

WM. McEVOY.

Woodburn, Ont.

[We are much indebted to Mr. McEvoy for the above contribution. His advice is valuable alike to the beginner and the experienced bee-keeper. Mr. McEvoy is a great bee man, and is always ready to give to others what he knows himself. We are all the more indebted to him for his various contributions for the reason that he is doing so gratuitously. He is accepting no pay. His one desire is to promote the bee industry, and, incidentally, to assist us in putting the C.B.J. in such a condition that it will be indispensable to every bee man in Canada, and bring it to a commercially paying basis. We are in some measure indebted to Mr. J. L. Byer for the same reason. Mr. McEvoy has replied very fully to Mr. Sykes and Mr. Sackville. We would like to say, however, to Mr. Sykes, that it is impossible to always conduct a beginners' department, for the reason that beginners are beginning always. During the last year Mr. Hand has conducted a beginners' department, the back numbers of which we will mail to Mr. Sykes if he desires them. We think that a good bee book is what Mr. Sykes most needs. We would advise Mr. Hutchinson's book, or A B C in Bee Culture, either of which we can supply him. The matter published in the C.B.J. from month to month cannot fail to be of benefit to the beginner if he will closely peruse it. Mr. Sackville will find Mr. McEvoy's method of lifting up frames of brood into the super and replacing them with drawn comb or

comb foundation, a valuable method of keeping the queen busy and obviating the overcrowding of the brood chamber, and thus getting a strong force of bees for the harvest. If Mr. Sykes and Mr. Sackville, or any other of our readers, have any other questions to ask, we will be glad to receive them, and give them any information that we can.—Ed.]

EXPERIMENTS WITH FARM CROPS

Dear Mr. Editor:

The annual market value of the farm crops grown in Ontario is greater than the combined annual values of the products of the forests, the mines and the fisheries of the whole of Canada. The production of the soil and the prosperity of the country are very closely associated in this Province. The public press has done much to advance progressive agriculture in Ontario during the last few years.

The insertion of the enclosed announcement of the co-operative experiments with farm crops for 1908 would assist in this great work, and would be appreciated by your readers.

Yours very truly,

C. A. ZAVITZ,

Director.

Ontario Agricultural College,

Guelph, Ont., March 7th, 1908.

The members of the Ontario Agricultural and Experimental Union are pleased to state that for 1908 they are prepared to distribute into every township of Ontario material for experiments with fodder crops, roots, grains, grasses, clovers and fertilizers. About 2,200 varieties of farm crops have been tested in the Experimental Department of the Ontario Agricultural Col-

lege, Guelph, for at least five years in succession. These consist of varieties from nearly all parts of the world, some of which have done exceedingly well in the carefully-conducted experiments at the College, and are now being distributed, free of charge, for co-operative experiments throughout Ontario. The following is the list of co-operative experiments in agriculture for 1908:

No.	Experiments.	Plots.
1	Three varieties of Oats.....	3
2a	Three varieties of Six-Rowed Barley	3
2b	Two varieties of Two-Rowed Barley	2
3	Two varieties of Hulless Barley	2
4	Two varieties of Spring Wheat	2
5	Three varieties of Buckwheat	3
6	Two varieties of Field Peas..	2
7	Emmer and Spelt.....	2
8	Two varieties of Soy, Soja, or Japanese Beans.....	2
9	Three varieties of Husking Corn	3
10	Three varieties of Mangels..	3
11	Two varieties of Sugar Beets for feeding purposes.....	2
12	Three varieties of Swedish Turnips	3
13	Two varieties of Fall Turnips	2
14	Two varieties of Carrots....	2
15	Three varieties of Fodder or Silage Corn.....	3
16	Three varieties of Millet....	3
17	Three varieties of Sorghum..	3
18	Grass Peas and two varieties of Vetches.....	3
19	Rape, Kale and Field Cabbage	3
20	Three varieties of Clover....	3
21	Sainfoin, Lucerne and Burnet	3
22	Four varieties of Grasses....	4
23	Three varieties of Field Beans	3

24	Three varieties of Sweet Corn	3
26	Fertilizers with Swedish Turnips	6
27	Sowing Mangels on the level and in drills.....	2
28a	Two varieties of Early Potatoes	2
28b	Two varieties of medium-ripening Potatoes.....	2
28c	Two varieties of late Potatoes	2
29	Three grain mixtures for grain production.....	3
30	Three mixtures of Grasses and Clover, for hay.....	3

The size of each plot in each of the first twenty-seven experiments, and in Nos. 29 and 30, is to be two rods long by one rod wide, and in No. 23 one rod, square.

Each person in Ontario who wishes to join in the work may choose any **ONE** of the experiments for 1908, and apply for the same. The material will be furnished in the order in which the applications are received until the supply is exhausted. It might be well for each applicant to make a second choice, for fear the first could not be granted. All material will be furnished entirely free of charge to each applicant, and the produce will, of course, become the property of the person who conducts the experiment.

METHODS OF HONEY TESTING FOR BEE-KEEPERS.

(By C. A. Browne, Ph.D.)

The most common forms of adulteration which are practised at present in the sophistication of honey are the addition of commercial glucose, cane sugar and invert sugar. The adulteration of honey by dilution with water is less commonly practised; such addition is easily recognized by the increased fluidity of the honey, and

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there is, besides, the increased danger that the product will spoil through fermentation. It is often desirable, however, for the bee-keeper to know the approximate percentage of moisture in his products in order to avoid the marketing of unripe honey which might exceed the limit for water allowed by the standards (25 per cent). The average water content of American honey, according to the average for 99 pure samples analyzed in the Bureau of Chemistry, is 17.59 per cent, so that there is above this a margin of more than 7 per cent in which the moisture of honeys may be allowed to fluctuate.

The accurate determination of moisture in honey in the chemical laboratory is a somewhat complicated process. A carefully weighed amount of the honey is evaporated at a temperature of about 160 degrees F. in a vacuum chamber until no more moisture is given off, and the loss in weight during the interval is calculated as water. For the bee-keeper such a method of determination is too involved and complicated; there is, however, a much simpler method by means of which the moisture content of a honey can be determined with ease and rapidity and with a fair degree of accuracy. This is by means of a specific gravity float or spindle. The liquefied honey is poured into a tall cylinder and immersed in hot water of 170 degrees F. temperature. The honey is stirred with a thermometer and as soon as the temperature has reached 160 degrees F. the spindle is lowered into the honey and allowed to come to rest. The point at which the surface of the honey cuts the graduation mark upon the spindle indicates the percentage of water in the honey.

For the accurate determination of glucose, cane sugar, and other adulterants, the bee-keeper will usually be obliged to resort to the services of a chemist. This is especially true as regards cane sugar, as there is no simple test for this substance which can be applied by the ordinary layman. As regards glucose and added invert sugar, however, there are certain simple colorimetric tests which can be easily and quickly carried out.

A good colorimetric test for the presence of commercial glucose or starch syrup in honey is that of Beckmann, by means of a dilute solution of iodine in potassium iodide. One part of the honey to be examined is dissolved in one part by volume of water in a test tube and shaken up with a few drops of the iodine solution. If the honey solution remains a pale yellow, commercial glucose is probably absent; if the solution is colored a red or purple, however, the presence of glucose syrup is clearly indicated. In making this test it is always best to carry out a comparative test under similar conditions, using a honey of known purity and adding the same number of drops of iodine solution. In this manner a reliable comparison of colors can be secured.

The adulteration of honey with invert sugar syrup is being practised to some extent in this country, though not as widely at present as in certain European countries. This syrup has in many respects the same composition as pure honey; it is deficient, however, in ash, albuminoids, and other constituents which occur in honey in small amounts. Through the action of the high temperature of boiling a small quantity of decomposition products of sugar is produced in this artificial honey which serves to dis-

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tinguish it from pure honey unless the latter has been boiled for some time, in which case it also will contain decomposition products similar to those contained in the invert sugar syrup. An easy test for artificial invert sugar in honey is by means of a concentrated solution of aniline acetate. This reagent should be prepared freshly each time before using. Five cubic centimeters of chemically pure aniline are shaken up with 5 cubic centimeters of water and 2 cubic centimeters of glacial acetic acid added. The milky emulsion of aniline and water should clear up perfectly on addition of the acid. About 5 cubic centimeters of the honey to be tested are diluted in a test tube with an equal volume of water and a little of the aniline solution poured down the walls of the tube so as to form a thin layer upon the surface of the liquid. If artificial invert sugar is present, a red ring will form beneath this layer, and on gently agitating the tube the whole quantity of aniline acetate will be tinged this color, the depth of coloration depending upon the quantity of artificial invert sugar present in the mixture. Pure honeys which have not been spoiled by overheating do not give this reaction.

In carrying out the tests previously described only a very small outlay in apparatus will be required. The special spindles for determining the water content of honey and the other apparatus can be obtained from any manufacturer of chemical goods. Glass or metal cylinders for containing the honey while spindling will be needed, as also a collection of test tubes and racks. A small 50 cubic centimeter graduated cylinder will also be found useful for measuring out the volume of honey solutions and of reagents.

All apparatus should be thoroughly cleaned and rinsed after using, as any contamination with impurities may affect the accuracy of the tests. The drugs specified may be purchased of any druggist.

Mr. Wm. J. Wight, of Widder, Ont., writes: "I have sent in my membership fee as a member to the Ontario Association. I cannot do without the Bee Journal. My bees are coming through in fine shape so far."

The first real bee-work for the year begins with what may be termed spring cleaning. By this is meant clearing floor-boards of dead bees and other débris, and at the same time taking note of how the stock has wintered, strength in bees, food in store, contracting brood, next giving extra wraps and placing on feeders when wanted, and other particulars, so as to have everything in readiness beforehand as needed later on.

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QUEBEC BEE-KEEPERS' ASSOCIATION

On Wednesday, February 5th, in the City Hall of St. Hyacinthe, there was a meeting of a considerable number of bee-keepers of the Province of Quebec, with the purpose of forming a Bee-keepers' Association.

The chair was occupied by Mr. Chs. Péloquin, M.C.A., of St. Hyacinthe, as President of the meeting, and A. O. Comiré, M.D., was acting as Secretary.

In a few words Mr. Péloquin explained the purpose of the meeting, and upon his suggestion the following resolutions were adopted:

"That an Association, known as the Quebec Bee-keepers' Association, shall be formed in the Province of Quebec, and shall be composed of those interested in bee-keeping, who become enrolled as members by paying an annual membership fee of one dollar to the Secretary of the Association.

"That the direction of the Association shall be composed of nine members.

"That the following persons shall be the directors: Chs. Péloquin, of St. Hyacinthe; Hector Béland, of Louiseville; Théodulé Cloutier, of L'Islet; Napoléon Gaudet, of St. Simon; F. W. Jones, of Bedford; J. A. Camirand, of Sherbrooke; Dr. J. L. Comiré, of Yamaska; Michel Dufault, of St. Joseph of Sorel; Onésiphore Fontaine, of St. Guillaume.

"That the President shall be Mr. Chs. Péloquin, of St. Hyacinthe, and the Secretary A. O. Comiré, M.D., of St. François du Lac.

"That the Hon. Jules Allard, Minister of Agriculture, shall be asked to bring before the Government, at the next session, a law providing for the legal formation of Bee-keepers' Asso-

ciations in the Province of Quebec, and another law providing for the suppression of foul brood among bees."

A. O. Comiré, Secretary.
Chs. Péloquin, President.

NORFOLK BEE-KEEPERS' ASSOCIATION

The meeting of the Norfolk Bee-keepers' Association, held at Simcoe on the 4th inst., was a decided success, there being some 25 present. This was the largest attendance of any meeting for some time. Mr. Holtermann of Brantford gave some good advice to beginners as to the spring management of bees. At this meeting the following resolution was adopted: "Resolved, That the members of the Norfolk Bee-keepers' Association note the statement in the Canadian Bee Journal that there is little or no foul brood in Ontario east of Northumberland County. That, in view of this, we would earnestly solicit the Minister of Agriculture of Ontario to cut off the foul brood inspectors in that territory, and that more be appointed in the sections where it is well known that it exists; and that a copy of the resolution be sent to the Minister of Agriculture and the Canadian Bee Journal." After spending an interesting and profitable time, discussing important questions, the meeting adjourned, to meet again at Delhi the latter part of May.

Yours truly,
LEE BEAUPRE.

Mr. Harold Newson, of Rocky Point, P. E. Island, under date of March 2, says: "I enclose an express order for \$1.50, for two years' subscription. The C.B.J. has improved very much under your care. It is developing into a good, practical bee paper."

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Want and Exchange Column

Advertisements for this column will be received at the rate of 35 cents for 25 words, each additional word one cent. Payments strictly in advance, as the amounts are too small to permit of book-keeping. Write copy of add 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

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BEES FOR SALE—"To R. F. Holtermann: The one colony of your Bees I received last spring gave me two good swarms and nearly 100 sections of comb honey"—G. W. Tebbs, Supt. Orphan Boys' Home, Hespeler, Ont. Will try and give those desiring breeding stock as good stock and same blood as above.—Write R. F. HOLTERMANN, Brantford, Ont.

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Spring Management

(Continued from Page 92)

and everything will be all right. This does the work of uniting with one manipulation. But not so with the wire screen idea. Should there be a considerable quantity of honey in the strong hive, or honey coming in from natural sources, a shallow extracting super should be placed above the weak colony to hold the surplus of stores, or the queen in the top hive will soon be crowded for room to lay.

Where just a few colonies are kept, and there being other bees in the same neighborhood, a simple way to feed light colonies in early spring is to fill a fruit sealer with bee feed, and put a piece of cotton cloth over the mouth of the sealer; then turn on the ferl until the upper rim of the ferl is within half an inch of the cloth. This forms a bee space when jar is inverted over a hole cut in the quilt or honey board above the cluster or frames. Where a honey board is used above the frames, quart bottles may be used to hold the bee feed. Tie a cotton cloth over the mouth of the bottle, have a hole bored in the honey board sufficient size so the neck on top of bottle will fit the hole like a cork. Bees in a cellar can be fed in this way, only I like to wax the cloth and make a small hole in the waxed cloth with a 17-gauge wire nail, and invert this right over the cluster. I have fed bees in this way in outdoor wintering, placing the feeders on in the fall when bees were packed and leave them on hives till spring, when I would find some feeders empty and some more or less full. With one small perforation in feeder only four or five bees can get at feed at once, and in this way there will be no excitement.

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W. J. KEDWELL

Manager and Editor

HONEY QUEENS

Laws' Italian and Holy Land Queens —Plenty of fine queens of the best strains on earth and with these I am catering to a satisfied trade. Are you in it? Or are you interested.

Laws' Leather and Golden Italians,

Laws' Holy Lands

These three, no more. The following prices are as low as consistent with good queens. Untested, 90c; per dozen, \$8.00; tested, \$1.00; per dozen, \$10. Breeders, the very best of either race, \$3.00 each.

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F. P. ADAMS,
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BOW PARK ITALIAN QUEENS are recognized among Canadian Bee-Keepers as a good reliable strain of bees. The demand for them has steadily increased from year to year.

If you intend re-queening next season, I will be pleased to correspond with you now. The stock is as good as careful breeding and proper attention can make it.

I expect to further increase my queen-rearing facilities another year, and will give the business the same careful attention as in previous years.



F. P. ADAMS,
Aplarist
Bow Park
Brantford, Can.

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Untested, each \$1.00	Six, \$5.00	Twelve, \$ 9.00
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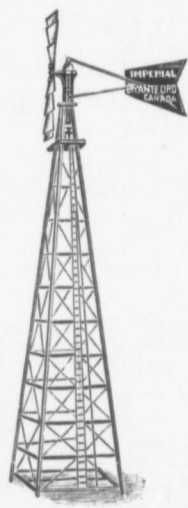
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