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# CANADIAN BEE JOURNAL

PUBLISHED MONTHLY.

NEW SERIES  
VOL. II, NO. 2.

BRANTFORD, ONT., AUGUST 1894.

WHOLE NO.  
354.

In another column will be found a notice of the North American Bee-Keepers' Convention. We are pleased International that the officers are all ready arranging for the Convention. The president is full of energy, and we have no doubt that the vice-president, Mr. O. Herscheiser and the secretary, and treasurer Messrs. Benton and York, will make every effort to have a well-arranged programme.

In the hands of our St. Joseph friends, we are safe to have the arrangements which tend so much to make these conventions pleasant. No one of course will expect plans which will interfere materially with the practical utility of the convention.

To our Canadian brethren we would say, we have again and again tested the hospitality of our United States cousins, and they have never been found wanting. Some of the brightest and never to be forgotten trips have been to bee-keepers and Bee-Keepers' conventions on the other side. Distance will doubtless prevent many Canadians who would otherwise like to go, from attending. They will watch with interest the reports of the proceedings.

\*.\*  
"Olla Podrida" in the present number mentions the nameless bee disease. We have yet to see the first case of it in our own apiary, or that of any other apiary. We should be pleased to go quite a distance to see it.

Too much importance cannot be placed upon the introduction of new and valuable

blood in the apiary from time to time.

\*.\*  
In another part of the CANADIAN BEE JOURNAL will be found a report of work done at the Michigan State apicultural station. The Winter Experiment. report which is given in the Review, would go to show that it takes less stores to winter on sugar syrup than on honey. We strongly incline to think that bees will winter as well on sugar syrup, or part sugar syrup and part honey as on honey alone. A question of greater doubt would be, what will bees build up most rapidly upon in the spring, sugar syrup or honey stores.

We take this opportunity of saying that, bee-keepers' generally are to be congratulated that Mr. Taylor has again charge of the Michigan state experiments in apiculture. The past years experience must be of immense advantage to him, and to other experimenters in planning work for the future.

\*.\*  
Bee-keepers' should be careful when sending money to strangers. We have during the past year at different Caution. times refused money for advertisements, because we did not think it was in the interest of our readers to accept advertisements from doubtful sources. Whilst we do not hold ourselves responsible for any of those who advertise in the CANADIAN BEE JOURNAL, we do not accept advertisements from those whose dealings in the past can be clearly shown to be unjust to their patrons.

In the American Bee-Keeper we see an

account offered for sale due from John McArthur, Toronto. We have heard other complaints in the same direction and would caution readers of the CANADIAN BEE JOURNAL to be careful in this direction.

\*.\*

We are pleased in this number of the CANADIAN BEE JOURNAL to give our readers a half-tone engraving of Mr. M. B. Holmes, Athens, Ont., for years a director of the Ontario Bee-Keepers' Association and a good bee-keeper. He has won a reputation for careful, quiet and firm action upon all important occasions.

\*.\*

A method to get all worker comb has at different times been suggested. The putting of a comb with drone Drone Comb. cells is considered an important factor in getting the bees to build all worker comb. We have yet to see that this plan makes any material difference in the amount of drone comb built by the bees. We understand that Mr. S. T. Pettit, has experimented in this direction quite extensively. Perhaps he would give the readers of the CANADIAN BEE JOURNAL the result of his experience.

\*.\*

Those who read the British and other European Bee Journals cannot fail to notice one marked difference between the development of bee-keeping in Canada, yes, in America, and Europe. In Europe one of the leading objects of Bee-Keepers' Associations appears to be to encourage the keeping of bees and increase the amount of wealth produced by bee-keeping. This is done by interesting cottagers and others and giving them as far as possible the necessary information to make them successful.

They in connection with association work appear to keep in view the development of their markets. Such being the case it will not be a matter of surprise that Germany now has about two million colonies of bees, France nine hundred and fifty thousand, a

small country like Denmark, over ninety thousand. In Canada, and possibly in the United States, we think associations, owing to the feeling of bee-keepers, work simply in the direction of giving information to their members, and indirectly to other bee-keepers through press reports, to enable them to keep bees according to better methods. There was a time in the apicultural history of the country when bee-keeping was not developed upon a healthy basis; men were lead into it without having fairly pointed out to them its difficulties. The reaction has been extreme, and we look for the time when bee-keeping will be developed along more healthy lines.

The work of developing our honey markets has never been attempted by our associations. Perhaps many of the leading men in these associations find no difficulty in marketing their honey, and are unable to put themselves in the place of the other men, and hence do not see the necessity for action. The editor of the CANADIAN BEE JOURNAL is one who has for years had strong faith in the possibility of educating the public to a much greater consumption of honey.

He has also strong faith in the ability of Bee-Keepers' Associations and the united efforts of bee-keepers, being able to make an impression upon the people of our country. Shall we make the effort and bring it hand with a healthy development of the bee-keeping industry for the benefit of the country.

\*.\*

Except in sections where there was an abundance of alsike clover, the bees gathered a very light crop of clover The Honey Crop. A few good reports came in, but the majority were discouraging. Our own crop from clover would run in the neighborhood of 20 lbs per colony of extracted honey.

On Wednesday July 11th, bees began working well on linden, the 12th was largely spent in extracting right in the apiary. On July 15th, after a heavy shower the bees began working on thistle.

Both the *American Bee Journal* and *Gleanings in Bee Culture* make kindly references to the engravings in the June number of the CANADIAN ENGRAVINGS. BEE JOURNAL. Friend Root paid us the high compliment of reproducing prints of two of the plates and in addition that of the editor with some complimentary references to that undeserving creature. In his closing remarks our friend Root says:

"When we know a man so well it is always interesting to know how the members of his family look."

Now we know editor Root practices as he preaches and there is only one way out of the difficulty. He must let the readers of *Gleanings* "know how the members of his family look." *The associate editor included.*

### Canada's Great Fair for 1894.

The Toronto Industrial Exhibition, which is to be held from the 3rd to the 15th of September, will no doubt be the greatest fair of the present year, and from present indications it promises to excel all others, both in point of exhibits and in attendance of visitors. The grounds have been vastly improved since last year, and already most of the space in all the buildings has been applied for. All entries close on the 11th of August. A good programme of special attractions, both novel and interesting, will be provided as usual. It is only a little over a month to the time of the fair, and our readers cannot choose a better holiday trip than this offers. Cheap excursions will as usual be run on all railways at rates in keeping with the times. This great Fair has now become one of the best and most popular educational and entertainment enterprises on this continent, and attracts visitors each year, not only from all parts of the Dominion, but from the United States as well, and those who have never been there would be surprised at its magnitude and attractiveness, being almost like a World's Fair, only on a smaller scale. The exhibit in the apiarian department continues to be the best in the world.

I will have a pretty fair crop of honey to dispose of this year, bees are doing very well this last while. Basswood is better this year than I ever saw it.

DANIEL EBY.

Moorefield, Ont., July 22nd, '94.

### To The Bee-Kcepers of North America.

The North American Bee-Keepers' Association was organized in December, 1870, with the avowed object of "promoting the interests of bee-culture throughout North America." All who are familiar with its work know, and its published proceedings also show, that it has adhered to this purpose, and has contributed as much as any similar society in the world to the spread of a knowledge of practical and scientific apiculture. Reviews, translations, and citations from these proceedings appear in the apiarian journals of all European countries. Much has in this way been done by this Society toward giving to the American system of apiculture the recognition which its great merits justly entitle it to receive.

#### APICULTURE PROGRESSING AND THE SOCIETY FLOURISHING.

The Association itself was never in a more flourishing condition than at present, having reached at the last meeting the highest membership it has ever possessed. But the remarkable progress made by apiculture in the United States and Canada within the memory of many who are still among the active members of this Society—in fact, the development of this industry until it has become one of considerable national importance—makes it certain, when we consider the wide fields yet unoccupied, that still greater things may be expected. If all who are interested in this pursuit, and are proud of the rank which the apiculture of America holds, are willing to assist the objects of this Association to the extent at least of becoming members and retaining continuous membership, results not merely gratifying to all but substantial benefits to every member will follow. It is not a trade union nor a socialistic society to promote strikes and boycotting, but a peaceful joining of scattered forces which by numbers, interests, and enthusiasm shall command respect and recognition with those whose work in life has not made them familiar with the extent and needs of this industry. The field is wide enough for all, and there should be no holding back through a spirit dictated by a feeling that one's own advancement is hindered by the well-earned progress of his fellow-man. Each should have instead a just pride in the knowledge that he has contributed to the general advancement.

#### WHAT THE SOCIETY CAN DO.

The North American Bee-Keepers' Association might aid in obtaining National and State legislation favorable to the interests of apiculture, both in securing and

promoting attention to this branch at experiment stations and in checking the sale of adulterated apiarian products. Should this body be composed permanently (as it certainly ought to be) of three-fourths or more of the intelligent apiarists of the country, its opinions, resolutions, and requests would carry with them far more weight and influence than they do at present. The time has come, in fact, when apiculture, having arrived at the dignity of a distinct pursuit and having enlisted the attention of some 300,000 of our citizens, has within itself forces worthy of much consideration—forces that should be united in order to do more effective work.

#### EVERY BEE-KEEPER,

therefore, whose eye falls on these lines is personally requested to ally himself with the members of our Society, whether he can be present at the regular meeting or not. The Proceedings, published in pamphlet form, are sent to all who pay the annual membership fee, and the names of all members appear in the printed list.

The next Annual Convention will be held at Saint Joseph, Missouri, October 16, 17, and 18, 1894. To avoid confusion at the time of the meeting and just before, members or those who wish to become such are requested to forward their dues, \$1.00, at the earliest date possible, to the Treasurer of the Association, Mr. George W. York, 56 Fifth Avenue, Chicago, Illinois, who will return a neat membership-card. Those who attend the convention are requested to present membership-cards and secure badges. State or local apiarian societies paying an annual affiliation fee of \$5.00 receive medals to be given to their own members as prizes, and delegates appointed by these societies to attend the conventions of the North American receive membership-cards and badges free.

For further information address:

FRANK BENTON,

Secretary North American Bee-Keepers' Association, Washington, D. C.

#### List of Recent Patents.

522,772. Beehive. Robert C. Aikin, Loveland, and Harry Knight, Littleton, Colo. Filed Jan. 31, 1893. Serial No. 460,478. (No model.)

*Claim.*—1. In a bee-hive, the combination with the super-section of strips or separators located between the sections and provided with spurs or projections, substantially as described.

2. In a bee-hive the combination with the super sections, of the separators

provided with spurs or projections adapted to indent and support the sections, the casing composed of detachable sides and the tension rods which pass through apertures formed in the extremities of two sides and engage lugs or projections formed on the other two sides the rods being provided with suitable nuts which they are threaded to receive, whereby the super may be simultaneously compressed on all sides, substantially as described.

3. In a bee hive the combination with the super sections and the knock-down casing, of the separator provided with suitable spurs or projections adopted to indent and support the sections as the sides are compressed on all sides, substantially as described.

4. In a bee-hive the combination with the super sections and the knock-down casing inclosing the same, of strips or separators located between the sections and carrying projecting spurs or edges adapted to indent the sections as the casing is compressed, and tension rods engaging the casing whereby it is simultaneously compressed on all sides, substantially as described.

#### Counties of Prescott and Russell Bee-Keepers' Association.

A joint meeting of the members of the counties of Prescott and Russell Bee-Keepers' Association was held June 9th, 1894 at the apiary of Mr. W. J. Brown, Chard, Ont. Nearly all the members of both associations were present. Amongst others present were noticed, A. Evanturell, Esq., M. P. P., and Miss Evanturell, Alfred Nap Longlin, J. P. and Mrs. Longlin, W. Brook, M. Landry, reeve of Clarence. Mr. Evanturell was chosen as chairman of the meeting. Addresses were delivered by W. J. Brown, M. Landry, Nap Longlin and others. An able address was also given by the chairman in which he strongly urged farmers and other parties interested in bee-keeping to follow the examples set by Messrs. Brown and Charbonneau. An able letter was read by W. Brown, from the pen of Alex. Dickson of Lancaster, on Cellar vs. Out-door Wintering. J. Charbonneau, had his instrument with him and took several views of Mr. Brown's apiary and also photographed the entire group, and received several orders for pictures. Mr. Brown showed all those present through his apiary and his method of extracting. At the close of the meeting all were supplied with a sumptuous repast by Mr. Brown, in which he did not spare trouble or expense. Mr. Brown deserves great credit for his trouble and pains taken

for the benefit of apiculture. His apiary and bees were in nice order, and bees in good order for the honey harvest. A hearty vote of thanks was tendered the chairmnn and also Mr. Alex. Dickson of Lancaster,

JAS. CHARBONNEAU.  
Sec'y-Treasurer.

### The Apiary of G. A. Deadman.

(Concluded.)

In continuing a description of my Apiary as shown in last issue of this Journal, I would say that the hives, with the exception of an odd one at alternative end of every other row, are in pairs. Between the hives constituting each pair there is a space of one foot, or sufficient to stand in to use the other hive for a seat if so inclined; then between each pair of hives there is a space of 4½ feet, which is ample room for a wheelbarrow or hand wagon to go between.

Before swarming begins only one hive in each pair contains bees, the other is empty and remains so until the colony in the other one swarms. When they do we simply exchange hives and place them in the old stand. In going over the apiary with this plan, there is no difficulty in seeing at a glance which colonies have swarmed and which have not. Of course only one swarm is allowed from each colony. Not only this, but by having your stands properly distanced you can *slide* the full hive on to the empty stand, which is much easier than lifting it. When desiring to unite two colonies, one hive is placed on the ends of the four blocks and the bees from either colony readily go into it. The stands are best made of round cedar 6 inches or more in diameter and cut the desired length. Shave off one side so that the hive will rest firmly, and sink the other in the ground an inch or so; a very little does. They should be slightly lower in front, otherwise it is better that the four blocks of each pair are level. The white in front of the hives is refuse salt, and is fortunately obtained so easily from a salt block which is adjoining the premises. The large evaporating pens are scraped every week or so and thrown out in heaps at the end of the building, and only costs the expense of hauling it. No doubt, when this is not obtainable, it would pay to buy ordinary salt by the barrel. With the exception then of about a foot in front of the entrance of each colony, the remainder of apiary is of grass. It is friend Boardman, I think, who has given us an account of the

way he and his assistant literally scraped his apiary, so that not a blade of grass nor weed could be seen. With all due respect to our good brother, I would not want my apiary treated in that fashion, nor not if a man would pay me for doing it. When the thermometer is in the eighties, or any other time, a carpet of green grass is decidedly preferable. I do not use a lawn mower either to keep it in subjection. It will be a surprise, except to those who know, how closely one can cut with a good sharp scythe, especially when the dew is on. A good plan is to take five or ten minutes each morning and cut between one row. This can be gathered up and given to your Jersey cow, (and what bee-keeper should be without at least one) and by the time you have gone over your apiary it is ready to begin again. Of course cutting it all at once makes a nicer job of it. Only one corner of the honey house is to be seen in the engraving, and this portion is open on two sides. It contains a work bench which is very necessary, as all bee-keepers know. It affords a shady retreat when you want to keep "your eye" on swarms and do some fixings besides. A swarming box after the style of friend Sheppard's, is leaning against the building. It has what I consider an improvement, viz: The box is made to swing on the handle so that it is always right end up no matter which way you hold it. This is an advantage, especially when the swarm is directly above you. No apiarist can afford to be without one or more of these. Two waggons are noticeable in the front ground, and I seldom "work among the bees" without one of these along. It contains the necessary tools and that may possibly be required. Like the worthy editor of this Journal, I am the happy possessor of a wife and family. The former has a child in her arms. My brother-in-law, Mr. T. McGillicuddy of Toronto, occupies a position to the left of the group, and his wife and one son at the right. Your humble servant is supposed to be busily engaged with a colony near by, while at the same time enjoying the shade of a cherry tree. The portion of a bee-tent can be seen to the left of the group, and which occasionally I find very useful.

G. A. DEADMAN.

Brussels, Ont.

Clover did next to nothing. Linden doing only middling.

S T. PERRIN.

Belmont, Ont., July 9, 1891.

## INTRODUCING QUEENS.

—G. M. Doolittle

This is an old and apparently worn-out subject, yet, notwithstanding, there is nothing which gives the average bee-keeper more anxiety of mind than the putting of a valued queen into a colony of bees which has lately been deprived of their own mother queen, in whom they were well pleased. I find that there is no time of the year in which queens are more easily introduced than at the end of the honey harvest, for the reason that, at this time more queens are superseded than at any other season of the year, and when the bees are, of their own accord, changing their queens then is the time for the apiarist to do the same, provided he has such work to do; hence this article at this time, but not to bore the readers on a worn-out subject. I propose in this article to give a bit of my experience as regards introducing queens, rather than point out any particular method for so doing. In a practice of twenty-five years, many things have come under my observation which have been interesting, and have thrown light on an operation which has many times proven, not only to myself but to multitudes of others, to be not always a successful one. Heretofore the loss of the queen has been charged to the bees rather than the queen, some parties being so rash and provoked as to crush a ball of bees enclosing a queen, under their feet, when in reality the queen was the one to blame. Many queens would never be molested in the least by the bees if they would behave themselves as they did in the hive which they formerly occupied; and I venture the prediction, that when we arrive at a plan that will place the queen with strange bees in the same quiet condition she was in while in the hive in which she was reared, we shall be successful every time. To substantiate this position I will give some experience in the matter. Some years ago I had a queen which began failing during the forepart of the season. Wishing to replace her I went to a nucleus and took out their queen, which had been laying about a week; then going to colony having the failing queen, I removed her and placed this young queen on the combs in the exact spot I picked the old one from. She immediately commenced to "pipe," the same as a virgin queen does when there are rivals in the cells in a hive calculating to send out an after-swarm. To this the bees paid no attention, but quietly came to her as

they would to an old queen with the intention of feeding her, to ail appearances; but instead of taking the food offered she put out her foot and struck at then, or laid hold of their heads with her feet, and continued piping. She passed around among the bees piping at intervals for a minute or two, I watching all the while. When she came to a young bee just hatched, all white and fuzzy, she immediately uttered a short pipe or squeal, clinched the little fellow and stung it so it curled up and died in an instant. At this the bees became enraged and showed signs of hostility for the first, beginning to lay hold of the queen. With a little smoke I dispersed them and still continued to watch. In about fifteen minutes she stung and killed nearly a score of these young bees and was seized each time after doing it, but I as often dispersed them with smoke. At all other times they were ready to feed her and treat her as they did their old queen. Once or twice she took food of them, but as a rule she would strike at them with her feet when they offered her food. I closed the hive and left them, and upon looking the next day I found queen cells started and supposed her dead, but in a week or so they cast a swarm, when, lo! there was my queen running around in front of the hive trying to go with the swarm, but being unable, as I had cut her wing. I opened the hive but found no eggs or larva, as the bees had not allowed this queen to lay any. The queen cells formed on the brood of the old queen were taken off and the swarm returned, upon which the queen went to laying again as when taken from the nucleus, and made a good queen. Again I have had queens which the bees treated as they did their own queen, but they would not stay in the hive at all. They would run out at the entrance, often followed by a few anxious bees, which would feed them and keep them alive. I had one out thus until I had put in another queen and she had begun to lay when I found the first under the bottom board to the hive with a few bees with her. I have no doubt but what many queens are finally lost in this way, by those who lose queens in introducing and send for another, while a thorough search about the hive would reveal them and save the ordering of another. Thus many facts in my experience go to prove that the queen has more to do with the loss sustained in introducing than the bees. "Well," says one, "if this is so, how can I remedy it?" The plan I have latterly adopted is this: Make a cage out of wire cloth having about sixteen meshes to the inch, large enough so it will cover some honey and quite a patch of hatching brood, by cutting little squares

out of each corner and then bending the sides up at right angles, so as to form a bottomless box, as it were, about three inches wide by six inches long. Unravel the wires at the bottom so that the ends of the wires left can be pressed into the comb to keep the queen. Remove the queen you wish to supercede, shake the bees from a selected comb having young bees just gnawing from the cells. Let the new queen run from the cage on the comb over these hatching bees, and then place the cage over her, pressing the unraveled edges of the wire cloth into the comb till the top of the cage is only about three-eighths of an inch up from it. Hang the comb in the hive, leaving bee space between the top of the cage and the next comb, so that the bees can go all about the cage. The next day open the hive and if eggs are found in the vacant cells under the cage, with bees and queen all quiet it is safe to lift the cage, when the queen will quietly go among the bees the same as she would had she always been in the hive. If no eggs are found in the cells under the cage, return the frame and keep the cage over the queen until eggs are found. The presence of the young bees with her, which have hatched from the brood enclosed within the cage has much to do in expediting matters and reconciling the bees and queen. As these young bees know no other mother than this queen, feed her till she begins to lay and form a sort of acquainted guard after the cage is lifted. At least I have been universally successful with this plan, where the cage was allowed to remain till the queen had filled the cells with eggs which were under the cage, as the queen will not lay many eggs until acknowledged mother of the bees by the whole colony. In this way both queen and bees are placed in a position to get fully acquainted with each other in the shortest possible time, and when liberated she is ready at once to deposit eggs at her fullest capacity.

Borodino, N. Y.

Report of Ontario Bureau of Industries.

CROPS IN ONTARIO.

TORONTO, JUNE 15th, 1894.—*Bees and Honey.* Reports regarding the condition of bees are variable. The loss during the winter appears to have been about the average where hives were left on the stands, but mortality appears to have been greater than usual where the bees were wintered indoors. The fine weather of the late March and early April days gave bees an earlier outing than usual, but the wet and cold weather which afterward prevailed was very trying

to the apiary. Several correspondents complained of spring dwindling, and losses from chilled brood and hunger were reported from various parts of the province. There has been practically no mention made of foul brood. With continued fine weather it was expected that colonies would pick up, and that honey making would go rapidly forward.

Toronto Industrial Exhibition Prize List.

SEP. 3 TO 15.—ENTRIES POSITIVELY CLOSE  
AUGUST 11TH.—HONEY AND  
APIARY SUPPLIES.

SEC.	1st	2nd	3rd	4th
1. Best display of 100 lbs. of extracted granulated Honey in glass ...	\$10	\$ 6	\$ 4	\$ 2
2. Best display of 500 lbs. of liquid extracted Honey, of which not less than 250 lbs. must be in glass, quality to be considered ....	20	15	10	5
3. Best display of 500 lbs. of Comb Honey in sections, quality to be considered .....	25	20	12	6
4. Best display of 20 lbs. of Comb Honey in sections, quality to be considered, that is to say, clean sections and best filled .....	10	6	4	2
5. Best display of 100 lbs. of extracted liquid Linden Honey, in glass, quality to be considered .....	8	5	3	—
6. Best display of 100 lbs. of extracted liquid Clover honey, in glass, quality considered .....	8	5	3	—
7. Best Beeswax, not less than 10 lbs. (manufacturers of comb foundation excluded) ...	6	4	2	—
8. Best foundation for brood chamber .....	3	2	1	—
9. " " sections .....	3	2	1	—
10. " Apiarian supplies. (1. Silver Medal and \$10				
11. " style and assortment of glass for retailing extracted honey (2. Bronze Medal and \$5				
12. " section super for top story and system of manipulating, product to be exhibited in super as left by the bees	3	2	1	—
13. " and most practical new invention for the Apiarist, never shown before at this Exhibition. ....	8	5	3	2
14. Largest and best variety of domestic uses to which honey may be put, prepared by the exhibitor or a member of his household, illustrated by samples of the different things into which it enters as a component; for example, say one or two samples each in canned fruits, cakes, pastry, meats, vinegar, etc. ....	8	5	3	—
15. For the largest, most tasty and neatly arranged exhibit of Honey in the Apiarian Department, all the honey to be the production of the exhibitor, quality to be considered. Bee-wax may be included in the exhibit: \$25 of this prize is given by the Ontario Beekeepers' Association .....	30	20	10	—
16. To the exhibitor taking the largest number of 1st prizes for (1. Sr Medal Honey at this Exhibition, 1891. (2. Br. Medal				

## Outdoor vs. Cellar Wintering

Given at Perth Bee-keepers' Convention  
By D. Chalmers.

Mr. President and fellow Bee-keepers.—If my memory serves me right, the above subject was allotted me at our last meeting as an appropriate paper to present at this our spring gathering.

But before entering upon it I would like to draw your attention to the term "out door," or "outside wintering." Does it not seem to you in using such a phrase, that the bees are outside simply in their hives as those in cellar would be; I will leave it with you to discuss as to how "Winter Packing vs. Cellar Wintering," would pass as a proper term to use to distinguish between those wintered in cellar and those wintered in summer stands protected.

My experience with the system of winter packing I practice now, dates from the year 1882, but for 13 years before that I cannot well explain how my bees were prepared to stand the winter blasts. Several winters between 1882 and now I have tried cellar wintering, and also a room prepared on the D. A. Jones principle, well protected, supplied with sub-earth ventilation, etc., etc., but for the last three or four years I have wintered almost exclusively on the winter packed system. Had these lines been penned in the latter part of March or early in April, grave doubts would have pervaded me as to how the bees would fare, after the warmth in the earlier part of the former month, which no doubt induced them to brood freely. This warm spell was followed by about three weeks of cold weather endangering chilling of the brood, but the cold seemed so steady that few bees ventured out and therefore spring dwindling did not reduce the bees as it often does, and to-day I am better pleased than ever with wintering bees protected in summer stands. It has an advantage which cellar wintering cannot claim, it saves the heavy carrying to and from the cellar, it saves all anxiety as to when bees should be set out. In early spring some mornings are bright and warm, but ere the day advances very far it becomes chilly, and should bees be set out from the cellar on such a morning they would be lost by thousands, for they will come out whether fit or not, when newly placed in open air, but on the contrary, when winter-packed, they are their own judges of the weather and are very instinctive as to when it is wisest to stay home." In Germany

I think it is, the people look to the bees as weather indicators, and in fact my observations are that on a rain threatening day if the bees do not seem to leave their hive to go gleaning, their owner had better not go far from home either.

My mode of winter packing is to make a rough box with bottom within the sides, so that the rain will not lodge so readily. The top of it should be sloped to suit a shanty roof. It requires two strips about three or four inches wide nailed edgeways on the bottom of the box to set the hive on, said strips to run from the front to within four inches of the rear. The box also requires a hole to be cut in front about four inches square, the bottom of which should just be level with the top of bottom board of the hive. It should be large enough to allow at least four inches of packing all around.

When the time comes for packing for winter, the rough box is to be filled to the top of the strips on the bottom herein above described. Set the colony in place, bridge the entrance, pack all around and over the top of the hive, and the chances are that another summer's sun will shine on a live colony of bees. A very essential point, of course, is to see in early fall that they are supplied with sufficient sealed honey to carry them to next season's apple bloom. As to the time of packing, if your rough boxes are water tight, pack in September or October. But if they leak, better leave off packing till after the fall rains are over. The hive entrance may be kept about three inches wide during winter but when spring comes contract to about one-half inch and gradually open as the days become warmer.

Trusting these ideas may meet your approval, and wishing you all a prosperous season.

D. CHALMERS.

Poole May 10th, 1894.

A man went into a drug-store and asked for something to cure a headache. The druggist held a bottle of hartshorn to his nose, and he was nearly overpowered by its pungency. As soon as he recovered, he began to rail at the druggist. "But didn't it help your headache?" asked the apothecary.

"Help my headache!" gasped the man. "I haven't any headache. It's my wife that has the headache."—Selected.

All things fulfil their purpose, low or high;  
There is no failure; death can never mar  
The least or greatest of the things that are;  
Until our work is done, we cannot die.

—Chamber's Journal.

## Honey as Nature Makes It.

—G. W. Demaree.

I have not been idle either in thought or in practical experiment, concerning the much discussed question of keeping up the reputation of honey as an article of food. Unique in kind, and unsurpassed in its fascination of the human palate.

The true secret of the nearly universal *sentiment* in favor of honey, is found in the fact that *Honey is honey*, and nothing else is, or can be made to be honey.

It is well to understand that in these "last days" amidst universal "unrest" in the world, and increasing temptation to dishonesty, driven at a flying gait, under the sound of the cry of "Lo, here! lo, there!" we expect honey to be tampered with. Everything else has been "watered" and has suffered in "woof and warp," and why not honey? The heart cry is "more, more!" and the current is toward the miraculous, whether some of our friends like miracles or not.

But honey will never be anything else but honey. If all the bees on earth were swept away, the word "honey" and its equivalents in all the languages of the human race, would become obsolete. This leads us to the query, though I admit by a circuitous route,—What is virgin honey? I have never met with a satisfactory answer, and will not be able to give an answer that will satisfy a great many. Now, virgin honey is nectar, gathered and stored by bees and evaporated by them in a current of heated air thoroughly disinfected by the constant emission of formic acid from the body of the bees, until it has attained to sufficient density to be sealed in the combs by the bees. This is virgin honey and nothing else on earth is, or can be. For the good reason that the art of man can never make the *conditions* under which the bees *cure* the crude nectar into honey. From the above it will be seen that I am an advocate of leaving the honey with the bees till it is fully evaporated to standard density, before taking the honey through the extracting process. Such honey is imperishable if kept from contact with dampness.

The following experiment, which I have repeated time and again, will convince any honey producer who will be candid and honest with himself and his fellow man, if he will try it for himself, and let the result speak to his better judgment. Now, for the experiment.

Take combs that are sealed down from the top bar, from one-fourth to one-half the way down. First throw out the thin unsealed honey and store it to itself, then uncap the sealed combs, and store it to itself. Keep both lots over the next winter, and till warm weather the following season, and if the results have been the same in your experiment that it has been in mine, repeatedly tried, the latter mentioned lot taken from the sealed combs will represent true virgin honey while the former lot will be *glucosy* syrup, though both lots may be apparently well preserved. All nectars in the early process of curing undergoes normal fermentation (normal for honey), and this is the agent that reduces the cane sugar in the crude nectar.

When the fresh nectar is first carried into the hives it contains the *seeds of ferment*—the outer air is full of them) and slight fermentation (normal for honey) goes on till checked by the disinfecting agency—formic acid, in the hive. Now, when thin, unsealed nectar is removed from the combs, and placed in the air of a "curing room" to be evaporated "artificially," it is brought in contact with germ-loaded air and a second fermentation takes place and the result is *glucosy* honey. But it is urged that this artificially cured honey "won't spile." May be not, and neither will commercial glucose spoil, because it is already spoiled.

In conclusion I want to say that any good manager in an apiary, by supplying his outfit with plenty of good "extracting combs," can produce honey in its best estate at a reasonable cost of capital and labor, and be honest, and feel honest, and enjoy its natural reward.

Chistiansburg, Kentucky.

## Correspondence.

I have just received word (yesterday) from the other officers of the North American which enabled me to place the date of the next meeting on this letter head, which was in the hands of the printer at the time. You will see that it is St. Joseph, Mo., Tuesday, Wednesday and Thursday, October 16, 17 and 18, 1891.

I hope we shall see you there. The "wild and woolly west" is great and it will do us all good to go out there and get a sniff of the prairie air. I think there will be a large attendance from Missouri, Kansas, Nebraska, Iowa, and perhaps other states near.

Yours truly,

FRANK BENTON,

N. A. B.-K. Ass'n.

## PREPARING THE APIARY FOR WINTER.

Given at the Michigan State Convention.

There is no question in bee-keeping at the present day which can be discussed before bee-keepers generally, with as great a profit as "Preparing the Apiary for Winter." Many of us are satisfied with our methods, simply because we are not educated to something better. We winter bees and bring out the hive with life in it, and are satisfied. If the hairs of the bees would only turn grey with care, they would tell a different story. However, there is another index, and that is to compare our honey crops from year to year with that of our neighbor, herein the grey hairs are manifest. Better preparation for winter, and better wintering would very much increase the net profits to be derived from bee-keeping.

Preparation for winter begins very early in the season. Our aim should be to have strong colonies for winter, with bees in the full vigor of life, that is bees not old and yet fully matured, the queen should also be perfect and in the full vigor of life, and plenty of wholesome stores for winter. The careful and successful bee-keeper must, after he has increased his colonies sufficiently, have more bees than he cares to handle the following spring. It then becomes a question of wintering and selling or destroying the bees. At the present price of bees, in the spring there is no money in selling bees at that season. The hives, the honey they consume, the room they occupy in the winter, and the work connected therewith, to say nothing about percentage of mortality, make it undesirable (unless in exceptional cases) to winter bees for the purpose of sale. There is also another advantage to be derived from destroying a number of colonies each fall, for we are able to select the very best for wintering, and by such selection much can be accomplished towards successful wintering. Other things being equal, colonies hived on starters will not be as strong as those hived on full sheets of foundation or combs. These hives are likely to contain the old queen. In selecting the colonies which are to be wintered, we should look as much as possible for young queens from stocks which have shown desirable characteristics, we want queens of desirable strains and strong colonies.

Sufficient honey should be kept back to give each colony natural stores unless the bee-keeper is in an exceptional locality

and natural stores are injurious. Of this latter I have no experience. If combs of honey have been kept they can readily be given as soon as the brood hatches from the brood chamber, if not I take one of the strongest colonies I intend to destroy, place upon it two upper stories and feed it a syrup prepared from granulated sugar, pure water and a little honey, and feed this as rapidly as possible. No better method can be derived than to feed from beneath the brood chamber.

Bees when not gathering, settle down to a quiet condition during which there is very little wear and tear of the system. This quiescent condition should not be broken in any way avoidable, by making the bees you intend to destroy do the storing, there is no loss in this way. Next, there will be less waste of stores and vitality all round, even should you have no colonies to destroy by disturbing a few instead of many, it is extremely likely much will be gained. Again, by means of such feeding, winter stores are sealed and in much better condition. The best method of feeding combs of honey, is to prepare the stores in a hive, place this under an old brood chamber and shake the bees down. A few moments and the work is done. I am no advocate of uniting bees at any time unless it be just before the honey flow. After having left the practice of contracting the brood chamber according to the strength of the colony, I return to it and advocate that bees should fairly well fill their hive. I would contract by means of a close division board. I am (for cellar wintering) an advocate of sealed covers with packing above to keep the moisture from condensing on the surface of the quilt, raising the rear of the hive from the bottom board.

R. F. HOLTERMANN.

### The Michigan Experimental Apiary.

#### SUGAR FOR WINTER STORES.

During the past year Mr. R. L. Taylor in his government position, conducted an experiment in connection with sugar for winter stores.

Its object was to get some idea if possible as to the difference in value between sugar syrup and honey for winter stores.

In the fall of 1893 twenty-four colonies were selected, one-half of which were fed sugar syrup for winter stores and the other half to be supplied with honey for the same purpose. Care was taken to select and arrange the colonies so as to have the two sets as nearly as possible of equal strength. This was done by noting the size of the

cluster but not weighing them. Mr. Taylor in his report states that he now attaches more importance to actually weighing the bees and should he again conduct an experiment along this line he would weigh them. Owing to the character of the latter part of last season few of Mr. Taylor's colonies were strong last fall. Again, the colonies selected were partly in two story Heddon hives and partly in one story ones, and that in order to derive one set almost completely of honey and to supply the other set with an abundance of honey for winter stores, it was found necessary to so manipulate the hives that those to be wintered on honey had two story hives, and those to be fed sugar syrup one story.

The hives were weighed when put into the cellar, the 15th of November, and again, when taken out the first days of April.

Two of those fed sugar syrup and three of those wintered on honey perished. They did not die from dysentery, or from this was there any indication that it resulted from either kind of food.

The following table shows the weight of each hive at each season and the difference or amount consumed by each in pounds and ounces.

#### THE SET WITH SUGAR STORES.

Fall Weight.	Spring Weight.	Am't Consum'd
33-12	29-4	4-8
31	28-8	2-8
30	26	4
33-4	30-8	2-12
29	26-4	2-12
29-8	26-8	3
32-4	29	3-4
32-4	29-8	3-12
26-12	23-4	3-8
26-8	24-4	2-4

31-4

#### THE SET WITH HONEY STORES.

54-4	48-8	5-12
57-8	51-12	5-12
56-4	45-8	10-12
63-8	51-12	8-12
45-4	39-8	5-12
47-8	40	7-8
48-4	43-12	1-8
46-8	41-4	5-4
50-12	63	7-12

61-12

it is well established that sugar syrup is fully equal to the best of honey for winter stores, to say nothing of inferior honey.

Mr. Taylor also tried an experiment in out-of-door wintering. He placed six colonies in the single story Heddon hive one above another, with a wire cloth sheet between each hive. The lower hive had a bottom and the upper a lid, each hive had an entrance separate. The hives were well packed with planer shaver shavings. All perished.

### THAT NEW PLAN TO PREVENT SWARMING.

G. M. Doolittle, in "Gleanings in Bee Culture."

While I would not on any account discourage new plans (for out of the invention of new plans for the various manipulations of bees has come *wonderful* things of late), yet I cannot feel that it would be right to let pass unnoticed some of the obvious errors which are found in the article by Bro. Edson Hains as given in Gleanings on page 405. To let these errors pass unnoticed would perhaps cause many to put time and money into such a swarming-preventative arrangement, by way of building new bee hives or by altering old hives over, boring holes, etc., in them, with little if any prospect of success, as I can see it; while a word of warning may save some from going into this thing headlong, and allow those who wish to experiment along this line to do so understandingly. In the first place, the plan is not a *new* plan, for it is very similar to the D. A. Jones plan which was given to the world some ten or fifteen years ago. The Jones plan was to allow the queen from six to eight combs for laying in which are placed in the centre of the hive with perforated zinc on either side and over them, with two or three combs near the entrance, and between these and the queen's apartment two wide frames of sections were placed, while more wide frames of sections were placed back of the queen's apartment, and finally sections placed over the whole top of the hive. As soon as the six or eight frames were filled with brood, three of them having brood in the most advanced stage, were taken out and put in the place of the three combs in the front of the sections, and next to the entrance, while those combs were placed in the broodnest to give the queen plenty of empty room. In two weeks the three combs in front, now nearly empty of brood, were substituted for

Mr. Taylor says the amount of stores consumed throughout the apiary was remarkably small, his loss in wintering was a considerable percentage throughout the apiary. He also points out the economy to be derived from feeding sugar syrup. The average of sugar syrup  $3\frac{1}{2}$  of honey  $6\frac{1}{2}$ , and this has added importance when we remember that

three with nearly mature brood again, from the brood-nest, and so on through the season, thus keeping the queen's apartment empty of honey, with plenty of room for eggs, while the bees could store their honey in the sections in front and overhead without going into the brooding apartment at all unless they desired.

The whole thing looked so reasonable to me that I made five hives on this plan, and in early spring put five good colonies into them, working them according to instructions, with the result that every one of them swarmed, and the whole thing was a complete failure so far as the merits claimed for it were concerned, as I gave in the columns of Gleanings about that time. It matters not whether the queen can go out with the swarm or not; so long as the bees contract the swarming fever, and that fever continues they are of little value as a colony for storing honey in sections to the best advantage. and I see nothing in the Hains plan to prevent their contracting the swarming fever, more than there was in the Jones plan. The whole thing is based on the false idea that bees coming in from the field loaded with nectar go directly into the sections and deposit that nectar in the cells. Mr. Hains says, "When I put on the surplus case I place it so that the bees can have ready access to it from the combs in front of the excluder, without passing through the zinc. This partially keeps the honey gatherers out of the brood-nest and saves them the trouble of going through the zinc heavy laden with honey, and it prevents them from emptying their load right into the brood nest where the queen is about to lay her eggs." This is only the old idea over again, which caused an entrance to be made at the tops of the frames of thousands of the first-made Langstroth hives, as well as at the bottom, so that the bees in returning from the fields with their loads of honey could go direct to the sections and thus be saved the time, trouble and travel of climbing up through the crowded hive with their loads. I have lain hours enough, when put together, to make days, by the side of a single-comb observatory hive to see what I could find out in this matter, as well as other matters, and I never yet saw a bee, coming in loaded from the field, deposit the load of nectar it had, in a cell of the comb, unless honey was so abundant that every bee was so filled that it could hold no more, which does not happen once out of ten thousand times; but the load is always given to one of the younger bees which has not yet entered the fields as a field-worker, and taken by this bee and deposited where it is wished. Again, the same thing is proven when

we change a colony from German bees to Italians, by changing queens sometime before the honey harvest. There comes a time when all the German bees will be field-bees, and all the Italians will be inside workers; and if this change was made so this time comes in the height of the honey-flow you will see none but black bees going in and out of the entrance; while if you take a look at the sections, you will find only Italian bees there at work, or *vice versa*, according as the change of queens happens to be. Thus it will be seen that all plans to save the field bees traveling into the brood-nest of any hive, by way of "comb-ladders," etc., are fallacious.

Again, Bro. Haines seems to expect, if they do swarm, and the queen happens to squeeze through the zinc, she will stop on the two outside combs; but, according to my experience with the Jones plan, this will not be the case; for the queen is just as anxious to get entirely out and away from the hive she has formerly lived in as any of the other bees which go with the swarm. Another thing I notice is, that "undesirable drones should be kept in the brood-nest." Don't you do it, for there is no one thing that makes me feel "edgewise" toward perforated zinc as does this matter of its confining the drones to the hive, where they rush around pell-mell every day from one to three o'clock trying to get out, and kicking up a disturbance generally till their life is worn out of them; and after they die they are still worse than they were when alive; for the workers will tug and pull at them in the vain effort to remove them from the hive, till the hair, legs, and wings are pulled off; and, finally, if there are too many of them they clog up the zinc, and rot or ferment, and become a stinking, sickening mass, unless removed by the apiarist. No, no, Bro. Hains; either remove all drone comb from the apartment where the queen is, or else provide some means for the drones to get out of the queen's apartment.

Again, I notice, "Virgin queens, being smaller, will be able to get through the excluder to take their flight." By close experimenting and measuring, I find that the thorax of a virgin queen is just as large when she is hatched, or six days old, as it ever is; and as it is the thorax which prevents a queen or drone going through the perforated zinc, any queen that can go through when a virgin, can go through when she is fertile, providing she exerts the same energy to get through later on in life. This she is not apt to do, except in cases of swarming, and this is the reason why so many queens in full laying powers do not go through the zinc, while virgins do, and



M. B. HOLMES, ESQ., ATHENS, ONT.

not because the virgin or fertile queen at swarming time has a smaller abdomen. Lastly, Bro. H. assumes, and this assumption is accorded to him by the editor in his footnotes, that the bees dislike to go through the perforated zinc. Now, if this is really so, we as apiarists of the nineteenth century had better dispense with it, only in cases where it is absolutely necessary to use it, and have it go out to the world that, whenever we do use it, we do it with the full understanding that we do so at a sacrifice of dollars' worth of honey to accomplish the purpose we are after. How is it, brother and sister bee-keepers? are we using perforated metal at a loss in honey?

[This is timely and to the point. There is always some one of our old veterans, if not the editor, who is prepared to say whether an idea is old and whether there is anything in it. As you intimate, we are not prepared to say that loaded bees would take the shortest road to the super. If it is true, as you say, that they turn their loads over to the young bees and they themselves deposit it in the combs, there would be nothing in the new plan. Mr. Doolittle has made quite a study of this matter, and, if we are correct, his conclusions have been endorsed by one or two others. But over against this there is this fact: Years ago we once left, in the height of the honey flow, some combs

leaning against the entrance. The loaded workers instead of going into the entrance, deposited their loads themselves in the aforesaid combs; and one or two observers have since said that they would also store in the first two combs near the entrance, leaving the young bees to transfer it to the supers.

But you say that this plan before us was tried by D. A. Jones and others—yourself included—and that there proved to be nothing in it. It is indeed important to know this at this time. In the mean time let us have facts from actual observation as to what the field bees do with their loads, as a rule, on arriving at the entrance. Definite knowledge on this point may make it necessary to make some modifications in the brood-chamber. Your last point is well taken, if bees do dislike to go through zinc. We had not thought of it in that light before. The mere fact that bees will store tons of honey above it, does not look as if they objected to it. So far, extensive bee-keepers say that they cannot discover that it makes any difference in the yield of honey.

*Later.*—Since writing the foregoing we have received a letter from H. W. Funk, of Forval, Ill., stating that, five years ago, he tried a non-swarmer plan, quite similar to the Hains plan on 10 colonies. They all swarmed, he says, and sooner than the rest of his colonies.—ED. GLEANINGS.]

### Some Experiments in Wintering.

R. L. Taylor also writes in Review.

During last fall and winter I made such efforts as I could under existing circumstances to get some light on the problems growing out of the matter of wintering bees. My bee-cellar is under my honey-house and is fifteen by thirty feet with a cistern in one end. I have wintered bees in this cellar for seven or eight years with almost uniformly excellent success, and yet it now seems certain from my experiments with a hygrometer, to be a very damp one, there being a difference, at a temperature of from 40° to 50, between the wet bulb and the dry bulb, of only one-half a degree, which indicates that the percentage of moisture is about 98—almost complete saturation.

It is claimed by many prominent beekeepers that moisture is one of the principal causes, if not the principal cause, of the winter disease of bees known as dysentery, but if this were true I should have expected to find it prevailing largely among my bees during the last winter, but such did not prove to be the case. In fact, though I suffered a larger percentage of loss than I ever did before in this cellar—about 20 per cent—yet only a small proportion of those that perished showed even a little evidence of that disorder. I discovered only two cases that could be called jelly-bell, in one of which the colony died and in the other the colony had regained its health and was in good order and of good strength when removed from the cellar, and still remains so. This case was a peculiar one. The hive was an eight-framed L. hive and the bottom board was left on in the wintering. Such a forbidding receptacle for bees as this was when taken from the cellar about the tenth of April, I have seldom seen. The bottom board was covered with a mass of sticky ordure to such an extent that only now and then would a bee venture upon it to gain the outside of the hive. The cover was well sealed on and when pried off it ran with the almost incredible amount of water and the honey board and combs outside the cluster were wet and white with mould. When the bottom board was removed and a clean one substituted, the bees came out to fly as clean, healthy and strong as one would care to see.

I cannot reconcile this case, as well as many others I have examined recently, with the theory that moisture is the cause dysentery. Yet I think I have good

evidence that moisture under certain circumstances is harmful. When the strength of the colony is sufficient to enable it to keep its immediate neighborhood dry, it appears not to suffer from moisture, but if it is so deficient in numbers and vigor, one or both, that it is unable to do that, it seems reasonable to suppose that it must perish, being either chilled to death in the cluster or else driven to desperation by the misery of the situation, scattering and leaving the hive tenantless. The slight spotting of the combs which often occur under such circumstances should not, I think, be taken as a sign of the trouble known as dysentery. It is rather the result of the weakness of approaching dissolution than the cause of it.

Last season after the failure of clover and basswood there was very little nectar to be gathered in this locality either during the remainder of the summer or during the fall, from which fact it resulted that at the beginning of winter a large portion of the colonies were not only weak in bees but especially so in young bees. It was not difficult to foresee the probable consequence of this state of things, so I was not surprised at the loss I have incurred. Apparently the old bees died off during the early part of the winter, for more than the usual number left the hives during that time, thus reducing the cluster to a size too small to enable it to successfully combat the unfriendly influences of moisture combined with a cellar temperature. Perhaps in many cases the cellar temperature alone would prove sufficient to create such a feeling of discomfort as to make the bees restless and so cause them one by one to leave the cluster and wander out of the hive and be lost, but I have no doubt that in other cases the added influence of moisture was necessary to accomplish total ruin. That the decline of these colonies came about in the way I have indicated seems substantiated by the fact that in almost all these cases very few dead bees were left in the hives and in only now and then one had the bee-last to perish preserved the form of a cluster to the last.

Quite a strong effort was made to determine if possible whether sealed covers were, in cellar wintering, a disadvantage and a large number of hives with such covers as well as of those with loose covers were set apart and carefully examined with the result that where the colonies were of fairly normal strength there was no apparent difference—almost every one of that class wintering very satisfactorily. About the only advantage of the loose covers was that the combs were preserved dry and clean. It was also observed that the entire removal of the

bottom board, leaving the bottom of the hive entirely open, served largely the same purpose as a loose cover, though not to quite the same extent. In some of the larger hives, having a bottom board, as well as sealed covers, the combs outside the cluster were very wet and mouldy. In the case of the weaker colonies sealed covers were comparatively detrimental. Of course all this is in a cellar where the temperature was maintained during the entire winter at 45° and over, and it can readily be believed that the class of colonies that would fail to cope with the conditions induced by sealed covers out of doors would be very considerably enlarged; not, I think, because the moisture would induce the disease known as dysentery, but because it would require stronger colonies to ward off encroaching chilliness caused by constant excessive evaporation, so that the health and vigor of a large number would be undermined and finally destroyed.

Of course so far it does not appear that sealed covers have any advantage in any case but inasmuch as they cause wet and mouldy combs it would be well worth the while to loosen all covers when the bees are put into the cellar and certainly so unless the bottom boards are entirely removed.

The losses I have incurred speak plainly of the importance of giving strict heed to the old rule: Keep old colonies strong. By doubling up about one-third of my colonies in September I should have escaped with practically no loss.

Lapeer, Mich. April 23, 1894.

## OLLA PODRIDA, NO. 9.

[By O. Fitzalwyn Wilkins.]

Another year has passed into eternity and No. 12 of the Canadian Phoenix (C. B. J.) has passed into the hands of its numerous subscribers, showing continuous improvement in every number since it arose from its ashes in Beeton.

Brother L(ive) B. intimates that "*live men*" are to be credited for the improvement. Now while I quite agree with Bro. B. as to the spirited sprightliness, vigorous vivacity, and *live liveliness* (?) embodied in the *New Series* of our own CANADIAN BEE JOURNAL, yet it should be borne in mind that the traits above mentioned are not sufficient in themselves to carry an enterprise to a successful completion.

"Money makes the mare go" is a trite and true saying, therefore, without desiring to disparage the energy and business ability

of the new firm I would respectfully suggest to the L(ive) B. that had the former proprietor of the JOURNAL, been possessed of a "plentiful sufficiency" of worldly wealth, it might still be as it formerly was (and I hope may again become) the first as well as the most progressive WEEKLY Bee Journal in America.

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Some of the American bee journals have lately published several letters concerning the wide spread prevalence of the "nameless disease" or bee paralysis in the southern States and California. One writer states that he had tried all the remedies he had heard of, but with no beneficial result. Several years since I had several colonies which were afflicted in like manner; I also tried everything that I could find recommended but without success. Then I killed the queens of the affected colonies, and permitted them to raise young queens from the eggs of those decapitated—the strength of the paralytic colonies being kept up by frames of hatching brood drawn from strong, healthy colonies. The worker brood from these young queens showed in the course of a few days, the same symptoms as did the progeny of their mothers. Being still hopeful of saving my colonies, I again killed the queens of the paralytic colonies and this time introduced queens from unmistakably healthy hybrid colonies, which proved successful, the hatching brood being all healthy, and the colonies becoming eventually strong enough to winter.

\* \* \*

The cause of this "nameless bee-disease," or "bee paralysis" seems to be involved in obscurity, up to the present time. I may be wrong, but I think it is caused by in-breeding too closely. Those queens which I destroyed were the grand-daughters and great-grand-daughters of a thorough-bred Italian queen procured from the U. S., and were mated with drones of the same stock, (I allowed no drone brood in the other hives). None of the progeny of my other queens showed any symptoms whatever of the disease, which entirely disappeared after I substituted hybrid queens for the thorough-breds.

\* \* \*

If any of your correspondents have had any experience in this matter, I hope they will favor your subscribers with their opinions as to the cause of the disease, and its cure.

\* \* \*

"Prevention of Swarming" by A. G. Willows is a very interesting as well as timely article. I was successful last season in prevent-

ing swarming by the adoption of a similar method, viz: giving an abundance of room before preparations began. I use a hive having a loose bottom board, which can be "tiered up" to any height, whether running for comb or extracted honey. I tiered up to three hives high, placing a queen-excluder between the brood chamber and the second story. When the second story was partially full, I raised it up and placed a hive having the full number (10) of empty combs under it next to the brood chamber, and when the third, (the former second) story was completely filled it was taken off and another hive of empty combs placed next above the brood chamber, as before. By this method of procedure I was entirely successful in my endeavor to prevent swarming last year, and I shall make use of the same means again this season.

\* \* \*

HOSHAL'S Heddon Hive may be more valuable than the Heddon Hive as made and sold by Mr. Jones; however, not having seen the Hoshal-Heddon, I am unprepared to discuss it, but I will say that I used the Jones-Heddon during three seasons, then discarded it, and this spring I used it for kindling wood with which I start my furnace fire. "Furthermore than this, deponent sayeth not."

\* \* \*

The innate modesty of our genial editor is only exceeded by his agreeable personality. I judge so from having carefully scanned the features of that "chip of the old block," as exhibited in that very pleasing picture (page 253, of C. B. J.) of Handsome Harry Holterman and his mamma. The group on the previous page is equally as attractive, and I doubt not that the entire subscription list of the C. B. J. would be as delighted as the writer to see the entire Holtermann family photograph (including the one who considers himself as "not being very good looking.") occupying one whole page of the JOURNAL. I would also suggest that photos of the gentlemen comprising the firm, together with those of a few of their principal employees occupy the adjoining page. Periodicals of all sorts are more attractive when fully illustrated, and an old *typo* told me that pictures cost less than print.

\* \* \*

I am pleased to know that a bill has been brought into the Dominion Parliament with the view of prohibiting the imitation and adulteration of honey. Should that bill become law, would it not be well to have Messrs. Pettit, Darling and Frith request the Customs department to amend that

clause of the tariff which imposes a duty of three cents per pound on all importations of "honey in the comb, or otherwise, and imitations or adulterations thereof," by prohibiting the importation of all imitations and adulterations of honey in the comb or otherwise. Furthermore, would it not be well were my suggestion acted upon at once.

International Bridge, Ont., June 4, 1891.

## FIRST STEPS IN.... ...BEE-KEEPING.

KEEPING EVERLASTINGLY AT IT  
BRINGS SUCCESS.

QUESTIONS SENT IN BEARING UPON FIRST STEPS  
IN BEE-KEEPING WILL BE ANSWERED IN THIS  
DEPARTMENT BY THE EDITOR.

In many localities during the month of August and for the remainder of the season, bees gather no surplus, in many cases they do not even gather sufficient honey for their immediate requirements. During this time colonies should be examined as little as possible, such examination induces robbing, which often leaves the bees bad tempered for days.

Examination should of course be made to see that every colony has a laying queen and if she has not, one should be given at once.

A proper bee tent to keep away robber bees is very desirable. Yet economy in equipment is desirable, and those having only a few colonies of bees can by proper management largely do away with the necessity of a bee tent.

Examine your bees towards evening, expose no more comb than necessary, have a box or hive alongside in which to place combs which cannot be left in the hive you are examining, and keep this box covered with a cloth. Examine only one colony during an evening and no trouble is liable to occur.

If you have no fall flow in your vicinity and you find a hive with but few bees, no brood and no queen I would advise destroying the bees. The chances of wintering such a colony are not great and you are likely to be out the price of the queen and the honey they consume before death. Comb honey should be removed to avoid soiled sections. It is well to keep in the upper storey some combs of sealed honey

they may be required below for winter stores.

QUESTIONS AND ANSWERS.

Question—I am not much of an expert with bees—but I cannot see the use of so many drones eating so much honey and doing nothing. Would you advise me to use the *Alley Drone Trap* and catch and destroy them, or would there be danger of my catching the queen with the drones and destroying her as well.

C. C. F.

July 6th, 1893.

Ans.—The *Alley Drone trap* is an exceedingly useful appliance in the apiary. In hives where full sheets of comb foundation have not been used, there is a liability of having too much drone comb and drones. It is well to trap the drones and in addition cut out most of the drone comb and put in worker. There is no danger of catching the queen in the trap, unless a swarm should issue, or a young virgin queen should be in the hive and fly out to mate.

This latter will occur when the hive has for some cause lost its queen and they have reared another, or the young queen reared at swarming in the old hive fly out. The precaution may be taken to look for the queen in the trap when destroying the drones.

Question.—Two large swarms have gone into the same box. How shall I divide them? Both have queens. Is dividing advisable?

Apple Hill, Ont.

J. H.

The swarms may be divided by finding the queens and separating the bees. This can be done soon after they enter the hive. Generally I do not divide but the queens may be valuable when it is desirable to divide. Or one queen may be valuable, another not, when it is desirable to find the inferior queen and destroy her.

Question.—How would you clean an old hive (one that failed to winter through) so as to make it habitable for new swarms? There was considerable honey, but it was somewhat mouldy. Would it be better to take the old comb and honey out and put in a new foundation, and how much.

How do you induce the bees to commence to fill the sections. My bees seem to devote their time to breeding instead of honey. Is there any necessity of anything between the brood chamber and the sections for honey. Between what hours in the day are bees most apt to swarm? Is the gathering outside any sign of soon swarming, or is there any definite way of telling when a swarm will leave. Hoping that you will bear with these simple questions from an amateur and wishing you and the C. B. J. every success. I am

FLIP.

Iroquois, Ont.

Answer. I would cleanse the old hive by giving the combs one at a time to a strong colony. Of course they should be brushed clean, as far as possible by hand.

If this cannot be done, brush and dry the combs and either put in the upper story of a hive or throw a swarm upon them. Repeated batches of brood hatching from the combs render them old and for this reason they should be changed, otherwise the only danger with mouldy combs is that a swarm when thrown upon them will forsake them.

In reply to the question re best method of getting bees to work in the sections I would say the race and strain of bee has something to do with this. Again if the sections are not put on before the bees get the swarming impulse, they are likely to swarm out and not work in the sections. With an extremely deep frame the bees often appear reluctant to pass much sealed honey and work in the supers.

Perhaps oftener than any of the above the beginner's bees do not work in the sections because his colonies are not strong enough or not sufficient honey is coming in. Bees are most apt to swarm between ten o'clock in the morning and three o'clock in the afternoon, but they quite frequently come off earlier in the morning, eight to four in the afternoon and very rarely earlier and later than that. The gathering outside in a cluster is an indication that the hive is crowded or the bees too warm inside, when this the case during a honey flow it is liable to be followed by swarming.

### Bee-Keepers' Association Meetings.

#### THE NORTH AMERICAN BEE-KEEPERS' ASSOCIATION.

The quarter Centennial meeting of this Society will be held at St. Joseph, Mo., Oct. 16th, 17th and 18th, 1891. It is the first convention of the North American Association beyond the western bank of the Mississippi, and large delegations from the great West will be present. We hope the East, the North and the South will gather with them.

FRANK BENTON,  
Secretary North American Bee-Keepers' Association, U. S. Department of Agriculture, Washington, D. C.

#### NORFOLK BEE-KEEPERS' CONVENTION.

DEAR SIRS:—The next regular meeting of the Norfolk B. K. A., will be held at the apiary and residence of E. E. & Rot B. Emrick, one-half mile north of Tyrell P. O., on Saturday, September 1st, at 2 o'clock p. m. All parties interested in bees and honey, are invited to attend.

ROBT. B. EMRICK,  
Sec'y N. B. K. A.



## Strictly Business

We have been mailing as high as seventy-one queens by a single mail and are prepared to supply a few more queens to subscribers of the CANADIAN BEE JOURNAL. This offer holds good until September 1st, 1894. To new subscribers an Italian queen (a daughter of our valuable queen) and the CANADIAN BEE JOURNAL for one year for \$1.50. Renewals to C. B. J. from those in arrears not more than three months and such a queen \$1.70. Those in arrears more than three months. C. B. J. and queen \$1.85.

\*.\*

Many owing to pressure of time have neglected to renew. We extend the offer of a Besto Fire Mat for thirty days. Note it below.

A large number of subscriptions expired with last number, and as our terms are \$1 payable in advance, we ask a prompt remittance, and to every one remitting his or her subscription before August 31st, we will send a Besto Fire Mat. Or if you will send us \$2 for two years in advance we will send both a fire mat and a handsome art portfolio. If you want to stop your subscription, and have paid for it in full, drop us a post card at once and we will take off your name. If you do not notify us *we will continue to send the Journal*. If you are not ready to remit within the month, let us know when you can pay, and we will wait a reasonable time.

### Correspondence.

I have never had so much to contend with in a season before. Bees came out in very good shape and built up fine but after 17th of May we had three weeks of the worst weather on bees I ever experienced. Nearly all queens ceased laying, and before the rainy weather let up nearly all ran short of stores. So we had a ten days' honey flow from teapots and the feeders to keep the bees from starving. This continued until the 10th of June, then we had to get on a hustle to get the bees (nearly 300 colonies) moved by rail, so I have had no time to think of anything, but drive along the work. Clover has been almost a failure in this locality, but if the weather is right there will be a great show for basswood. It will be out now in about a week.

C. W. Post.

Murray, July 9, 1894.

The honey crop has thus far been a failure here. W. J. BROWN.  
Chard, July 9th, 1894.

Bees not doing well, I am afraid it is going to be a short crop. WM. COUSE.  
Streetsville, July 9th, 1894.

THE CANADIAN BEE JOURNAL is the best I ever saw it. WILL ELLIS.  
St. David's, July 9, 1894.

I like the JOURNAL very much and must say there is a wonderful improvement since it came into your hands. C. M. NEWMANS.  
London, July 12 1894.

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Errors, like straws, upon the surface  
flow,  
He who would search for pearls must  
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Devoted to the Interests of Bee-Keepers,  
Published Monthly by

GOULD, SHAPLEY & MUIR CO.  
(LIMITED)  
BRANTFORD, CANADA.

R. F. HOLTERMANN, - - EDITOR

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WM. LAWLERS.

Kingsey, Que., May 26, 1894.

The foundation you made for me is very nice, every sheet being perfect.  
E. W. EVANS.

St. Mary's, May 28, 1894.

I told you last fall that when I had fully tested the three queens which I got from you last July I would more fully speak of their merits. I can now say that out of my apiary of eighty colonies I have none better than those containing your three queens. They are nice in color, gentle to handle, and great workers. I am highly pleased with them.

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