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...The Canadian Bee Journal

PUBLISHED MONTHLY.

NEW SERIES
VOL. VII, No. 9.

BRANTFORD, ONT., MARCH, 1900.

WHOLE No
491.

Annual Meeting

Twentieth Annual
Meeting Bee-Keep-
ers' Assoc., Ontario.

HELD AT
TORONTO,
DEC., 1899.

Spring Management in the Apiary.

D. W. Helse, Bethesda.

On receiving notice from our worthy President some time ago that the executive committee had seen fit to place my name on the programme for a paper on "spring management," with the request that I at once endorse the action of the said committee, I replied saying, that while I thought very little of the subject assigned me, yet I would endeavor to have something to say upon it at this convention. My reason for saying that I thought very little of the subject was not because I considered it one of slight importance, but from the fact that it has within the last few years received considerable attention at conventions and through the different journals, and more particularly from the fact that the subject was so ably and thoroughly handled only a year ago at the city of Guelph by our esteemed friend, Mr. Sibbald. So while it would seem to be pretty well exhausted, yet perhaps after all there are always those in our ranks who would largely improve on their spring management, and with the thought

before me that "keeping everlastingly at anything will eventually bring success," I take encouragement, and will endeavor to briefly outline what I would consider "ideal" spring management" in my locality when bees are wintered on the summer stands.

The first step towards proper and successful spring management should be taken not later than the fifteenth of September of the fall previous (that is when there is no fall flow) by contracting the brood chamber with a division board to a size accommodating the strength of the colony, which may be from four to seven combs. The remaining combs in the space so contracted, whatever the number may be, should contain not alone what we might consider was sufficient stores, but a supply that we are absolutely certain will be an abundance to carry the colony safely, not only through the winter, but right up to the time of fruit bloom. By preparing the stocks in this way the bee-keeper will have no occasion to open up the hives for examination until the weather is sufficiently warm that all danger of chilling brood or breaking the cluster will be reduced to a minimum. The first examination of bees in the spring should not be made until some calm day when the thermometer will register seventy degrees or more in the shade, and after the bees have been permitted for some days to gather both water

and natural pollen. When the above conditions are present the hives should be opened, and the strength and conditions of the colony ascertained. All hives should now be contracted to a capacity best suited to the size of the cluster, that is, in case such has not been attended to the fall previous. As the colonies of average strength will be found at this date with from two to four frames of brood in different stages of development these frames should be raised up sufficiently high so the honey along the top bars and in the corners can be uncapped. This will cause the bees to move it, and they will certainly store it in the cells that surround the brood, where it will be of most advantage. In the case of no honey being along the top bars of the frames which contain the brood, frames of honey (first having been uncapped) should be placed one on each outside of the brood nest proper. Uncapping in this way serves a twofold purpose: first, by providing the liquid honey for larvæ food, and of easy access, and secondly by clearing the coast for the queen to widen out her circle. All garbage and dead bees should be removed from the hive floors, at this time a very simple matter indeed if the bee-keeper has been so wise as to use only loose floors; unfortunately some of us are still hampered with permanent floors. All the foregoing having been attended to the operation will be completed by re-placing the clean quilt (if such is used) with a gum cloth, putting on top of this three or more thicknesses of paper, return the top packing, contract the entrance, and close the hive. While it takes some little time to outline the above manipulation yet in actual practice only a very few minutes are required for the whole operation. Any queenless colonies that are found at this time should be forced on not more

than three frames, and united with weak colonies at the very first favorable opportunity. In eight or ten days if the weather has been propitious, and the bees have been able to gather from the fields, moderately, more uncapping should be done, the brood chamber enlarged, if found necessary; frames containing honey should be placed of the division board "A la Sibbald," which is a positive prevention of starvation and an excellent stimulant for the extension of the brood nest. Do anything and everything that will not disorganize or endanger the colony, but that which will compel them to convert honey into brood because it is bees we must get at this time, if we can expect to have our supers rapidly filled when the main harvest arrives. From this time up to the fruit bloom frames should be added to the brood chamber, and frames of honey inserted as often as the condition of the colony and the amount gathered from outside may demand. Always selecting a fit and proper day for the operation. At the opening of fruit bloom is the time when all full winged queens should be clipped. Having recently noticed considerable discussion in the journals regarding this operation I am persuaded to mention the method I practise, and for which I am indebted to Mr. McEvoy. As the queen is heading for the top bar when the frame is held on an angle I catch her by the wings with the finger and thumb of the right hand, and then pass her over to the finger and thumb of the left hand, securing her by the two legs on her left side. When held in this position she cannot squirm, and the operator's right hand is at liberty to remove (with a pair of scissors) any portion of the wings desired. When completed, simply hold her close to the comb, relax the pressure suddenly and she is at liberty

without her body ever having been touched.

Now to come back to the fruit bloom, all strong colonies and those of average strength will be in condition to have their full quota of brood frames returned to the brood chamber. Any colonies that are above the average strength and appear crowded should be provided with supers filled (or partly so) with brood frames allowing the queen to occupy them if she choose to do so. By this method we get the dark fruit bloom and the dandelion honey swapped off for bees, which at the opening of the white flow should be given to the weak colonies, a certain number of which, I think, most bee-keepers have on their hands this season. Another very important detail requiring attention at this time is scraping all propolis from the frames, and out of the rabbets, also removing brace and burr combs, making everything clean and smooth at this time greatly facilitates the manipulation of frames in the busy season. Neither should we forget that the less propolis we leave in the brood chamber the less we are likely to have in the sections. Having the colonies up to our ideal of strength when fruit bloom is past our every concern should be to guard against famine striking the bees during the gap between fruit bloom and clover. This tided over, spring management ceases and summer management commences, and I will let the other fellow tell about it. I have said nothing about supplying the bees with water, neither have I said anything about having everything in readiness for the season's work. As the journals are keeping these matters vividly before bee-keepers' eyes I conclude that a word to the wise is sufficient. Now, I do not wish to be understood that I practice in detail what I have been

preaching; neither do I wish to be understood that the above is the sole and only system of spring management that can possibly lead up to success, but it is what I would practise were I not sometimes prevented from doing so through pressure of other business. Having already taken up too much of your time, and knowing that Mr. Gemmell is ready and anxious to hammer me for my ignorance, I will give him the opportunity.

M. F. Gemmell: Mr. Heise has done the thing so well that I do not know that I shall hammer him. In regard to weak colonies I do not care to bother with them when they are very weak. I would sooner have the colonies as nearly as possible the one strength. If I have three or four colonies that are not very strong I would prefer doubling them up and giving them all about the same amount of combs. As far as queenless bees are concerned, I have found that as a rule they don't pay for the bother with them. I double them up because by the time you introduce the queen the season is pretty well advanced. With regard to uncapping the honey, I think what Mr. Heise has suggested is all right. I have really nothing further to say, except that I would like to hear Mr. McEvoy criticize the paper.

Mr. McEvoy: I was not in when Mr. Heise started, but I take it that it is spring management. I have followed the uncapping system off and on for seventeen or eighteen years and I have made it pay after I got right into it and understood pretty near how to do it, but I have had it go the other way at times. I have always made it pay between fruit bloom and clover. There is a gap at that time in most localities, and it pays to uncap some. I have uncapped sometimes too much, and have

made a mistake, but just to uncap two or three in an evening in the bare time in order to supply them with unsealed stores and to feed the larvæ, in this way I get the honey used up rapidly and I increase in bees. A little later on I uncap more. Old bees will not uncap the old sealed honey fast enough, when they are caught suddenly, to keep pace with the amount of larvæ on hand; then it pays to look after uncapping or bruising. This year I went through the colonies three times between fruit bloom and clover, and with 95 colonies I had it so arranged that almost every frame was filled with brood clear up to the top bar and from end to end to the outside wall. Did it pay? Yes; I never did anything in my life that paid so well. I would not advise every one to do it; some might go on a morning of a spring day when there was not much required and uncap too much. You must use judgment.

Mr. J. B. Hall: Mr. Heise's paper is excellent; the only part I object to seriously is that which says he does not practise it himself. I differ with him a little in the crowding of the bees in the fall. Bees are like communities; sometimes in the community there are no deaths, and other times deaths are numerous; if you contract them in the fall they still want contracting in the spring. My practice is with bees several miles from home to leave them just as they are in the fall and give them sufficient to last until fruit bloom. Don't uncap your hives, don't clean them out, they will clean themselves out. The contraction, if any, should be done in the spring and not in the fall. Notwithstanding that Mr. McEvoy will differ from me.

Mr. McEvoy: Certainly on that point.

Mr. Hall: My experience is this,

the weak colonies winter better than the very strong colonies, the middle colonies are the ones that winter best; the very strong colony is dead, generally speaking, in the spring, or very weak, and that is the time they want contracting, do your contracting in the spring instead of the fall. The bees will contract themselves in the fall and get into a small compass. With regard to clipping queens, we never clip our queens like Mr. Heise has said, but we clip our queens of course; we cannot run after swarms. We hunt our queen and after finding her we simply set the frame outside the hive, then we get down on one knee to the business, get hold of the queen by the wing and with a very sharp knife take away the part we lay hold of.

Mr. Heise: Mr. Halls says a colony of bees will contract themselves in fall. We know that; why then not contract?

Mr. Hall: In the spring time when you examine your colonies during the fruit bloom you will have eight cards of brood with perhaps four or five pounds of honey on them. Then as far as taking weak bees and uniting them with others your are wasting your time. If they cannot pull through themselves your are better without them.

Mr. Heise: I would not attempt to equalize the bees by taking from the strong to the weak. Would it not be better to take the weak ones and put them together?

Mr. Hall: My experience of over twenty years is that if you take weak colonies and put them into three you will still have three weak colonies; if you shut them down and don't meddle with them at all there will sure to be some of them that will come up and be good colonies, and the others that are no good will die out, and if

you put them together one of the poor queens may be saved.

Mr. Heise: I did not advocate uniting weak colonies in my paper; I advocated where there were queenless colonies to unite them with the weak.

Mr. Hall: That is worse still; these queenless bees have borne the fault before.

Mr. Heise: Mr. Hall, in the spring say from about 10th to 20th April, how many bees would you find hatched in the hive?

Mr. Hall: If it is a good stock of bees there will be more bees than we put in in the fall.

Mr. Heise: Your colonies differ from mine.

Mr. Hall: We don't open them except they are hungry; we don't open a stock of bees in our yards until the fruit blossoms. We let weak colonies die if they choose.

Mr. Dickson: Between apple blossoms and clover is a blank; sometimes there is a week and sometimes possibly a week and a half—I am down in the extreme end of Ontario—my practise is not to sell the buckwheat, and we save this buckwheat to feed the larvæ, and when the bees hatch you will have workers, and you have the strong swarm which will work, and the honey will come too.

Mr. McEvoy: I wonder how many here would be able to catch the queen by the wing like Mr. Hall does? I think we would be likely to cut a little bit more than the wing.

Mr. Hall: Not with a knife.

Mr. McEvoy: Take an ordinary farmer, and I think he would take half the bee. I admit that Mr. Hall's remark is true, speaking generally, that medium colonies winter best, the weak ones fizzle out, and the strong

ones will go to pieces, that is, without contracting in the fall of the year; but take good strong stocks and go back to the crowding system in the fall of the year and put in those combs sealed, and they won't go to pieces, because you have stopped the queen from breeding.

Mr. Hall: This is outside business.

Mr. McEvoy: In or out. The strong ones go to pieces, and I am going to fix it so that I can stop that. Coming to the weak colony I will agree with you in the spring of the year. I will put two or three of them together in the fall and I will bring out a colony in the spring on the crowding system and not keep them spread or give them the whole comb or too much territory. During ten days in February of last winter we here in Ontario had a sort of Klondike weather. If the bees are spread out the steam condenses on all the combs outside and some bees starve to death with honey in these outside combs, if they were crowded on full combs all they would have to do would be to lean forward. It is a sure system and it is better than yours, Mr. Hall.

Mr. F. Gemmell: Mr. McEvoy is all right; he crowds them on four or five combs, and there is no place for the queen to lay until they have wintered, and then they commence to boom right along.

Mr. Walton: Why does strong colonies succumb?

Mr. McEvoy: You can break up almost any colony; take good strong colonies spread out going into wintering outdoors and empty, and there is all the chance in the world to lay in the centre, and the bees have to care for the young. The bees become restless and are worn out to no purpose, and you have spring dwindling and fizzling out. You can check

that; just give them the sealed comb and rest your queen.

Mr. Walton: When do they commence to breed in the other case?

Mr. McEvoy: Later on; as they consume a little more and more the season is getting further on towards the spring, and you can get more fly-days; you have rested your bees and you have saved them. I am speaking from experience.

Mr. McKnight: Does not your system prevent bees from clustering?

Mr. McEvoy: No.

Mr. McKnight: I understood you to say that all the bee had to do was to lean forward?

Mr. Gemmell: They are clustered on the honey.

Mr. McKnight: They are practically spread over the comb.

Mr. Gemmell: Oh, yes.

Mr. McEvoy: They are all crowded up solid, and some of them are behind the division board. Speaking of the division board I would like to improve on the division board. I like to have my bee space on the top and bottom, and if I do happen to crowd a few they will get in there. I don't want division boards to fit so close that I have to rip them up.

Mr. Gemmell: I have contracted in the fall and they wintered first rate, because there was no space for the queen, and in the spring they boomed right along.

Mr. Darling: Reference has been made to the strong colonies breeding early. I know what some of my experience has been. The seasons vary greatly in the eastern part of Ontario. I have seen me put out good strong colonies in the latter part of April or first of May with scarcely any young bees in the hives; I have seen me put out strong colonies in the last week of March and first of April

and I have found young bees crawling over the combs by the 10th of April.

Mr. Hall: Mr. Heise's paper spoke of wintering them outside and with a very large population there will be more deaths than with a small population; for instance the city of Toronto has more deaths than the locality where Mr. Darling lives simply because there are more to die; the dead bees clog the entrance and smother the balance.

Mr. McKnight: For twenty years or more I have had more or less that were not crowded, sometimes ten and fifteen; I guess this year I have about ten crowded on five combs, but I noticed in the spring of the year—take the ten or fifteen that were not crowded, although they had the weight, was heavy with honey, they would not average up the fifteen crowded ones.

Mr. Dickson: Some would agitate doubling up and trying to keep your colonies, but I say it is all very well for an amateur to try that, but since we have carried on the business exclusively we have found it does not pay to double up, neither does it pay to doctor a poor colony in the spring; let them go.

Mr. Holmes: My experience in the matter of the small colonies tallies exactly with what Mr. Hall told us. On more than one occasion it has happened to me that the small colonies have come up and done excellent work, as good as those of a great deal more pretentious dimensions.

Mr. Armstrong: My experience has been about the same as Mr. Hall's with his nuclei: when I put two or three colonies together and put them into proper shape as a general thing they were my best colonies in the spring, that is, if they did not start breeding before the spring. I have

had them to come out and cluster outside in February. I was sure that colony would go up and be no good next spring, but if they were closed up tight with full sheets of sealed honey, no room for the queen to do anything until they get some consumed, those colonies came out all right.

Mr. Hall: I have faith in Mr. McEvoy, and I think it is four or five years ago since we lived our bees on contracted hives of five combs instead of eight. I fed them up as much as they would take, and therefore, I presume it was solid combs they had, and in the spring they were in a nice condition, but allow me to tell you that I had to go into them and give them room for breeding purposes, and I did not get so much honey from them as in other cases. It may be my location and stupidity.

Mr. Armstrong: Don't you think the reason you did not get good returns from the strong colonies was that a time before the flow came out they would run down in stores?

Mr. Hall: I will tell you decidedly on that. They had too much stock; they could not consume it to raise brood, and as I was lazy I did not take out the division board until fruit bloom.

Mr. Gemmell: But they wintered well.

Mr. Hall: Grand.

Mr. Gemmell: If you have weak colonies and double them up they will come out all right, but give them room afterwards.

Mr. Hall: Spring or fall.

Mr. Gemmell: In the fall.

Mr. Hall: But suppose they are weak in the spring.

Mr. McEvoy: You are going on the idea that there are going to be a lot of them weak.

Mr. Hall: Do you not have weak colonies in the spring?

Mr. McEvoy: Certainly, some.

Mr. Hall: You lose all of your nice queens. Let them be, and those that are worth anything will come up and give some honey, and those that are worth nothing will die.

Mr. Heise: Would you leave them 8, 10 or 12?

Whatever it is I don't meddle with them; I look under the bottom to see if they are strong; I don't touch the top at all.

Mr. Walton: If the weak ones winter that way without being contracted, why don't the strong ones do so?

Mr. Hall: I give you the reason. With a small entrance and large population there would be more dead, and they would drop on the bottom board, and they would suffocate.

Mr. Walton: It is a somewhat interesting question to this convention. This spring management of bees has drawn out quite a discussion. With all the experienced bee-keepers' here I may be away behind the times, but I tell you my bees are not. I contract neither spring nor fall.

Mr. Hall: Neither do I.

Mr. Walton: We ought to get to some settled point on this question. With reference to the weak colonies in the fall with my friend Hall. I would allow them to stay so, if they have stores enough; don't meddle with them. I wintered some twenty-five, I practise out-door wintering, but last year I wintered 25 in the cellar—queens I had not sold—they were rather weak, but they surpassed all the ideas and opinions of the writers in journals. I could give the temperature and a good many things along this line, but I do not think it is necessary. I would leave the weak ones quietly alone if they were any ways protected for the winter. Also

as to clipping queens, I am not in favor of clipping with scissors, I am afraid there is a liability to clip the queen in two.

Mr. Darling: I lay my finger right on the back of the thorax and the wings come up that way, and I clip what I catch, one, two or three and let her go.

Mr. McEvoy: Mr. Walton, how much do you take off?

Mr. Walton: I take off both wings, one on each side. I think I like to have the queen evenly balanced.

Mr. Gemmell: It is astonishing how easily they will fly if they have wings both the same on both sides.

Mr. Walton: I don't get down on one knee: when the queen is coming right down some comb I catch her by the two wings, (shows.) We are always in haste in doing this thing, and I think it is the nicer way to clip wings. I suppose I learned it from Mr. D. F. Doolittle. I think Mr. Heise's paper is very good.

Mr. Newton: I am sure this paper has been pretty well discussed, and a good paper it has been. I think any paper that will bring out the discussion that this has led to this afternoon is worthy of the thanks of 'his association. There are some things I agree with, but most of you know I am from Mr. Hall's school, and of course I fall in with a great many of his ways. With reference to the clipping of the queens Mr. Heise's plan seems to me to be a very awkward one. I think if I were to try Mr. Heise's plan I would be very apt to kill the queen the first go off. In working with my hive I sit down on the hive top; I place my comb between my knees, and catch her as she runs up the comb, and in somewhat the same way as friend Hall does I strike a knife across the finger and I take about one-eighth or a quarter of an inch off one wing,

which is sufficient to prevent the trouble, and this does not disfigure the queen. I don't believe in contracting in the fall. I give them a good letting alone in the spring until we have time to work with them in fruit bloom, and sometimes if it is extra good spring, and they have been shut up I have in mind two places where there have been four or five cards and a nice mass of honey built in. I generally find the medium winter best.

Mr. Pickett: The matter which I have risen to speak of is this uniting of weak colonies in the spring. I think one of the first things we require to take into consideration is the temperature at which our hives should be when breeding; and another is, how are we to get that temperature at the earliest possible moment, so as to secure the required amount of bees to bring in the honey at a proper season? I presume, these are two, at least, of the many things that are required. The more bees there are together and the more closely they are confined the sooner will that temperature be arrived at; the more room you give them the longer it is going to be, and the later in the season before they are going to start to breed, and the sooner they commence the sooner you may have something to replenish those old bees that have been laying back, because if they were light colonies in the fall, the chances are that there are a great many more, and therefore, even if they are left to themselves I don't wonder if you have a number of them that are no use in the spring and die, because it is so long before they can replenish their number that they outlive themselves. My impression is that if you unite them in the fall, and if you have them light in the spring, which I have any way, I would say unite them then; you had

better have one half than a dozen otherwise.

Mr. Hall: But you are not making them good by so doing.

Mr. Pickett: The method we take to get them good is by increasing the number of bees at the earliest possible moment, and if they have not got the heat you know as well as I do all the honey you could pile into your beehive would not amount to much. You cannot get the bees if they have not sufficient heat.

Toutes Sortes de Choses.

Dear Mr. Editor: It is now two long months since we met and parted in that fair city of Toronto. Since then, like myself, no doubt you have had a little more experience in the ways of the world and I hope your experience has been along the same line as mine. I have had the pleasant experience of having been put into a contest for the Ottawa Journal's gold headed cane, offered for the most popular County Councillor in the Ottawa Valley. But although having received over twelve hundred votes I did not succeed in capturing the prize. I have also had the pleasure of meeting my fellow County Councillors in Council and sharing with them three hard days work in committee. As the title of this article denotes, I shall in brief touch upon "all sorts of things."

I saw the Shaver-Edminson letter in January C. B. J., have you? Right you are, and glad am I. D. W. H., Notes and Pickings, Feb'y 1900, page 182, article five, truly every thing was lovely and our association must feel glad at heart and draw one breath, and thank the Lord for His great blessings that we had no Boers in our midst with long range rifles to vent their spleen across the hall.

Oh say, has the bottom fallen out

of the Paris Exposition or has the matter been dropped for all time, I hope such is not the case, for know ye all, your committee of by gone days spared neither time nor pains to advance your interests in this direction and although our honey of '99 may not be in it, it should get a place until relieved by the 1900 crop. Am I right or am I wrong?

I hope my successor in office will take up the good work that he assisted me with so well in the past and see that it is carried to a successful issue.

Another matter I would like to call the attention of your readers to is the fact that I am no longer either president or secretary of the Ontario Bee-Keepers' Association, and I would request that all communications in connection with the affairs of the association in future be addressed to Mr. William Couse, Secretary O. B. K. A., Streetsville, Peel Co., Ont. I make this remark because nearly every mail brings me matter which should be addressed to Mr. Couse. We are having a very fine winter down here, not much snow, but a little sharp some mornings, twenty below zero on the 2nd inst. Hoping my brother bee-keepers' east, west, north, south are well and wishing them a prosperous season, so au revoir,

W. J. BROWN.

Chard, Feb. 5th.

My bees are wintering splendidly so far, I don't think that there is a peck of dead bees on the cellar floor from 295 colonies. Have 43 outside. Been no weather to hurt them to date.

C. W. POST.

Trenton, February 15th.

THE
CANADIAN BEE JOURNAL.

Devoted to the Interests of Bee-Keepers.
Published Monthly by

GOOLD, SHAPLEY & MUIR CO.
(LIMITED)

BRANTFORD - CANADA.

Editor, W. J. Craig.

MARCH, 1900.

EDITORIAL NOTES.

Reports generally say that bees are wintering well, both indoor and out.

"What are the prospects of the season?" A question much easier asked than answered. Some of our people are hopeful; others feel just a little bit despondent on account of the heavy frosts and periodical thaws, with so little snow to protect the clover.

Mr. C. W. Post, in a private letter to the editor, says: "I can say nothing officially in reference to the Paris Exposition. I understand that there is ample honey offered to make a creditable display and that it will be forthcoming when wanted."

"The Month's Work." In this issue begins a series of articles under this heading by A. E. Hoshal, Beamsville. Mr. Hoshal is well and favorably known to many of our readers and is thoroughly practical in his style, as his writings will indicate. We are sure they will be read with profit.

Dr. Howard, Professor of Bacteriology, Washington, D. C., after very careful investigation, microscopical

examinations and diagnoses of the New York bee disease, declares it to be a new disease, distinct from that of foul brood or pickled brood. He has named it "black brood" on account of its character, it beginning with a dark spot on the larvæ, which increases in size, becomes darker and finally black. We understand that the disease is not altogether unknown in Canada. We hope next month to give a synopsis of Professor Howard's report.

At the congress of the German, Austrian and Hungarian bee-keepers, which took place in the city of Cologne, August 26 to 30, Mr. Lihzen, editor of the *Bienenwirtschaftliches Centrablatt* (Hanover), mentioned in his address about forty-eight tons of honey being stored by some thrifty and clever bee-keeper against a "rainy day."—A lesson here for our Canadian bee-keepers; had we some of last year's surplus on hand we could dispose of it at good prices this year without any great effort.

Questions on bee-keeping have very often been sent to us by our readers requesting an answer by mail. We have tried to meet their wishes in this respect, although at times we have thought it a little more than should be expected of us. In opening "Questions and Answers" columns we hope to serve, in so far as we are able, those of our readers who wish for information along these lines. The answers will come from the best authorities on the subjects, as the character of the question may demand.

The Bee-Smoker

How to get most
out of it

By . . .
Old Grimes

The first bellows smoker ever used in the Grimes apiary came from the first smoker inventor, Moses Quinby, and what a crude appearance it would present beside the elegant Bingham and the other smokers of the day!

As to construction, I do not believe the present smokers could be improved upon, and when the hereafter improvements come it will be in some radical change in the method employed to subdue the bees. In my day I have seen men eat tow and blow fire out of their mouth and nose, but the bee-keeper has never fathomed the secret—perhaps there is too much “hot blast” to it, but it is possible that some enterprising bee-keeper with an inventive turn of mind, will “catch on” to this idea some day, and all the bee-keeper will have to do will be to regulate his diet accordingly.

I have to deal, however, with the present smoker, and in the matter of either cold or hot blast smokers the Grimes family have talked the matter over autocratically at the breakfast table, and have come to the conclusion that all the bee needs to subdue her combative propensities is smoke, and the difference between hot and cold blast is not enough to make any material difference. We can make a cold-blast smoker hot-blast, or vice versa.

It depends much upon the fuel used, in order to make a lasting smoke. Some advise hardwood, maple etc. Now, if you desire to make a hot-blast from a cold-blast smoker, just get a good wad of hardwood coals in the furnace, and the heat of the smoke

will not be much more augmented if a hot-blast smoker is used. Now let us fill a hot-blast smoker with fine shavings, straw, or gunny-sacking, and after the smoke is well developed insert a compact wad moistened with water, and the smoke will be as cool as any one need desire.

I have seen many smokers since the days of Quinby, and have seen some immense, cumbersome fellows, with a sheet-iron fire-box as large as a stove-pipe. Such things need an extra man to carry them around, and manipulate them, and life is too short to bother with them, any way.

The Grimes family use a medium-sized smoker. To start a smoker quickly we have used a little spring-bottom oil-can filled with kerosene. A few squirts of this upon the fuel before applying the match will ensure a fire every time. I have no doubt but Dr. Miller's saltpetre plasters would do as well. I take the Doctor's word for it, and he ought to know, for he is well up in the plaster business!

It is a good plan to temper the smoke to the colony. Some bee-keepers temper the smoke according to their fears of bee-stings, but the practical man has no fear of stings, and can exercise a little mercy upon the bee. The experienced bee-man soon knows how much smoke to use, just from the way the hive opens up. It is quite an orthodox rule to smoke the bees at the entrance to the hive when it is approached, but the busy bee-man forgets this operation so often that it is after a while wholly neglected. The first blast into the top of the hive after the cover is removed sends a thrill of alarm clear to the entrance, and the temper of the colony is soon learned.

It is perhaps not a very important matter as to where the smoker is kept

when not in use, but an orderly bee-keeper will have a little closet near the honey house large enough for two or three smokers, and lined with tin or asbestos, and having an exit for smoke. You can get more out of a smoker by using it well, and then if it is put in a safe place, and there is a little fire left in it, there will be no danger from the fire communicating with other things. Many bee-hives and buildings have been damaged from this lack of care.

And now when I have said all I care to say about the smoker, one of the boys at my elbow remarks that the fellow I refer to who ate tow and spit fire reminds him that some men use a filthy weed known as tobacco, as fuel for smoke, and a pipe, and the mouth for a furnace; and that reminds me of the old adage about the man with a cigar — "A little roll of tobacco leaves, with a fire at one end and a big fool at the other." Don't be a fool; but, if you are, get into the ranks of the wise people as soon as possible.—American Bee Journal.

Questions and Answers

[Questions to be answered in these columns should be sent to us not later than the 15th of each month in order to insure their answer appearing in the following issue. We wish to make this department as useful to our readers as possible and a reliable source of information. For the present at least, the replies will be procured from various sources.]

Pollen in Combs.

QUESTION—Last season being a poor honey season my bees stored a great deal of pollen in the combs. By giving the combs back to the bees this

spring will they clean the pollen out of them again so that the queen can lay in them? Or what is the best thing to do with them? As they are good combs I do not want to destroy them. Please answer through the C. B. J.

J. K.

Campellford, February 3rd.

ANSWER.—It seems that J. K. took the combs of pollen from his bees last fall and fed up for winter with clean combs. If I had been asked to answer this question early last fall, I would have said feed up for winter on those combs of pollen for I never found it to harm my bees in the least, provided they have plenty of stores. And if properly wintered so the pollen does not sour they are in the best possible condition for spring. But as the case now stands if the combs are properly wintered and the pollen sweet and clean I would work the combs back in the brood chamber as early in the spring as possible, by hanging a comb of honey uncapped back of a division board and put the comb of pollen in the brood nest just outside of the brood. Continue this as fast as they empty the comb back of the division board and by the first of June the combs of pollen will be converted into young bees, ready for the clover and the combs they wintered on or the ones you filled with brood will be all right for extracting combs. But if the combs are stored in a damp place where the pollen has fermented, I would hang them over my strongest colonies just before the honey season. The pollen will shrink with the heat from the bees and they will soon tumble it out. It would remind one that they had started a pill-making establishment.

C. W. Post.

Trenton, February 15th.

Notes & Pickings

By D. W. Heise, Bethesda.

"We are paid 9 or 10 cents per section, no matter whether the wood is white as snow or black as ebony. I have tried snow white sections, and colored cartons, to make an attractive package easily handled by the merchant, but I could get no more for it than the man who brought his honey in an old tin can." Such is the lamentation of J. A. Ruff in *Gleanings*, P 18. If I were so unfortunate as to find myself domiciled in such a community as the one above referred to, where attractiveness, cleanliness, thrift and advancement where so slightly appreciated, and in fact "wholly ignored," I can assure you I would not allow the grass to grow under my feet in my haste to get out of it. And I would leave the following "Litany" in bold characters, in some conspicuous place, "from such a community Good Lord deliver us."

"Old Grimes" who we thought had given up this tenement of clay years ago, and who has ever since been immortalized as that "good old soul," has in reality only been playing Rip-Van-Winkle all those years, and a few months ago, to the surprise of everyone he bobbed up in the *American Bee Journal*. And in a series of articles he tells in a very interesting way, (coming as it does from one recently resurrected) how to get the most out of the bee-hive, the bees, the apiary, the smoker, the honey-house, etc, etc. Daddy Grimes' articles alone are worth to the beginner one year's subscription to A. B. J.

What manner of animal is this,

that A. I. Root has developed into that Dr. Miller is going to have him transported over the railway, classified as "freight." Is he beast of prey, Doctor, or a domestic quadruped? See *Gleanings*, P 77.

In speaking of laying workers, O. L. Abbott has this to say in the *American Bee Journal*. "Where there is evidence of the pest, there are no nurse bees, and the scant supply of field bees is rapidly diminishing. By overcoming these two misfortunes the pest will disappear." "Remedy, give the colony a frame of hatching brood, in two or three days repeat the dose, after a like interval give it a frame of worker eggs, and if convenient, a queen cell. With me this remedy works satisfactory." Mr. Abbott's remedy will no doubt work all right, because he practically starts a new colony.

If my judgement is worth anything I do not think bee-keepers' will be warranted in making any elaborate or expensive preparations for a honey crop in 1900 throughout this locality. But of course the wide awake apiarist will hold himself in a position that he can take care of a crop, if the unforeseen should result in one. The prospects are however, not very bright. The clovers, after last season's protracted drouth, did not look any to thrifty when winter approached, and the varying degrees of temperature, and the bareness of the fields since winter has set in, has been, what I consider very, unfavorable for the well being of the puny plants. Then there is the basswood, which is a more constantly falling victim to the lumberman's ax, and even those that remain cannot be expected to bloom every year, and as they have done so three years in succession. I look for a blank this year, but am still hoping for a favorable surprise. It is yet too early to

form any opinion as to how the bees will come out in the spring, but so far I would consider the conditions for success quite favorable, although we who winter outside are now getting anxious for them to have a fly day, as they have now been confined some three months February 10th.

G. M. Doolittle in a paper read at the Illinois State Bee-Keepers' convention, asked for the discussion of the burr-combs, (or ladders, as Mr. D. prefers to call them) from a standpoint that I do not remember of ever having been approached. He hints very strongly that the non-removal of the "ladder" will increase the amount of surplus in the supers. He says in part as follows,—“The result was that the colonies in hives having no ladders gave an average result of nearly ten sections less than did those having them, and I have had experience very similar before. Did the ladders by inducing the bees to enter the sections more quickly, cause the result? Here is a chance for some good deep thinking, and experimenting. If the ladders are not the cause, are there any suggestions to be made as to the same? If the ladders were the cause, then they were to my benefit of not far from \$1.20 per colony for those that had them. Now which will pay the best, thick top bars and no ladders, or \$1.20 per colony with the burr-comb nuisance as it is called”? I firmly believe that Mr. Doolittle could have answered the above questions definitely himself, and the sooner he condescends to do so the more he will be admired by his brother B. K. P. R's. \$1.20 per colony, why, let me see; yes, sure, that would be \$120 for 100 colonies. Oh, yes, I think most honey producers could endure the burr-comb “nuisance,” if they could be benefited to the extent of \$120 per 100 colonies by them.

I see by the February issue that the American Bee-Keeper desires admittance into the discussion of “*Apis Dorsata*,” as “he (the Bee-Keeper) don't know anything about it either.” Thanks Mr. B. K. for that insinuation concerning this “Pickers” ignorance. But, say, how did you ever acquire the knowledge of anything? Is it absolutely necessary for an individual to make a personal investigation pertaining to any matter or thing before he dare have faith in it? Men of practical experience have made extensive experiments, and that at the expenditure of considerable money for the purpose of domesticating *Apis Dorsata* and have failed. Must the testimony of those men be treated as rot? That is all I know about it; but you Mr. B. K. don't appear to know even that much; where have you been all summer, with your winter clothes on? But let that be as it may, since you want to be admitted into the discussion, if the editor of this Journal does not object, this “Picker” will raise never a finger. And you shall have every opportunity for immortalizing yourself by discussing her ladyship into domestication. When you have accomplished this it will be in order then, and not before, to discuss the desirability of the importation of *Madam Dorsata*.

According to Gleanings, Dr. Howard has been making extensive scientific investigations concerning the new malady that has been afflicting the bee-keepers of Eastern New York. Dr. Howard has found the malady distinct from either foul brood or pickled brood. Readers of Gleanings are promised more in the near future concerning it. Verily the ten plagues of Egypt will soon be upon the bee-keepers' also.

The Month's Work

A. E. Hoshal, Beamsville, Ont.

"To everything there is a season, and a time to every purpose under the heaven." We might almost suppose the inspired writer was a bee-keeper, did we not know that he was a preacher. The success of many of the operations of the apiary depends upon their being done at the right time, and some of them even to a day. Evidently all bee-keepers do not realize this, judging from what I often see. So long as there is other work about the farm or premises in the least pressing to be done, the bees are allowed to go, while others again neglect them from want of knowledge, and yet from these very persons how much we hear about "luck" in bee-keeping. Yes, there is a certain amount of luck or chance in bee-keeping, but the luck of the above classes is the luck of negligence and ignorance. "A thing that is worth doing at all is worth doing well" I was taught when a boy; if this be true with respect to the affairs of life in general, it is doubly true in respect to bee-keeping in particular; bee-keeping cannot be made a success worked upon any other plan than this.

March is the month for placing the bees wintered inside upon their summer stands. I speak from an experience obtained in the Niagara District of this province. This date, therefore, may have to be modified some for those living in the more northern parts of the province, where spring is later in coming than here. An old man once told me that St. Patrick's Day was the right time to put the

bees out, and while his logic was perhaps that of custom and wit, he nevertheless was not far astray. The first warm and favorable day about the middle of March or thereafter on which the bees can fly they should be removed from their winter repository to their summer stands; or should they show signs of uneasiness and bad wintering in the least, they could be put out, weather permitting, as early as the first of March, given a cleansing flight, and, if necessary, returned to the cellar again, being careful when put out the second time that each is made to occupy the same position in the yard as before. Such a flight will relieve the strain upon their vitality, and do much to recuperate their power of endurance.

Colonies wintered outside should have their entrances closed to within $\frac{3}{8}$ or $\frac{1}{2}$ inch and all top or other winter ventilation, if any, stopped after their first flight in March. Colonies which were wintered inside should have their entrances similarly arranged on the day they are set out, and, if there are any cracks or openings about their hives, especially on top, they should be carefully closed so that no heat from the clustered bees inside can possibly escape. It will also materially aid them in keeping up their warmth if their hives are setting in the sun, and are some dark color so as to absorb its heat, instead of white, which reflects it, and consequently will help to keep them cold. If practical, it is best also that they should be protected from the wind. In all these matters we seek to conserve the heat of the colonies during March, April and May as far as possible, and to protect them from the attacks of robbers.

If not done so sooner, all supplies for the coming season should be

carefully looked after during this month. It is folly to put these off until wanted. Those who do so usually pay dearly for their neglect.

Enforcing the Law vs. the Spraying of Fruit Trees.

By G. A. Deadman, Brussels.

Judging from the reports from some bee-keepers' last season of the injury sustained from the spraying of fruit trees when in blossom, I think it would be advisable to do something to lesson that danger in the future. The fact that there is a law against spraying when the blossom is on will avail nothing unless that law is known and enforced. Every year, I might say, I have had the editor of our local paper to sound a note of warning, but what may be very plain to us might never reach the ears or eyes of some who annually spray their fruit trees. My attention was drawn to this last year by a carpenter whom I had making changes in some hives, who not only formerly kept bees, but who last year took contracts for spraying orchards and sold the sprays. To my surprise no one seemed to know about this law and another thing did not care so far as the effects in bees were concerned. When they were told of the value of this little insect to the horticulturist, the uselessness of spraying when the blossoms were on, together with the heavy fine for doing so they were willing to forego spraying during that time. I am of the opinion that the best and surest way to educate along this line, would be to have some posters printed say about 4x7 inches explaining the whole affair, and have them posted on the gate posts within two or three miles of the bee-keeper sufficiently interested to put them there. Now individual bee-keepers'

could do this, but the restraining power would not be so effectual as it would if done by the Bee-Keepers' Association. I can readily believe that the note of warning of imposing a fine on all who were found disobeying would have more weight when signed by the association than by individual bee-keepers. Not only this, but the expense would be much less, as they could be printed in quantities and the association then supply a specified number to all who are members free of charge. I intended mentioning this some time since it will not now give much opportunity to discuss the subject if anything is going to be done this year. The danger is increasing as I believe that very soon those having fruit trees and do not spray will be the exception.

To Prevent Bees Gnawing Quilts.

A writer in *Gleanings in Bee Culture* says: "For years past I have used waxed cloths over brood frames. The bees propolize the spaces between the frames quite liberally, and oftentimes manage to insert a good deal of the stuff between the cloth and the top-bars. Once in a while I remove the cloths and run a hot laundry-iron over them, thus diffusing the propolis over and through them. Prior to this operation the bees are somewhat disposed to gnaw the cloth, but never after. Now, I have a number of these cloths that have been in use several years. They are as dark or black as any brood-comb I ever saw."

"That's a good idea. Carry it out," said the editor to a man who came in with a better plan for running the paper. — Philadelphia Record.

How Bees are Wintering.

Bees are wintering well in the cellar quiet and dry. Very few dead bees on the floor yet. Those outside cannot help wintering well unless the frequent flies they have had may induce the queens to lay and thus consume their stores brood rearing now and leave them short afterwards.

H. G. Sibbald.

Peel Co., Ont., Jan. 29th.

My bees are wintering well so far; better than I had hoped for, as the last season was a poor one. I put in 77 swarms and they are doing nicely. If we have a decent spring I think they will come through in good shape.

E. A. Buzzell.

Rouville Co., Que., Jan. 25th.

Up to the present conditions have been favorable for the bees wintering, but I would be very much pleased if they could have a good fly-day in the near future.

D. W. Heise.

York Co., Ont., Jan. 29th.

Bees are wintering well, I think. Those out of doors had a splendid fly a couple of days ago and those in the cellar are very quiet. I am afraid we are not getting enough snow to protect the clover and we may have another freeze out like last winter.

J. D. Evans.

York Co., Ont., Jan. 25th.

Common Black. The Italians and Carnolians are imported queens, I have been trying this as an experiment. I am very much pleased with the Canadian Bee Journal and wish you every success in your undertaking. I am looking forward for a good season. My bees are mostly Italian blood (not imported). I find that they are the best for business.

C. E. TAYLOR,

Harrow Smith, February 1st.

Bee-Keeping in Switzerland.

A writer in the Country Gentleman, says in a foreign letter:

"As every traveller knows, honey is much in evidence, at almost every meal in Switzerland. The Republic has an excellent bee school at Zug, where there are usually five and twenty students undergoing training in the brief honey-producing season, which (as far as commercial production goes) extends to but three or four months—the later stores being always allowed to remain in the hives for the insects' winter use. The bee most valued is the small brown German variety, which beats the Italian and Carniolan sorts hollow in foraging and hot weather. I regret to see that complaints are rife as to the import of adulterated honey, and need hardly say where the complaint chiefly lies. Scarce one of the old-fashioned straw 'skeps' is now in use, the most approved bar hives being in almost universal use.

C. P. Dadant sums up the wintering question in a few words. "Good healthy food, and even temperature, quietness and a fair amount of ventilation.

DEAR SIR—I put 65 colonies of bees in repository Dec. 18th and left three colonies outside they are all in good shape at date. The bees outside have not had a fly as the weather has not been favorable, the three that are outside are three different strains of bees, Carnolians, Italians and the

Communications.

Distribution of Samples of Seed Grain.

To the Editor of the C. B. J.

DEAR SIR—Under instructions of the Hon. Minister of Agriculture, another distribution of sample packages of the best and most productive sorts of cereals, etc., is now being made from the Central Experimental Farm, Ottawa. The distribution will consist, as heretofore, of samples of oats, spring wheat, barley, field pease, Indian corn and potatoes. Each sample will weight three pounds. The quality of the seed will be of the best, the varieties true to name and the packages will be sent free to applicants, through the mail. The object in view is the improvement of the character and quality of the grain, &c., grown in Canada, an effort widely appreciated, and the choice of varieties to be sent out will be confined to those which have been found to succeed well at the Experimental Farms.

These samples will be sent only to those who apply personally, lists of names from societies or individuals cannot be considered. Only one sample of one sort can be sent to each applicant, hence if an individual receives a sample of oats he cannot also receive one of wheat or barley. Applications should be addressed to the Director of Experimental Farms, Ottawa, and may be sent any time before the 15th of March, after which date the lists will be closed, so that the samples asked for may all be sent out in good time for sowing. Parties writing will please mention the sort of grain they would prefer

and should the available stock of the variety named be exhausted, some other good sort will be sent in its place. Letters may be sent to the Experimental Farm free of postage.

WM. SAUNDERS,

Director Experimental Farms.

Ottawa, January 22nd, 1900.

Law Suit, Sinclair vs. Deadman.

To the Editor of the C. B. J.

Dear Sir—Eighteen ninety-nine subscribers to the Canadian Bee Journal will remember that mention was made of a suit to be brought against me to restrain me from keeping bees in the neighborhood of plaintiff and for damages sustained. The case has never come to court, but after some months during which the plaintiff wanted an interim injunction granted compelling me to move my bees away until such time as the courts would decide, but which was of course not granted. Sometime since he delayed proceedings, excusing himself that I had moved some bees to the country and had therefore mitigated the nuisance. As this would mean that I would pay our costs and it would then appear that he had gained the case. I instructed my lawyer to compel him to proceed or to have motion to dismiss the case with costs. He now informs me that the plaintiff has withdrew the case and pays the cost so this disposes of it, and we hope has taught the plaintiff a lesson. I thank the readers of The Journal who kindly complied with my request and also the United States Bee Keepers Association for their prompt assistance.

G. A. DEADMAN,

Brussels, January 26.

Literary Notes

Fashions in woman's attire for the ensuing spring will be shown in eighty pictures in the March Ladies' Home Journal. Thirty pictures of the newest spring hats designed especially for the Journal will be included in the number, which covers every essential for the well-dressed woman.

"The Topeka Daily Capital," Topeka, Kansas, announces that Rev. Charles M. Sheldon, author of "In His Steps" will on the 13th March next assume the entire business control of that paper for six days. For that period he will be its absolute owner, dictate its policy, edit its columns and control its advertising. In a word he will embody his idea of what a christian daily newspaper should be. This is something unique in the history of Journalism and will be watched with interest.

We have received from the publishers, The Central Press Agency, of Toronto, a copy of their Directory of Canadian Newspapers for 1900. This is the first issue of such a directory by the Company referred to, and it is very creditable to their diligence and enterprise. The obtaining of information for such a work means a lot of energy and patience, and the book, carefully compiled as it appears to be, cannot fail to be a most useful work of reference to advertisers and all who wish to obtain information respecting the publications of Canada and Newfoundland.

How to Get a Start in Bee-Keeping.

C. C. Parsons.

Written for The Modern Farmer.

"How to get a start in bee-keeping." That start doubtless contemplates that

equipment necessary to ensure success under ordinary circumstances. The first investment need not represent much cash. The beginner should buy only one text book, and a few colonies of Italian bees in good movable comb hives—he should subscribe for a bee paper also. With these he is prepared to begin his preparation, which consists of a knowledge of the habits of the bees and how to supply their wants. While the habits of the bees are about the same everywhere, it would be impossible to give figures and dates for manipulating them in a given locality unless the writer was thoroughly acquainted with that particular section. To be well prepared the bee-keeper must know at what time each and every tree and plant is in bloom, and if there be other source of honey, he should know at what time to expect it. This knowledge can only be had by patient and persistent observation. Keep a journal, and in it note the flora of your section and condition of your bees once a week for a number of years, and you will have gained knowledge that will be more valuable to you than that attained from any other source. Nearly all the books written on bee-culture, are written on the basis of white clover as the source of the honey crop, and give instructions for obtaining a crop from it.

When you read your book do not accept as true any unreasonable statement that is in it. Listen to all the bee-keepers in your section when you chance to meet them. If they talk about the king, don't dispute with them—if they say the drones lay all the eggs, don't turn away, but listen—they may know something that will do you good. Don't be too hard on the ignoramus. We were just like him once—maybe yet.

Bessemer, Ala.

BEES FOR SALE.

Owing to enforced removal to the South for my health, I will sell at a very low figure my Apiary, consisting of: 20 Colonies Italian Bees in Langstroth Hives, all in cellar, with 30 lbs. stores each; 20 Extracting Supers with Combs; 12 Half Stories with Section Frames; 13 Queen Excluders; 6 Alley Queen Traps; 25 Complete Hives in flat, (provided for this year's increase); Novice Extractor. Everything new and in the best shape.

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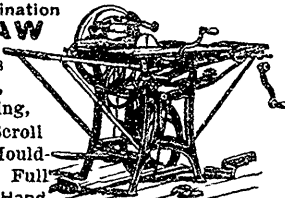
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