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CANADIAN BEE JOURNAL

PUBLISHED MONTHLY.

NEW SERIES
VOL. I, No. 11.

BRANTFORD, ONT., MAY, 1894.

WHOLE No.
351.

We have a letter from Captain Hetherington, which although not intended for an article, has in it so much

Captain Hetherington. of value that we take the liberty of publishing it elsewhere. Captain Hetherington has, we believe, over three thousand colonies of bees and can very rarely be induced to contribute anything to apicultural literature.

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On page 240 *Gleanings in Bee Culture* is the report of four different chemists setting forth that honey received from Disgrace to James Heddon, Dowagiac, Bee-keepers Mich., was adulterated.

Prof. Wiley, chemist at Washington, D. C., says at least fifty per cent. was glucose. This with other evidence appears very conclusive. We understood Mr. Heddon went out of the bee business some years ago. We trust he has and that he will not be looked upon by the public as a bee-keeper. Mr. Heddon may claim by some species of erroneous reasoning that there is nothing wrong about such an act and ask "have you reached that stage where you can believe that those who differ from you are honest in their belief." In such a case we would say, whether the fraudulent design is the result of want of moral principle, or merely want of moral training, a guilty act nevertheless deserves the strongest condemnation. There may be certain forms of adulteration difficult to detect but when adulteration with glucose, all chemists claim such

adulteration can be detected without any doubt and by means of very simple appliances.

Later.—Mr. Heddon has replied to the above article, but his reply far from covers the ground. He appears to deny that he has adulterated honey for the last two years.

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Brother York of the *American Bee Journal* says in the number for March 29th: "THE

CANADIAN BEE JOURNAL improves with each succeeding number. It is printed on an excellent quality of paper, and its contents are equally good. Bro. Holtermann is bound to make a success of his venture, and Canadian bee-keepers ought to turn in and support him heartily. Of course we would naturally advise every bee-keeper to first become a subscriber to the *American Bee Journal*; but to that 'means of grace,' we think Canadian apiarists should then add their own journal. The Canadian and American harmonize very nicely on the main objects to be attained unto in practical bee-culture.'

Brother Root in *Gleanings in Bee Culture*, March 15th says, "THE CANADIAN BEE JOURNAL is steadily improving. It has just put on a new and tasty cover. The paper and presswork are of the best, and the editorial management shows the handiwork of a practical bee-keeper. We gave this journal a good send-off in our previous issue, but it really seems to deserve another. The new series of the C. B. J. differs in one

important respect from the old one. The former started out on a high plane of journalism and gradually went *downward*; but the latter started on a high plane too, and so far has been gradually working *upward*."

* **

We have appreciated, and felt grateful for, the many kind notices given to the CANADIAN BEE JOURNAL since it fell into our hands. We take the liberty in the present number of giving a few of the kind words sent us with renewals. We assure our many friends that both the words of approval and the renewals are much appreciated.

* **

Many a bee-keeper will wish to know if he shall use full sheets in sections and brood and surplus Comb Foundation combs or starters.

We know of no successful comb honey producer, who uses in sections anything but full sheets of foundation. There is a greater difference of opinion about brood combs, yet very many favor full sheets. In using foundation we would say try and make the bees fasten the full sheets of foundation in the combs and partially or entirely build out the combs during the time the bees gather from spring blossom and fruit bloom. By doing this there will be less sagging and breaking down of comb. A strong swarm during a warm day, is not the most favorable condition under which to give the bees sheets of foundation in the hive. Use as many sheets as you can and let the balance be only a starter. We prefer a very narrow starter to a partial sheet. For extracted honey at least we would have nothing but full sheets in the brood chamber.

* **

We have just received word that F. A. Gemmill, Stratford The New Secretary Ont., has been appointed secretary of the Ontario Bee-keepers' Association, in place of the late Mr. Corneil. All membership fees should be sent to him at Stratford

On April 16th when we examined our entire apiary, there was not a particle of inclination to rob, and it was a pleasure to open hive after hive, and find the way in which the queen had been depositing eggs. The apiary is in exceptionally good condition. As we are not at present in the apiary during the greater part of the day, two weak colonies have been robbed out, since placing on the summer stands. These had gone into winter quarters weak, as when rearing queens some colonies are in poor condition. Another colony which had a queen introduced late in the fall, we thought safely, was queenless.

We are now writing on the 19th before going to press, and the bees had a splendid chance to work on maple and other blossoms. On the 16th, we found colony after colony with drone brood and the prospects are we shall have drones flying early. Should the weather change to cold and the gathering of natural stores be checked, the apiary should be carefully watched. The hive kept warm by means of packing above and the entrance contracted. Stores under such unfavorable conditions, after the stimulus of a good natural flow diminish rapidly and in this direction the bees should be watched. We find it a great comfort to have abundance of stores in the hive from the previous fall. From all directions come reports that bees have wintered well.

To many a colony on the verge of starvation, the favorable weather will mean salvation for the time being at least.

* **

It appears that the unpleasant task of saying something about the controversy going on between Dr. Mason Awards at and Mr. McKnight is left to Chicago. us. Until this hour we never looked closely into the merits of the claims of either party. We have felt inclined to allow everyone to make the most of the material in hand and have everything done in a friendly spirit. That this friendly spirit exists, even now,

we have no reason to doubt. What the quantity of honey exhibited was, we know not. The doctor may in the main be right. On the other hand, taking alone the awards on honey, *which basis is correct?* Mr. McKnight is about correct. He has left out the one award for New York state, the award being, we think, on the method of taking the honey, rather than the honey. The honey was taken in Illinois and while the method well deserved a medal, no one would care to claim the honey deserved an award.

Again, in Nebraska, there was one award for "Honey in marketable shape." Mr. McKnight did not give credit for this, He is probably correct in his decision, but to avoid dispute we can afford to allow it. Again, he credits Minnesota with one award and gives none to Nevada. We think, according to our list these states should be reversed.

It makes quite a difference to take the awards on honey alone. It is a little amusing to note how our brethren on the other side, think Canadians *boast*. On the other hand, Canadians think their cousins in the United States monopolize the boasting. We have travelled a good deal in the United States and can see but little difference in this respect. We would not give a straw for a nation which could not do a little boasting. It will dwell and thrive if there is any foundation whatever for it to rest upon.

Convention Notice.

The Lambton Bee-Keepers' will meet at the Johnson House, Petrolia, on Tuesday May 22nd. All are cordially invited to attend. It is expected that R. F. Holtermann, of the Canadian Bee Journal, and W. Z. Hutchinson, of the Review, will both be present.

Weidmann, P. O.

J. R. KITCHEN
Secretary

I value the CANADIAN BEE JOURNAL highly, and think it now better than ever before.
(PROF.) A. J. COOK.
Claremont, Cal. April 5th, 1894.

York Co. Bee-Keeper's Organize.

A number of the Bee-keeper's of the county of York, met at Unionville, April 3rd, for the purpose of considering the advisability of organizing an association in the interests of those engaged in the pursuit of bee culture.

After calling the meeting to order, Mr. D. Heise of Bethesda, made a motion that Wm. L. Baker of Ringwood occupy the chair, which motion was seconded by Mr. L. Mapes of Headford, and unanimously carried.

After taking the chair Mr. Baker made some remarks and then called upon Mr. Wm. Couse of Streetsville to address the meeting and explain the advantages and privileges of such an organization. Mr. Couse has kept bees for the past sixteen years and is a prominent member of the O. B. A. He said among other things in his remarks that the object of such an organization was to enable those engaged in the pursuit to produce a better article and to accomplish more with the resources at their command. He also said it was desirable to establish an export trade, which would be much to our pecuniary benefit.

When Mr. Couse had concluded his remarks, the chairman submitted the question to the meeting for its consideration. It was then moved and seconded, that we as a small representation of the Bee-keepers of the county of York do form ourselves into an association. The name of which association shall be the York County Bee-Keeper's Association. The motion was carried. The following officers were then elected.

President, Mr W. L. Walton, Scarboro Junc.; Vice-President, Mr. D. Heise, Bethesda; Sec'y-Treas., Mr. L. Mapes, Headford; Directors, Messrs. A. H. Crosby, Markham; W B Button, Ringwood; D. Ramer, Cedar Grove; L. B. Shell, Gormley; Wm McDonald, Unionville; A. Henrick, Headford and Mrs. Ira Badgerow Ballantrae. Any person interested may become a member by paying an annual membership fee of fifty cents.

It was decided to hold our next meeting in the "Tremont House" Markham, on April 25th, (Wednesday). The subject for discussion to be "The best method of producing comb honey." All interested are invited to attend our next meeting.

L. MAPES, Sec'y Y. C. B. A.
Headford, Ont.

I am well pleased with your Journal.
DR. GEO. DUNCAN.
March 8th, 1894.

Death of Mr. S. Corneil.

The Secretary Ontario Bee-Keepers' Association Suddenly Passes Away.

Many bee-keepers will be surprised and shocked to hear of the sudden death of Mr. Samuel Corneil. Lindsay, Ont.

On Saturday, April 7th, Mr. Corneil had reached the age of 58 and appeared to be in his usual health. After dinner he went to the garden and apiary and was found a few hours after with life extinct. Heart failure is supposed to be the cause. He leaves a wife and family.



Mr. Corneil was born in the township of Ops, Ontario county, on 7th of April, 1836. His childhood and youth were spent on the farm. Having obtained a good education he taught for some years at various places, and was afterwards local superintendent of schools for the county. For the last twenty-five years his residence has been in Lindsay, and he was chiefly engaged as an insurance agent. He was twice elected a member of the board of education in Lindsay and assisted much in getting the old High School changed to its present rank of a Collegiate Institute.

Mr. Corneil has held the position of President of the Ontario Bee-keepers'

Association and at his death was its Secretary, and director for the district in which he resided. He was one of the delegates to the Colonial and Indian exhibition in 1886.

Mr. Corneil was chiefly noted for taking some problem in bee-keeping and with careful and painstaking effort seeking to bring upon it all the scientific light which could be found in various works, and which appeared to bear upon the question. Although bee-keepers did not always agree with the conclusions arrived at, there is no doubt Mr. Corneil's writings were interesting and of value, aside from what may have been correct, in that it tended to make Canadian, yes, American, bee-keepers pay greater attention to the scientific side of bee-keeping. Practically the bee-keepers of the American continent lead the world. From the scientific standpoint we have much to learn from such men as Cowan, Cheshire, Dzierson and others, men who are original and careful students of scientific bee keeping.

The sudden call of one so well known to the bee-keeping fraternity is not without its solemn lessons. Let each of us take the lesson home to ourselves.

Attention!—Honey Legislation.

Brother Bee-keepers, you will be more than pleased to know that on April 23rd our Pure Honey Bill will be introduced.

Our good friend, T. S. Sproule, M.P., has charge of the bill, and in his energetic painstaking way will do great work for us.

The fact that we have some very little opposition in our ranks, has done much to hinder the work we are interested in.

Now, bee-keepers of Canada, you can do good service in the cause by writing to your member, setting forth the necessity of the proposed legislation; never mind if you and your member do take opposite sides in politics, and if he knows it; all the better; for he will appreciate your good judgment in brushing aside politics, and like a good bee-keeper working for the general good of the country.

Better not approach the ministers, they have been approached both personally and by letter quite enough, I judge.

I have been twice this session to Ottawa, and may possibly have to go again, but I hope not, but if I am recalled the response shall be both immediate and cheerful.

Belmont, Ont. S. T. PERRIN.

[We would urge all bee-keepers to act on the above suggestion at once, it is of great importance. Write whether you know your M. P. or not.—ED.]

SPACING COMBS.

SOME NEW IDEAS.

Written for the C. B. J. by C. W. Post.

I notice in the Bee Journals of late many very interesting articles on the above subject. As I have been requested to give my system of management, I will first state that there is such a great difference in localities right here in Ontario that a system that will give the very best results in one locality will prove outright disastrous in another.

I have experimented largely in spacing combs for the last six years and I have at last settled on a bee space that, for my locality gives the best results.

I use what is called a nine framed Langstroth hive 13 $\frac{3}{4}$ inches wide, inside measure, and frames with top bars one inch square. I have now in use 7200 such frames and don't see any that suits me better.

I winter on nine frames which gives a little over $\frac{3}{4}$ in. space between top bars. Now in the spring, from the time they are set on the summer stands until the end of July I want the brood chambers in the very best possible condition to raise brood, for plenty of brood means a good crop of honey in an average season. I want as little honey as possible stored in the brood chamber up to the 31st of July.

About the first of May I go through my apiary and open up the hives and see that the queens are all right. If not clipped I clip them and enter their ages in a book kept for that purpose. Place the combs in the same position as first occupied, only space them close enough to admit an extra frame, thus making ten frames with a bee space with a fraction over a quarter of an inch between top bars which leaves a $\frac{3}{4}$ inch space between the sealed brood. This brings the sealed honey too close together for a bee space and they will begin at once to cut away the combs that are shouldered out, which stimulates breeding at the same time, and if the weather is favorable they will build up at an astonishing rate.

They are allowed ten frames until the last of July then one of the outside frames is taken out and set away to be replaced in the spring and the balance of frames equally spaced. At this time there is but very little honey in the brood chambers, but through the buckwheat season all hives are

filled and combs shouldered out in good condition for winter.

I am wintering twenty five at present on ten frames and I believe they will winter as well as those on nine.

Last winter I took a hobby to winter some on eight frames, spaced the same distance as in my extracting supers. It looked to me so feasible that I prepared 340 colonies in that way, but they did not winter quite as well as those on nine frames. The honey granulated badly in some of the thick combs, besides they are shouldered so heavy it is very difficult to get them back to ten frames in the spring.

Now in running my hives with eight, nine and ten frames, I find which bee space has the least burr or brace combs. I find when run with ten frames the brace combs are not worth mentioning; when run with nine, just enough to keep the frames in place when moving the hives, but with eight frames the burr combs, brace combs, and combs that have no name is perfectly awful.

Murray, Ont., Feby. 23rd 1894.

GATHERED BY THE WAY.

Three Rather Funny Stories.

The editor of the C. B. J. has hinted to me that his critics have expressed a wish that its columns should contain only solid "pure extract" of common sense. From this I infer that the readers of the Journal must be very wise or otherwise for it is said that "the wisest men relish a little nonsense now and then." However, if my fragments are not worthy a place elsewhere, the waste basket is surely big enough to hold them.

My first incident bears no relation to bees or honey, nor do any of them, but it may sweeten life a little by creating a smile:

An engineer, employed on the Grand Trunk R'y, and who lives at the Bridge, was the unfortunate possessor of a Thomas cat of which he was heartily tired and which he determined to get rid. As cats are possessed of nine lives, the owner determined on less drastic treatment than killing, and so the doomed feline was put in a bag placed in the cab of the engine, and given a free ride several miles and then released. On the return home next day there the innocent victim of his cruel plan sat in a most forgiving spirit.

The next day the defeated engineer smiled a complacent smile. He again put his catship into the bag and carried it and its lively occupant to the station. No secret was made of his determination to dump the

cat into the Niagara river, as the train was passing over the Suspension Bridge. Now the fireman was a merciful wag and he "let the cat out" and placed instead within a lump of coal during the temporary absence of his superior. All went well, and when the bag went down 200 feet to the raging waters below, the would-be slayer no doubt heaved a sigh of relief, and perhaps sorrow. Of course the captive made tracks for home and if ever cat and man met under peculiar circumstances, it was when that engine-driver returned home that evening. The cat still lives.

No. 2 is the simple relation of a fact. It is told to illustrate just how much reliance can be placed on petitions. The incident occurred not one hundred miles from Brantford. The wags fell to discussing the carelessness with which a certain hotel-keeper signed petitions and a bet was made that he (the hotel-keeper) could be induced to sign a request that the City Council would order his hanging and would subscribe money to buy the rope. The preamble was carefully prepared and the two called on their victim. Of course the explanation given was in effect that the Council was being asked for certain favors to the liquor interest and a subscription was asked to secure legal talent to urge the matter. The name was readily affixed, and the money as cheerfully given, and only after the amount was spent at a neighboring bar, was the plot discovered that the Signee had asked for his own execution, and had helped to defray the expense. The moral of the story is: Be careful to scan closely any and every document you sign.

And now comes a dog story: A farmer determined to end the career of his canine and to do so effectually, planned a little jaunt into the woods, but taking the precaution to secure a good piece of rope as a part of the equipment. A tough sapling was bent down and a connection made between the neck of the dog and the top of the tree. When the tree was released, the effort on its part to resume an upright position was not greatly retarded by the weight at the top, and poor Carlo was struggling several feet from the ground. The half-repentant owner thought his work done and started to run away from the place of execution.

My story would end here, only that a neighbor had been curiously watching the summary proceeding from behind a big tree near by. As soon as things had reached the climax just recorded, the spectator rushed to the rescue, and in a trice the rope was cut, the half-suffocated culprit rescued, and he was making a rather zigzag journey home. Please let us drop the curtain over

the meeting between the executioner and his still living dog. E. L. Y.

RAISE FEW DRONES.

—G. M. DOOLITTLE.

From what I have seen in nearly every apiary which I have visited in the past, I am of the opinion that bee-keepers lose very much of the profits which they might otherwise secure, by having too much drone comb in their hives. Each colony should be allowed one or two inches of drone comb, but no more unless such colony is one which we wish to rear drones from for the improvement of stock, and in this case I give from one to three frames of such combs. Where three drone combs are used in each hive, it is a rare thing that I secure any surplus honey from that colony, for the drones will consume nearly if not quite all the surplus honey gathered by that colony, especially if I try to have the colony keep drones through the season. To be sure, the colony will generally give some surplus right in the height of the season: but this must be given back for the drones, if they are kept after the honey harvest. I have given this item so that the readers may know just what a lot of drones in each hive will cost them.

Here, I think I hear some one say, "If this is the case, why allow any drone comb in any but the colony which is to rear drones?" The reason for allowing one or two inches of drone comb to each colony is, that all colonies, which I have ever seen, will have some drone comb anyway, even if they have to tear down worker-cells to get it, building drone comb in its stead. Now, where we try to exclude every cell of drone comb, the bees revolt, and build drone comb in out-of-the-way places, a few cells here and a few there, so that the bee-keeper has no chance of keeping unwelcome drones from flying, by way of decapitating them just before they hatch, unless he uses a drone trap, which thing is an inconvenience to the bees and their owners, generally speaking. By having this one or two inches of drone comb all together in a single comb, and that comb placed in a certain position in every hive, it is a very easy thing to open the hives every 23 days and decapitate all the drones in a whole apiary. By placing this comb on the outside, or next to the side of the hive farthest

from where the brood nest is, in the spring, the queen will not lay in it till the bees become strong in numbers. In this way drones are not produced in hives thus fixed till late in the season, and if left in this position, none will be reared late, as these outside combs are first to be filled with honey, thus doing away with any more drones, as the bees are not as anxious for drones at this season of the year, hence will not take honey out of drone cells to rear them. In this way, about twice decapitating the drones during one season is all that is needed with any colony. But I think I hear some one say, "it is easy enough to talk about having only one or two square inches of drone comb in a hive, but quite another thing to keep the drone comb down to this; for almost every year holes get in some of the combs by way of mice, moldy pollen, etc., which the bees fill with drone comb when they 'patch up.' How is this to be avoided?" To remedy this matter my usual plans have been, either to fill these holes with old worker comb or foundation where the frames were wired. The best time to do this is when the fruit trees are in bloom, for at this season there is little honey in the hive, hence all patches of drone comb are readily discovered. Take all but the desired combs, which have drone cells in them, out of the hive, and substitute perfect worker combs for them. Now take these combs to the shop, and, after cutting out the drone-cells, fit a piece of worker comb into the hole made by removing the drone; or if the comb has a hole in it, fill it with worker comb, thus getting the start of the bees. To best do this I have several sizes of old fruit cans, without either top or bottom, one end of which has its edge filed sharp so that it will easily cut a hole through the comb by twirling a little while pressing down. By using the one which will just take out the drone-cells, a good job is done; while by using the same to cut out the "patch" of worker comb the same will fit in exactly. These worker "patches" are always taken out of imperfect combs, which materially lessens the number to be patched. For wired frames, cut away the cells around one side of the hole, so that the septum will be laid bare about the edge of it, and press a piece of foundation on this bared edge, having the foundation so warm that it will adhere to the comb while doing it. Now, this is the best way I used to know, and the only way, where the apiarist is short of combs; but there is a point about it that I do not like. All around the edge of this "patch" there will be cells of all shapes and sizes, which the bees persuade themselves into thinking are for drones, when any are large enough

to rear drones in, so that we often have as many drones reared around a large patch as would be reared in one square inch of drone comb. To remedy this I have studied quite a little, and when I came to have a surplus of combs, so I did not need all I had in early spring, I thought out the following, which has proved as near a success as anything I know of. All the imperfect combs were taken from the bees as before; but instead of being "patched" they are hung away in dry airy place till the bees became strong enough so I could form nuclei. Now, all nuclei or very weak colonies desire only worker bees, so they will build cells only of the worker size as may be, they being always ready to build comb whenever there are bees enough, and there is honey coming in from the fields, or they are fed. After cutting out the drone comb and fixing the combs as I desired, they were set into the nuclei to be patched, and let me tell you, the patches thus put in were very pleasing to the eyes, without scarcely a cell but what was of the uniform worker shape. I have written thus early in the season so that all the readers of this can have plenty of time to look over their combs which they have stored away, or which they may take away from the bees in early spring and have them fixed so that they will be perfect worker combs throughout.

Borodino, N. Y.

Personal.

Mr. A. Lang, Ponsonby, Ont., paid the office of the C. B. J. a visit lately. Mr. Lang has been away during the winter and the bees mourned his absence. He now mourns the absence of bees.

Mr. Jas. Armstrong, Cheapside, when in Brantford lately, reported his bees as having wintered well.

Congratulations are in order. Miss S. E. Pettit, a daughter of S. T. Pettit, Belmont, has graduated in medicine at the Cleveland, Ohio, Medical College, taking not only first rank in the graduating class, but taking a higher per centage of marks than any graduate has ever taken at the college before.

[How is this Brother York? Canadians ahead on more than honey.—Ed.]

Mr. S. T. Pettit is hard at work pushing legislation in connection with adulterated honey. He, J. K. Darling and R. F. Holtermann were at Ottawa in March.

Mr. Pettit has since made another trip to Ottawa on this important business.

SPRING WORK.

—J. E. POND.

To those who are fortunate enough to carry their bees safely through the winter the question of what shall be done in the spring, and how early shall we begin to do it?" arises. In endeavoring to answer the question, I shall simply state in narrative form, the results of my own experiments, and for the benefit of those new to the business, rather than the old timers, though they possibly may lose nothing by a perusal.

If nothing else in bee-keeping is sure and certain, the fact does exist that, no matter how nearly in like condition we leave our colonies in the fall, we shall find them in the spring, varying essentially in condition, and working strength. The reason of this I have not yet been able to determine, neither have I found, that the actual spring strength, is any guide in the endeavor to improve our stock by selection; that is by taking it as an admitted fact, that the colony that comes out the best in a given spring can be bred from, with any certainty that "like produces like" in that direction. But pardon the digression and I'll "resume my muttons."

The first thing to be done in early spring is to get all the colonies into working condition. The time to do this is as soon as bees can be handled without fear of loss. This time will vary in different localities, of course, but the first yield of pollen will usually give us the key note to it. To get colonies into working condition is a simple matter. The interior of the hives should be examined, and the bees aided in their house cleaning, and the weak colonies strengthened from the strong ones. I do not believe that this can be done by uniting weak colonies. My experience has been, that the so strengthened colony will do no better than both would have done if the union had not been made. In uniting we merely double the quantity of old bees; when what is needed is to infuse young blood.

I don't care for large colonies till the time has come for them to gather honey; then the bigger, the better. The proper way, in my judgement, to strengthen weak colonies, is to draw frames of brood from the stronger, and thus build them up. By so doing we infuse the needed young blood and also stimulate the queen in the strong colony, (if she is good for anything)

to keep the supply of brood constantly increasing. We say twenty-one days from the egg to the worker emerging from the cell: five or six days more for it to gain strength, and become a forager; which gives us from 25 to 30 days to create a nectar gatherer from the newly laid egg. Take this as the first factor in the problem. As a second the knowledge of the time when the flora begin to secrete nectar, and work out the result, viz: You get your bees in the best working condition possible by building them up to working strength, and by beginning so to do in time, so that the new workers will be up and ready for the first honey flow of the season.

No positive rule can be given for this, it is a problem that each will have to work out for himself. It requires but little experience and knowledge to enable one to determine the matter, but this knowledge and experience is an absolute necessity.

One must know the flora of his locality, the time of its budding and blossoming, and the duration of the same, for unless he does know this, his labor will be all guess-work, and as apt to miscarry as otherwise; but on the other hand, knowing this, it will require but little experience to enable him to so work his bees, as to have them ready in season, to do the work of the season, and obtain a good showing at the end of the season. The sections should be put in place as soon as the bees are ready for them. This can only be ascertained by careful watching, but it is better to put them on a day or two too early than to wait till the swarming fever sets in. Judgment and discretion must be used in working bees as in any other business or profession, and he who thinks he can keep bees without taking care of them, or that supplying a hive and sections will alone get a crop of surplus honey, will get badly left.

The beginner should begin to study up the matter now, and as a means to that end should subscribe for the CANADIAN BEE JOURNAL for by this means he will get all the new ideas that are being brought forward, in addition to the knowledge he gains from text books, and without such knowledge, one had better quit the bee business before he begins.

North Attleboro, Mass. Dec 19, 1893.

The C. E. J. has improved beyond recognition, it is now first-class.

March 5th, 1894. G. W. DEMAREE,
Christianburg, Ky.

Allow me to congratulate you on the great success you are making of the Journal.

March 6th, 1894. Wm. McEvoy,
Woodburn, Ont.

Best Method of Starting Cells for Queen Rearing.

--Mrs. Jennie Atchley.

After trying all the plans that have been given for procuring cells, I have now concluded to use only the following plans this year as I consider them best. I have a plan or rather a modification of the Doolittle plan which I use most, to wit: I dip all cells a la Doolittle except I use a cell stick with a small end. The small end makes a place that just fits the cocoons or linings of worker cells or makes a sink in bottom of cell cup just right to take in the cocoon. I set in old dark combs into the breeders hives, and when larva is about 12 hours to one day old. I take out a small piece containing about as many larvæ as I think I need at the time, take a sharp knife or razor and pare down the cells as close to the larvæ as I can not to disturb it, then take a small pair of watch-makers tweezers and remove the cocoon larvæ and all right into the bottom of my wax cups and if properly done the cocoon will just come up even with the bottom of the cell cup proper. When I have thus prepared about 12 cells I place them in a strong broodless hive so made a la Alley and I tell you it will surprise you to see how nice the bees will save them and what large and fine cells and consequently a fine lot of queens one gets. I dip my cells good and strong so that they can be handled easily without injury. This is what we call the Doolittle plan—the Alley plan and the Atchley plan combined, and I tell you I like it. We use some hives in the old or Doolittle way that is, save some cells built in upper stories. For laying queens also, we some times use the Alley plan, but the one that pays best and the one that I consider best is as above. You may make a failure the first time or two, but if you take a good strong colony of bees and keep them in an empty hive over night without a queen, next morning give frames of honey and the dozens cells prepared as above and see what fine cells you will get. I place my cells right on the comb, and not on sticks as some do. The cells are easier taken off the combs and by pushing the base of the cells against the combs hard enough to stay letting the point stand out from the combs a little. It is a good idea to always keep the cells point down in handling.

BEEVILLE, Texas, U. S.

The Production of Comb Honey—Other Items of interest.

Except that for the past ten years I have persistently declined writing for our American publications I would be pleased to send you an article for publication—but you can see that I cannot do it without discourtesy to them. I appreciate the task you have undertaken. You have put yourself in the midst of a field where you can do manly hard work for your generation. As to my experience with full sheets or starters in sections. I have experimented and satisfied myself for myself on this point. I can best answer this by saying that I am now making over one hundred and fifty (150,000) thousand sections for my own use, and shall put full sized sheets in every section, (shall use VanDeusen flat-bottomed F'dn 14 feet to the pound). I insist on a light f'dn. The bees will generally thin any f'dn, but often they will leave it very little worked down. The improved appearance of the section when filled is quite an argument in its favor. Another point is that the sections in clamp are worked more uniformly with full sheets, which is quite an advantage in practical work, right here let me say that many bee-keepers spread out so much that some sections are filled and sealed, when others in the same clamp are but part filled. No practical man can afford to handle sections. As recommended by some noted bee-keeper in producing comb honey, handle clamps or get out. Some bee-keepers fail because of a slip-shod system of doing their work. A swarm is examined in October, it appears to have bees and stores enough for winter, this will not answer my purpose. I must have positive knowledge. The age and capabilities of the queens are of more importance than is generally supposed more especially in the management of a large number and for comb honey. My practice is not to winter any queen two years old. i. e. if a queen was hatched in June 1890, I would not winter her in preparing my bees in the fall of 1892; in other words, I aim to change my queens one-half each season. As to a system of management for comb honey I have no settled system of management, I really believe I have changed it every year since I have been in the business. I worked fifteen years for a practical system of non-swarmling, greatly, as I now see it, to my disadvantage. If, by careful ventilation, preventing crowding and careful manipulation I can hold a swarm through the season without any great desire to swarm, I consider that management a success. If a colony as you think, is bound to swarm the sooner you humor it the better. The great

point for comb honey is to have a strong colony with a good queen early in the season. As to the other point of your letter (no upward ventilation) it may prove a very practical thing to do. I have never experimented in that direction, at first I thought it seemed a little difficult to accomplish practically. This is a grand point for some of our experimental stations to determine.

For twenty years I was experimenting and fooling over these nice new points of theory. I did it till I had all the conceit taken out of me. I never expect to have any more of that commodity as long as I live. I am quite content to stand outside of all this discussion and trouble. I never expect to get in the harness again. I have written this hurried rambling letter, if of the least intrinsic value to you, you are welcome to it. Do not allow beginners to put big money in expensive appurtenances, nor to experiment on these disputed points of fancy management, keep them along lines of established practical management. Experimenting on a large scale in former years cost me more money than my business could furnish. There are unfortunately too many men of sanguine temperament, ready to rush to the front and proclaim some new idea or theory, untested for more than one season in most cases. They are generally good talkers and often men of experience who ought to know better. An example in the case of a man in Minnesota, some twenty years ago, put forward the fact, as he proclaimed it. That a small cluster of bees (I think he advocated one guard) was much more advantageous and better every way for practical results than a large swarm, and advocated reducing the clusters by ~~shaving~~ the excess on the snow in preparing for winter. This seems absurd but it is a fact that this theory lost very many thousand colonies of bees to the country, because, while this idea was at the front of every bee-keeper, who had small clusters in the fall would say, 'a la! Hosier' and lose them of course.

In this industry I believe you are surrounded and supported by a grand lot of men. I admire their frank outspoken habit of putting things. Kindly remember me to Mr. Corneil and Mr. McKnight the only two of your co-laborers I have had the pleasure of meeting. Wishing you every success in your enterprise. I am

Fraternally Yours,

J. E. HETHERINGTON.

CHERRY VALLEY, N. Y., Mar. 10th, 18-4.

I am pleased with the Journal under its present management both in appearance and quality.

GEO. WOOD.

The Kind of Wood for Bee Hives

—D. W. HEISE.

During the spring of 1891, in the way of making preparation for increase from a few colonies of bees, I went to a manufacturer of hives with the intention of purchasing hives from him made up. But not liking the hive in its entirety, I concluded to make the hives which I might need for the season myself. Being a builder by trade, the labor of making hives fell right in my line, but not having sufficient dry pine lumber of proper dimension, I concluded to use some very fine soft elm boards, which I thought would answer the purpose equally as well, and in order to have the hives as light as possible, I had the boards planed down thin. I made up the hives all double walled, a two inch space being given sides and bottom, stuffed with dry sawdust. Swarms were hived in all those hives the following summer, and were left on the summer stands for winter with a sawdust cushion placed over the frames. The bees appeared to winter fairly well in those hives, but upon several occasions when raising the covers, I noticed a collection of dampness and frost in and about the cushion. Not having any double walled hives to compare them with, and having had no experience in wintering bees, I accepted the fact of the frost and dampness being present as an unusual occurrence where bees are wintered on the summer stands. The following spring on examination, I found the combs in those hives thickly covered with mould; especially the outer frame, but by aiding the bees a little by way of house cleaning, we soon had everything in apple pie order, and the bees did well, the following winter being the hard winter of 92-93 (to bee-keepers in this locality at least) the bees in half of those hives died, and I again found the inside of those hives damp and frosty and combs mouldy. Having also lost bees which were in hives constructed in the same manner as those already mentioned, but made of soft pine lumber, I gave the matter very little consideration, although the latter I did not find in such a filthy condition.

Now for the verification of the fact that the kind of wood has a great deal to do with a successful outdoor winter bee hive. Last fall I prepared my bees for winter in the usual way, and all in the same manner. About January 5th last, I walked over to

the bee hives for the purpose of ascertaining the condition of the cushions and hives as to dryness. Now the covers to the elm hives were all heavy and not liable to be blown off with the wind, and were left without weights, the other hive covers all being light were weighted down, and thinking it necessary to remove them, I merely lifted the heavy covers to the elm hives and I found them as in other winters, the hive frosty, cushions damp and wet. Knowing full well that to leave them in this condition would mean destruction to the bees, I proceeded at once to remedy matters by replacing the damp cushions with dry ones, for I had not the slightest idea but that all my bees were in the same condition. Imagine my surprise when on lifting the covers of the hives made of pine, to find them all perfectly dry and comfortable, while those made of elm without one exception were wet and frosty.

Now I think this proves without a doubt that a hive made from soft wood, such as pine, cedar, etc., is better adopted for outdoor wintering than any other, in this latitude at any rate, where we have a continuation of cold weather for four, eight and sometimes sixteen weeks, I verily believe that if sound cedar could be obtained for the manufacture of hives for outdoor wintering the mortality would decrease. At all events my intention is to experiment a little in this direction. A material that will absorb the moisture and allow evaporation, and at the same time retain the heat generated by the bees is what is needed. Any one will admit that hardwood, even hard flinty pine, is of a colder nature than soft wood, such as pine, cedar, basswood, etc. Basswood I think, would answer equally as well as any other as far as softness is concerned, but is too susceptible to dampness and will swell out of shape and therefore is not commendable.

I do not know that the above discovery is anything new to the bee fraternity, possibly it is as old as apiculture itself, but it is new to me at any rate and perhaps may be to some others and I thought it would be no injury to any to give it for publication for what it is worth. Bethesda, Ont.

[There is a good deal in what you say in the above. Another objection to elm is, that one never knows when it is through shrinking, and it is rather difficult to keep it in place, in that respect it has as great an objection as basswood. Cedar has been used in the construction of hives, at least double walled hives. It is a question whether a better all around material can be found for hives than well-seasoned pine.—Ed.]

HOW THE BEES WINTERED.

Cloth vs. Wooden Covers.

(Written for C. B. J. by F. A. Gemmell.)

The past 10 days of beautiful weather makes the Bee-keeper feel as if spring had actually come to stay. Be this as it may, it has been of great benefit to the bees, as they have been enjoying almost daily flights, thus putting them in shape for any backward weather which may come later on.

My own colonies, numbering 96 in all, were wintered outside, and with the exception of one colony which was *non est* on November 1st, the other 95 have come through in a fairly satisfactory condition.

Of course this does not mean that they are all wintered, as the first of May will be a better time to judge of that, still it is a satisfaction to know, that more than one is not now dead. Judging from present appearances of the surviving ones, however, I am quite sanguine all will give a surplus, the amount of such will of course depend on the character and duration of the honey flow.

I might here mention that with proper care and plenty of stores, my spring losses in the past have been so slight, that I have no fears on that scale, therefore give myself little or no concern as to the result.

That the winter has been a favorable one in my locality must be conceded, although all these who had not their colonies properly prepared early in November, would find the early cold weather in that month, and December a great damage to them. The month of January, however, was mild and some of the now tardy Bee-keepers even finished their winter preparations, about the commencement of the new year. On the 8th and 9th of February, the bees had a grand flight, which at a such a time means a great assistance in enduring the balance of the cold weather, as well as stimulating the stronger colonies to make preparations for early brood-rearing; if properly protected and not cramped for stores.

CLOTH VS. WOODEN COVERS.

My practice for years past, when preparing for wintering outside, was to pack early and I still think this plan good, it is surely the safest. Another thing I generally did, was to place a Hill's device or something similar, under a clean new quilt, before putting the packing or cushion on top, and this I also think for the majority is still the safest plan to follow. Yet for those who

pay more attention to the manner in which the winter stores are arranged I see no reason for not dispensing with the device, as well as the new quilt, and using the ordinary propolized quilt instead, especially in a hive no deeper than ordinary standard Langstroth or new Heddon hives, at least I have been able to do so.

I am not given to making extensive experiments without first trying the same on a small scale, and propolized cotton duck quilts, no matter how thickly coated, are now allowed to remain in the hives with as much success as formerly, to say nothing of the extra expense of a new supply each year.

As to wooden covers, I have always looked upon such with suspicion. I have, however, tried some partly as the result of necessity, and partly on account of neglect, in not preparing early enough, but remember in neither case are the quilts, nor the wooden cover sealed tight, in fact I take particular precautions to see that the wood cover especially are loosened and then raised at the back end by inserting a few leaves, so that an aperture of at least 1 1/8 of an inch is allowed for the escape of moisture, the whole then being covered with leaves to the depth of 8 inches. When the old quilts are used I generally pull them back about half the length of the hive, and allow them to again fall back into position, using the same amount of leaves on top as before, and placing the flat wood cover on top of them. Now one must use some judgment, and recollect that leaves do not pack so closely as chaff or sawdust, and therefore a smaller quantity of the latter is required, at least such has been my experience. Now in regard to the material used for packing. I am yearly becoming more and more convinced that it don't matter so much about what kind of material is used, providing the stores are good, and are properly distributed, or as Mr. McEvoy puts it "So long as the constitution of the hive is correct." Recollect 5 or 6 solid sealed combs of honey is better than double that number, containing the same amount, and empty combs for the bees to cluster on are not a necessity. A good colony can be crowded so as to cluster on combs of honey, and winter in first-class shape. However, if there are those who doubt they can very easily furnish a good place for the bees to cluster underneath the combs of honey by putting a 2 inch run under the hive or furnishing a space behind a division board, for as soon as the extreme cold weather approaches, the bees soon occupy a small space between the combs of honey, which are of course never too cold to cause them to become

chilled by confining honey unfit for winter consumption, therefore the mortality is so slight that the few bees which do die of extreme old age, are of little or no consequence.

In concluding I might just state, my preference under ordinary circumstances for packing material is forest leaves or cut straw, aside from the fact that they are more readily obtained. Saw dust except for spring protection, finds less favor with me than almost any other material, principally on account of its liability to become damp if in the least favored in that direction.

STRATFORD, Ont. March 23rd, 1891.

The Heddon Hive.

Written for the C. B. J., by A. G. Willows.

A dealer has lately sent me one of his catalogues of the "New Heddon Hive" and with it Mr. Heddon's catalogue for 1890. On reading the very strong claims made for this hive and system and the many highly flattering testimonials given by prominent bee-keepers I am led to wonder wherein I failed in making the hive a success.

I purchased the right to make and use from the D. A. Jones company when they held the right for Canada. The first year I made up about 25 hives and put bees in most of them the first summer.

The great objection I found to their use was that burr combs would be built between the various sections of the hive and also from below to the honey board and to the cover and the whole filled with honey. Then, instead of being the most easily handled hive made and with least exposure to robbers, as is claimed for them, they were about the worst in these respects. I think one of the most disagreeable jobs I ever had in the apiary was opening these hives when in the above condition and the bees inclined to rob.

I cannot see how the results can be any different with the top and bottom bars of frames made according to dimensions given in "Success in Bee Culture," that is 13-16x 1/4. The bee space allowed between the different sections of the hive—fully 1/4 inch would, it seems to me, make matters worse.

These light frames also allowed the combs to sag considerably when filled with honey. Then on being reversed they would in a short time sag in the opposite direction. This fact also made matters worse in regard to the burr combs. The frames were wired.

Now, I would like if some of those who have made a success of the hive would give their experience in regard to these troubles

in the C. B. J. and perhaps then I could see what was the cause of my failure.

If I could overcome them I would be glad to make another trial with the "new hive."
Carlingford, Ont.

Nonsense, Science and Common Sense.

The first by P. H. Elwood; the second by Prof. Cook and others; the third by Bee-Keeper's everywhere.

MR. EDITOR:—Yours informing me that the dog had eaten up my last contribution to the Canadian is at hand. I am sorry for the dog and hope you will watch him closely for symptoms of madness. It will be impossible for me to furnish a duplicate as I made no copy and my memory is entirely at fault. However, I think I am safe in saying that an entirely new communication cannot be any worse than the former one. This will cause me some trouble, for if there is anything I dislike more than hard work it is writing for the Bee Journals. Well, I observe that I am not the only one, in trouble. Bro. McKnight, for indulging slightly in the national pastime of the "Mother country" has had to have a severe castigation at the hands of the editor of the A. B. J. On account of continued insubordination and inclination to fight back Bro York has called for help and I notice in last Canadian, that the call has already been responded to by Dr Mason and Judge Secor. The former applies a blister while the latter pours on "oil and wine." I trust the matter may be settled without any further bloodshed but it is morally certain even if Bro McK. does not object to the blister, he will very seriously object to the medicinal use of the wine.

The position of the C. B. J. on the subject of adulteration is commendable. So long as adulteration of honey is practiced or advocated so long will it be necessary to fight it with tongue, pen, and legislation. There need be no fear of advertising it, for it has already been advertised by every newspaper in the land that cared to do so. Not only the newspapers but a recent Michigan State Experimental Bulletin (No. 95) (put out by men paid to promote the agricultural interests of their State) is assisting in the good (?) work of the advocates of sugar honey and of the equally philanthropic producers of genuine honey in that state who mix in a little glucose to improve it. The assertion that sugar-honey and genuine honey are the same chemically proves nothing. The diamond, plumbago, and charcoal are the same chemically yet how unlike physically. Likewise cane-sugar and gum arabic have the common

formula C₁₂H₂₂O₁₁. When I ask the druggist for gum-arabic, will he give me cane sugar because it is cheaper and then prove by his chemistry that they are the same and that I am a fool because I rely upon common sense instead of science to detect the difference? Is not the comparison exactly similar between sugar honey and nectar honey? This is on the assumption that the chemists are right in claiming the same formula for both; a claim that we are not ready to accept. T. W. Cowan, editor of the B. B. Journal in by far the ablest article that has yet appeared on this subject (see Gleanings page 161 1893) says that sugar honey and genuine honey are not the same chemically. I know of no more reliable authority than Mr. Cowan. I should not have thought of mentioning this subject at the present time but for reading a review of Mich. Bulletin No. 96, which lately appeared in one of our influential and widely circulated newspapers. In this review the teachings of Prof. Cook, as given in the Bulletin that sugar honey is as genuine honey as that made from the nectar of flowers, is accepted as true.

Permit me to congratulate you on the continued improvement in the C. B. J. both in dress and subject matter. Long may in flourish to advocate the true interests of honey producers, both north and south of the great lakes.

P. H. ELWOOD,
April 4th, 1893. Starkville, N. Y.

Kind Words.

I am much pleased with the CANADIAN BEE JOURNAL, I wish you success, it has every indication of proving a valuable Journal.
W. M. AIKEN,

I like the Journal very much under its present management, and send you my renewal subscription.
C. SMITH,
March 9th, 1894.

I am pleased to see the CANADIAN BEE JOURNAL doing so well and keeping up with the times.
R. H. SMITH,
March 12th, 1894.

Are members of the Ontario Bee-Keepers' Association to receive the Journal this year? If not let me know and I will send you the money as it won't do to go without the CANADIAN BEE JOURNAL.


A. LANGFORD,
March 1st, 1894.

I am glad to see the improvement made in the Journal. The last issue is gotten up in good shape both in material and appearance.
F. W. JONES,
March 13th, 1894. Bedford, Que.



THE BEE-KEEPERS' PARLIAMENT.

RE-ORGANIZED—
IMPORTANT CHANGES.



FOR JUNE NUMBER OF JOURNAL.

Artificial ripening of honey as opposed to ripening of honey by the bees in the hive. What benefits are to be derived by either system? Which is preferable? (Not more than three-hundred words.)

FOR JULY NUMBER OF JOURNAL.

Suggestions applicable to July, that will aid in the successful wintering of bees. (Not more than three-hundred words.)

FOR AUGUST NUMBER OF JOURNAL.

Suppose that your comb honey is yet on the hive. Handle it until ready for the wholesale or retail market. (Not more than three-hundred words.)

FOR SEPTEMBER NUMBER OF JOURNAL.

What can you do during September, to assist in successful wintering of apiary, (not more than three hundred words.)

“To what extent is the prevention of swarming desirable? What method shall be adopted?”

I want to be counted in with the majority of the brethren, advocating one swarm per season, and one only. It is a fact, as I have always claimed, that the two will produce more honey, and consequently more money, than the one alone. Therefore, it seems to me to be plain, we should “raise” one colony, and prevent all further effort in that direction. But how? Well, my method is to keep all queen cells cut out, attending to the job at ten day intervals. This is the only safe and practical way.

W. M. BARNUM.

Denver, Col.

No doubt there will be a great difference of opinion of your correspondents as to what extent is the prevention of swarming desirable.

It is only desirable to the extent that as it makes less labor and a larger yield of honey. All the devices hitherto advocated for the prevention of all swarms, make more work than allowing the bees to swarm at least once. I believe just as much honey, if not more can be secured by allowing the bees to swarm once. More

than once is not desirable unless you want bees instead of honey. The surest and possibly the best way to prevent second swarms is to examine the colony that has swarmed on the eighth day and destroy all the queen cells, making sure before doing so that one has hatched. It is advisable to shake the bees from the frames when looking for cells so as not to miss any. Not only this, but the new swarms should always be lived on the old stand. This sends all the working force with the swarm, in many cases preventing any second swarms without further trouble. If preferred, keep the old colony close by and on the seventh day after swarming move it far enough away, so that the flying bees will go with the swarm. This should remove any desire to swarm again.

G. A. DEADMAN,
Brussels.

I think it depends on the number of colonies I have and the number I want to keep. If I had ten colonies and wanted more I would let them swarm twice, but if I did not want increase and wanted to get all the honey I could from them, I should try and keep them from getting the swarming fever, but if a colony makes any preparation for swarming, I think it is a waste of time to try and prevent them doing so, just let them swarm, they will do more after swarming than they would if you went on tinkering with them trying to prevent it.

The method I adopt to prevent increase is to give them plenty of room in the upper stories, also lots of ventilation, and then if any get the swarming fever let them swarm. If two swarms come off at the same time unite them, hive them in a new hive filled with foundation, and in six days cut out all the queen cells but one and unite all the old stock placing one on top of the other, if only one swarm at a time, hive it in a new hive filled with foundation and cut out all the cells in the old hive and place it above the surplus cases.

JOHN MYERS.

Every man must to a large extent answer this question for himself. There are many bee-keepers however, who allow too much swarming of bees. There are others who attempt to keep down swarming by removing queen cells, or prevent increase by returning swarms, these latter practices are to be avoided. In a locality where fall honey flows are rare and unlikely, it is well to prevent swarming to the extent that it can be prevented by shading the hive. Giving room in time and plenty of it, by ventilation of the proper kind. In producing extracted honey, using

two supers instead of one as at present, will do a good deal towards excessive swarming, the same with the comb honey frequently three honey supers are desirable. In localities where fall honey flows are the rule and not the exception, it will probably pay to permit the swarming of strong colonies early, as the progeny of the second queen will be of use in the fall honey flow, but even here there is room for doubt, unless the summer flow is light and the fall flow heavy.

R. F. H.

In dealing with this subject, there are several things to be taken into consideration. In the first place, what is the apiarist running his bees for. Bees and queens, comb or extracted honey, but I presume the subject has reference to the production of comb or extracted honey. In that case I do not think it desirable to prevent swarming entirely, only so far as to keep down the increase to the required number which the apiarist can work with advantage.

I prefer bees to swarm once as they work with a greater vim after swarming. What method will we adopt? This method may be followed with very good results. As soon as you see the bees begin to whiten the comb along the top bars of the frame, or are being crowded for room, put on the super either sections or extracting super, and as they fill up give room by tiering up, but always put empty supers next to brood chamber, then when the swarm issues hive on the old stand with full sheets of foundation. Placing super on swarm leaving old colony standing alongside of swarm for four or five days, then shake nearly all the bees off old combs in front of swarm, or if no increase is wanted shake all off, giving combs to other colonies.

A. E. SHERRINGTON,
Walkerton, Ont.

First last and all the time is my practice. For four years I have had only one natural swarm issue and that returned to the hive in a few moments. My method is to protect my bees from all extremes of heat and cold, which I do with a house apiary. The hive I use has sectional brood chambers and shallow frames at the swarming season the bees are given plenty of ventilation, as the thermometer at this season registers 100° a good part of the time. I pay no attention to the cutting out of Queen cells and do not use queen traps or any new swarming device and do not clip my queens. After the sages stop blooming comes the dark honey flow, I then divide my colonies and rear queens for the next season. The nucleus of the same age are placed together in rows in the house and until the young queen is found to be laying. With all

nucleus so treated I last season secured the safe return of 98% of my young queens with this method and have produced tons of comb honey.

JOHN COLLINS.

Elsinore, Cal., U. S.

To the fullest extent consistent with the increase wanted. If you want no increase of colonies, then prevent swarming entirely. If you want increase of colonies, you should know how much increase you want, and permit enough of the colonies to cast prime swarms to meet your wants.

If you leave this matter to the instincts of the bees, you are a subject of the bees; you are not a Bee-master.

I prevent swarming by the application of my own system, which has been given to all who wish to avail themselves of its benefits. I have described my system of preventing swarming, in a number of bee periodicals, including the C. B. J., and to repeat it here in detail, would require more room than I have in this department. In a nutshell, I prevent swarming by raising the combs containing brood, above queen excluder, and start the queen anew below the queen excluder.

Christianburg, Ky. G. W. DEMAREE.

Comb Honey.

(Written for C. B. J. by Charles Dadant.)

Although I am not very competent on the question of comb honey production, for we have produced extracted honey about exclusively for 20 years, I can say that if I intended to work for it again, I would not decrease the size of our large Quinby 11 framed hives; or I would increase the Langstroth to 12 framed, instead of reducing them to 8, as a great many bee-keepers do now.

They act on the supposition that a colony with eight combs will put more honey in the sections of surplus, since it places less in the brood chamber. But this supposed advantage, if true, presents a great many drawback.

1st. Colonies in eight frame hives will swarm earlier and more than those on ten, and these last earlier and more than if they were on twelve frames.

2nd. Colonies on eight combs, having all their comb full with brood in June and July, incur the risk of being short of winter stores, if September is not favorable to the honey crop.

3rd. Fall honey is always dark and not as healthy for winter food as spring honey, and eight or ten frames do not give room for the storing of spring honey.

4th. If the honey flow of September is

large the bees will not have enough room to raise brood, and not only the number of bees will be lessened, but most of them being old, will be more exposed to die by imprudence during the mild days of winter; for accustomed to long flights, they start in search of honey, and are killed by the smallest cloud, or by a change of wind; while the young ones, more careful, do not venture far from their hives.

5th. Then, the number of bees being shortened in spring, either by the bad quality of honey, or by the imprudent going out of old bees, there is more of that so-called spring dwindling, and when the honey flow of spring begins, a great many colonies are of no value.

6th. Bees winter better in large than in small hives. Nine years ago about 20 per cent. of our colonies in 10 frame Langstroth hives died in winter, while all but 5 per cent. of those in 11 frame Quinby hives were all right. Yet both kinds were in the same apiary and had received the same care. These, not intended, comparative results, which were not the first, led us to the transferring of all the remaining Langstroth in Quinby large hives.

From the above we infer that, although bees in large hives are considered as less productive of comb honey than those in small ones, if we figure the loss of time occupied by over-swarming, the frequent necessity of feeding for winter, the increased loss of bees in winter and spring, the unpleasantness of seeing colonies recovering slowly in spring, etc., we will conclude that large hives for comb honey should be preferred, notwithstanding their higher cost.

HAMILTON, Ill., U. S.

Find enclosed \$1.00 for C. B. J. I am well pleased with the Journal since the change of management. Wishing you every success.

March 28, 1894.

ARTHUR NEUPHY.

Here is another \$1.00 for C. B. J. Credit me. Pitch into the fellows that cheat by mixing honey.

March 27, 1894.

A. S. SMITH.

Just received April number of C. B. J. and must compliment you on the marked improvement in it. It seems to me, that even if the excellent paper you use and the equally good illustrations do cost a little more, I feel sure that Canadian bee-keepers will rally to your support in sufficiently greater numbers to make up to you the extra cost.

E. M. HUSBAND.

No one knows himself until he has suffered.

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.

A GAIN I have a host of questions to answer, therefore let me briefly say: During month of May, say 15th to end of month, is the right time to buy bees. Purchase good colonies, and not inferior because the price is a little less.

If you are beginning, start with only a few colonies and work your way slowly and surely.

As soon as the comb whitens in the brood chamber along the top bar of hive, put on your supers. Do not allow your bees to get the swarming impulse for lack of room. Get everything ready beforehand and do not run about the neighborhood in a wild and excited manner hunting a bee hive after the swarm is on the tree.

If you are a farmer, make one member of the household the bee-keeper, even if it be only a child, let its first interest be the bees. Everybody's work is nobody's work,

Beamsville, April 14, 1894.

On what grounds do you condemn the Heddon hive, as stated in your editorials of this month.

JAMES E. ZIMMERMAN.

Answer.—When we look at the vast majority of bee-keepers, many of them are far better off to leave the brood chamber almost entirely undisturbed I, myself, am working more and more along this system. As often as not, one does more harm than good, and especially is this the case where there lingers traces of inexperience, and just as much is this the case when a man or woman is not in the apiary constantly and follows every change of weather or of the honey flow however great his experience. The system of management and the construction of the new, (now old) Heddon hive with two shallow brood chambers is certainly not in the direction we desire, as outlined above. One chamber is too small. An average brood chamber is therefore cut in two and gives greater opportunity for doing harm.

Again, I claim it is not a desirable, nay more, it is an objectionable feature, to have

the brood chamber (the combs) divided.

For reversing, turning the top down and the bottom up, inverting, or any other of those "ings" I would not give the snap of my finger. That craze has died and its ashes will never be rekindled. This latter feature is alike useless for the specialist or the novice, at least he can secure all he wants in this direction from an ordinary hive.

I recognize that there are methods which may be practiced to advantage by the specialist, which are not desirable for one not devoting his entire time to the apiary; but when you draw that line it leaves but few within the charmed circle.

I see nothing of value in this hive to the specialist, and there appear to be but few, very few, specialists who have been able to find this hive worthy of adoption.

With the birth of almost every new bee paper, Mr. Heddon appears to attempt to resurrect that hive. I have watched its throes with interest but when the gas disperses, life is again seen to be extinct and the hive again falls into the grave. The dovetailed hive, comb honey super, with section holder, less the top bar and separators, give one all the advantages of the Heddon section holder, less the inconvenience of a top bar, and the useless feature of inversion. This Journal is open to any honest writer, any honest man who thinks and sees to the contrary, if kept within the limits of our space.

QUESTION No. 1—I am thinking of getting some more bees, as I have lots of hives and combs. Would it not answer to buy about three pounds of bees and a queen about the first of May, so they would be in good condition for work about the first week in June, just in time for clover. Can this plan be worked successfully, and if so what is the best time to buy? No. 2. What should I pay for 100 lbs. of bees?

ANSWER.—I do not approve of buying bees by the pound. You get at that time mostly old bees, or if you buy far south, which would be best, you have no bees to replace the bees which keep dying, or worse, your colony does not increase in strength for three or four weeks; you add nothing to your worker force at the very time when such additions are very important. I would rather do without bees at all as an investment than buy bees by the pound. I condemn it every time unless very rare conditions should crop up. You ought to pay a good deal less for the bees than any man can sell them for. Better take 50 lbs of bees and their brood and queen and let the other man keep the balance.

CORRESPONDENCE.

Editor of Canadian Bee Journal.

I received your notice of my indebtedness and send the money. Please find it enclosed and let me know when this year expires. I will be more prompt in future. I built myself a new cellar last fall, capable of holding 100 hives. I put in 18 hives last fall. I lost 7 last spring through spring dwindling. My bees did not do much last summer as I only extracted about 800lbs from 18 hives. I like your journal, it is getting better all the time, although sometimes I think you might explain more fully to novices. For instance some readers of the journal have asked me, what is foul brood? Now you may think this a very simple question, but from reading the several treatise on foul brood a great many do not understand it.

Now various questions are asked.

What is foul brood? Is it a bee of useless type or is it a worker or a fly? Is it a boy? Does it hatch in the hive? What harm does it do to the colony? How can we detect it and how destroy it? And so on. Please put a paper in the next journal explaining more plainly. C. F. S.

Picton, Ont, Jan, 16, 1894.

Well friend S., we regret to hear you have been sick and have every sympathy for a delinquent subscriber of that kind. We felt like wishing that every other delinquent subscriber might have the same excuse, but we will temper it by saying—the same good excuse. We perhaps take too much for granted in instructing beginners. Friend McEvoy, our able foul brood inspector, kindly contributed an article on the above, which will be found in the April number of the journal.—Ed

Enclosed please find \$1 as requested in your circular of February, 28th just to hand.

This is no bee country. I have no bees, have not seen one for nearly two years. However, I still retain a spark of the old interest I had in them when in Ontario. Therefore I must keep posted and to do so I must have the C. B. J.

Best respects to Mr. Holtermann, whom I had the pleasure of meeting at a Bee Convention in Ailsa Craig six years ago. He was not an editor then, and I was not a telegraph operator, congratulations on his success. Yours sincerely,

J. S. Riadell

C. P. R. station agent, Pipe ne, Man.

Where man will go his feet will carry him.



Strictly Business

"Mrs. Smith's got a dog that likes me," said little Emily, coming home from a visit with her mother. "How do you know he likes you?" her mother asked. "Cause he tasted of me!" answered the little girl.

This incident illustrates a point I want to make: it is that many people, both in Canada and among our neighbors in the U. S. must like the C. B. J., because they are tasting it by asking for sample copies and then sending in their cheerful dollar for a years subscription.

I wish my readers could see the beaming countenance of the editor these spring days as he looks into my sanctum and remarks "Can you guess how many new subscriptions to day?" or "Did you notice the hearty words of approval of _____?" I try (vainly, it must be confessed) to dampen his ardor by showing the letter of an irate subscriber who don't want to pay for his paper and says it is no good anyway; or the other fellow who sends a much begrudged dollar and calls us hard names for gently, but persistently, demanding it. The editor simply smiles the more blandly and says, "Good riddance, here's a better man in his place."

It is some satisfaction, I must admit, to read these approving letters and enter the new subscribers on our list, for the average publisher or editor gets small pay, in either kind of coin, for his labor. Our Canadian friends are steadily showing renewed confidence in the *New Journal*, which is only fair, for its efficiency will be in proportion to your support. We are putting more money into the Journal every month than we are receiving, but our aim is to make it still better, in the belief that we will in time secure a much larger number of readers and eventually be reimbursed.

I wish you could see the dainty, illustrated edition of "Evangeline" offered for one new subscriber, for if you did you would not rest until some friend had given you his dollar and you had secured the fine premium. We have a few copies left.

Show your wisdom by securing one of those well bred Queens, if poetry does not entice you. I told about them last month and now repeat the offer.

STRICTLY BUSINESS.

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Notices will be inserted under this head for 25c. five lines or under each insertion; five insertions \$1.00. All advertisements intended for this department must not exceed five lines, and you must say you want your advertisement in this department, or we will not be responsible for errors. You can have the notice as many lines as you please; but all over five lines will cost you according to our regular rates. This department is intended only for bona-fide exchanges. Exchanges for cash or for price lists or notices offering articles for sale, can not be inserted under this head, unless offering full colonies of bees or honey. For such our regular rates will be charged, and they will be put with the regular advertisements. We can not be responsible for dissatisfaction arising from these exchanges.

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WANTED—40 or 50 colonies of Italian Bees in combination or Langstroth hives. Must be in first-class condition. Write stating your lowest price to A. LAING, Ponsonby, Ont. tf

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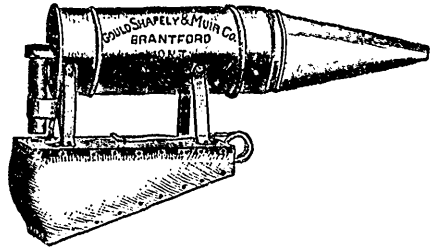
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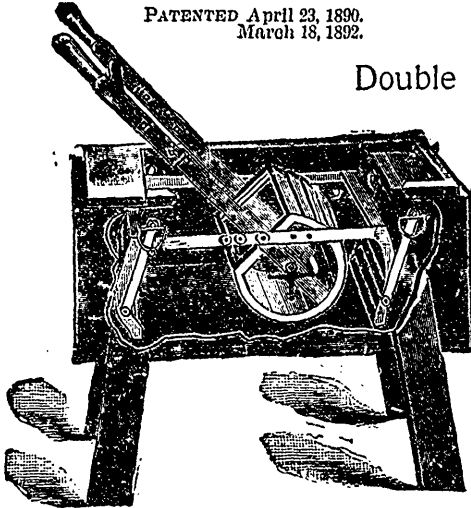
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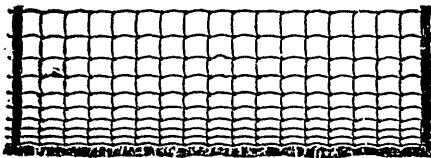
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