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"THE GREATEST POSSIBLE GOOD TO THE GREATEST POSSIBLE NUMBER."



### BEETON, ONTARIO, AUGUST 26, 1885.

Nc. 22



# D. A. JONES & CO, BEETON,

WEESLY - - \$1.00 PER YEAR

POSTAGE--Free in Canada and the U. S. Ten cents per Year extra to all countries in the Postal Union.

## SPECIAL OFFER.

To any one sending us \$5.00 in cash, with the names of we subscribers, we will send for one year, one copy of the lougnet. JOURNAL FREE.

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To any one sending us \$2.00 in cash, with the names of two subscribers, we will send for three months, one copy of the JOURNAL FREE, or for one year by sending 60 cents

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## THE CANADIAN BEE JOURNAL

AND	"Gleanings," semi-monthly,	1.90
**	"American Bee Journal," weekly,	2.75
**	" monthly	I.40
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**	"Bee-Keeper's Guide," monthly	1.75
••	" Texas Bee-Keeper "	1.00



## The Canadian Bee Journal.

1885

D. A. JONES & Co., Publishers.

### OUR OWN APIARY.

SOMETHING ABOUT BUCKWHEAT AS A BEE PLANT. © ROBABLY you remember that we spoke of sowing considerable buckwheat this Summer. One large field was sown on very low land. light frost injured some of the lowest spots, but the rest of the field is now growing and blooming magnificently, and the bees seem to get large quantities of honey from it till twelve or one o'clock in the day; sometimes they leave it before that time, but it is doing good service. The other field is higher ground and was sown ten or twelve days afterwards. It has just begun to bloom a little and will remain in bloom if no frost comes, probably for about a month. Should that be the case and the weather is favorable, we feel safe in saying that over 200 colonies will get more than they require for brooding, and perhaps enough for Winter, from fifteen or twenty acres. We noticed quite a commotion in the bee-yard, the bees rush-<sup>ing</sup> out and going in the direction of the buckwheat field. We followed them and the nearer we got to the field, the greater the number of bees and the more distinct was their joyful hum. You would just think a swarm was pass-<sup>in</sup>g and repassing you constantly. We were quite astonished to see such a great number of bees at work—there seemed to be one for almost every stalk. We think in future we shall try and have some late buckwheat within range of every bee-yard.

### LATE QUEEN CELLS.

In one of our bee-yards the other day We noticed some of the students had tents over the hives when removing the <sup>surplus</sup> combs, and those not containing brood, setting them behind the division

board up close to the combs they are left for the bees to winter on. This was in the afternoon when the bees could not get honey from the buckwheat and as fall flowers are scarce around this apiary, they seemed inclined to rob when an opportunity presented itself. These bee tents just seem to fill the bill-prevent the bees from robbing; in fact, after manipulating the combs, the hive is all closed up, and there is no chance for robbers to get in.

In passing between the different rows of hives we observed a young queen crawling on the ground. We thought that there must certainly be voung queens hatching in some of the hives very near by, as this one appeared to be not more than two hours old. On opening one of the hives we found a number of queens just hatched and a large number of very fine cells just ready to hatch; the students soon had them out and all caged, some of them hatching while the operation was going on. We found a number of queen cells hatched out and all the queens crawling about among the bees. Three were missing. This we ascertained by laying the hatched queen-cells and the caged queens together when we found that there must be three more young queens in the hive somewhere, as we had three empty cells more than we had queens caged, so we took an empty hive and placed it beside the hive with the queens, lifted out the combs, (examining them carefully) and setting them in the empty hive. We secured two of the queens and after, taking jout every comb looked in the hive, and there found her under the bees in a corner. There is no difficulty in finding queens by pursuing this plan. The quickest way to find a black queen is to lift the combs out, shaking off the bees in the hive, and jar them to the back part of the hive; then watch them as they roll out boards, and after moving the division of the cluster and rush towards the

entrance and you will see the queen try to get uppermost and she can readily be seen taking her long strides over the others. One or two minutes is sufficient to find a black queen, or probably any other queen in a hive.

FOR THE CANADIAN BEE JOURNAL. FACTS ABOUT BEES.

R. BENJAMIN KIDD in a late issue of Longman's Magazine has an interesting article under the above heading. And this is what he has to say in praise of the

hive bee :

"Look at her as she travels inquiringly round; is she not a well-bred, intelligent looking little creature? Intelligent in every motion, clean-cut compact in form, with no gaudy patches of color in questionable taste, but refined, yet business like in appearance, there is a general look about her which stamps her at once as belonging to the highest type of the insect race."

As to her province in the economy of nature he says:

" If our little friend the bee were suddenly to exisf who shall describe the desolation and confusion which would invade the harmony of nature? How many shy flower-virgins, on plain and hill side, would droop and pine for its coming! How many noble long-pedigreed families in wood and valley, finding life insupportable, would give up the struggle for existence and become extinct! How would nature herself change her brightest hues and dress herself in sombre colors to mourn our little friend?

In regard to the formation of the cell Mr. Kidd does not think that the little architects have that "extraordinary intelligence" so generally attributed to them. He asserts: "the work of building the cell is always commenced by excavating a circular pit in the layer of wax from which the work proceeds. A moment's reflection will show that if all the cells were circular they would not fit closely together, and this would entail a great waste of space, as well as a large expenditure of wax in constructing a separate wall for each cell. Now as the work of construction proceeds, both these undesirable contingencies are avoided in making the cell hexagonal by simply straightening it out as it were, and eating away to a single thickness the original circular wall at the six points where it comes into contact with the walls of surrounding cells."

Speaking of the powers of communication possessed by bees he declares: The bees of one colony always recognise each other, even after pro-

longed absence and although it has not yet been clearly established, there seems to be good reason to believe that they do so principally by the sense of smell, and not by a password or signal as has been supposed."

I am sure we will all be sorry to learn from the same authority that : "Bees do not possess the feeling of affection or attachment for us." Nay worse that "even the respect for their queen savors of the coldest utilitarianism, and when through either accident or circumstances she ceases to be of use to the colony for the one purpose for which she is maintained, she is abandoned or superseded apparently without the slightest compunction or regret by her so-call subjects. Bees never seem to help each other i difficulty, as is done by the ants."

"Drones," he says, " are produced from unimpregnated eggs," and " the queen state is that to which all the worker grubs would develop in normal circumstanes and that the bees deliberately and for social reasons prevent this natural developement by a *regime* of low diet."

J. R. BLACK. Garafraxa, Belwood, P. O. Aug. 3, 1885.

Friend B. has evidently chosen a number of points for his paper upon which a little discussion is now going on in the JOURNAL, and they are exceedingly well timed.

FOR THE CANADIAS BEE JOURNAL.

HIVES AND HEARING.

HAVE only time now to say in reply to Mr. Demaree (page 300) that he has forgotten that I said that I had worked in neighboring apiaries the L frame for several years after I had discarded it, only to the same disadvantage, which did not make my decision as premature as he may seem inclined to think : and also that I consider the L frame much better adapted to Kentucky than farther north.

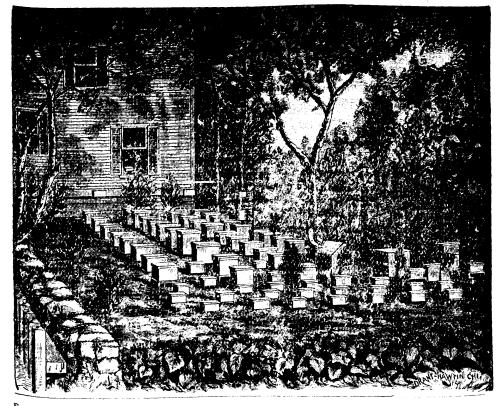
Replying to S. T. Pettitt, (page 300) I request him to put a pint of bees in a two-quart fruit can and put on the top. Now let them hum ever so loud and not a bee will notice them, while some bees in a wire cloth cage will draw all the bees around. It is the scent that does it. By the word "hear" in *Gleanings* I meant to impart knowledge.

### G. M. DOOLITTLE.

Borodino, N. Y. We noticed the oversight you mention in regard to working the Langstroth frame for several years after you had adopted the Gallup; and we have also frequently noticed that the odor of a queen, or a swarm, or the place where a swarm has alighted is so marked that it is easily detected by another swarm issuing. It is not the locality that draws the bees; it must be the odor because the bushes may be changed to another Part of the yard and still have the same effect.

Gallupville, Schoharie Co., N. Y. As I had the pleasure this Spring of a four days' visit at the same, I will give the readers of the JOURNAL a brief sketch of what I saw and learned there.

I have been engaged in bee-keeping for the past five years, and during that time have visited many large and prominent apiaries through New York State and elsewhere, but I have never before seen an apiary which, in all its departments, was in such good order, and from which so much real practical information could be ob-



### For The Canadian Bee Journal. A BEE-KEEPER'S HOME.

E have just received from friend 🗟 Boomhower, Gallupville, N. Y., an engraving of his apiary, the same as appeared in a late issue of Gleanings, and Mr. Samuel A. Miller, of Newark, N. Y., has written us a report of a visit lately paid to the apiary of friend B., which will be found below : A VISIT TO THE APIARY OF F. BOOMHOWER, AND

WHAT I SAW THERE.

apiary, numbering 75 hives, of F. Boomhower, village; and, although hundreds of persons pass

tained. This is due not only to the thorough and efficient management displayed, but also to Mr. Boomhower's remarkable willingness to give everyone the benefit of his experience and inventions, and his disposition to explain all the details of his methods and management, even to entire strangers, so long as they belong to the fraternity of bee-keepers.

In making the cut, the engraver omitted a row of hives which stand right up against the stone wall against the fence; and the little queen-rearing hives, in the foreground, are now replaced by full sized ones, making the number, as above stated, seventy-five. Right outside of the fence. Above will be found an engraving of the home runs the sidewalk of the principal street in the

THE CANADIAN BEE JOURNAL.

daily, there is yet to be the first complaint, such a gentle race of bees does Mr. Boomhower possess. The yard is entirely covered with a thick coating of sawdust (the sod having been first removed), packed down hard ; and, consequently there are no weeds or grass anywhere near the hives. It is just fun to see the little fellows pick themselves up on the sawdust, when shaken from a comb, and tumble into the hive; for the alighting boards are so low that they can crawl right into the entrances. Mr. B. uses a hive with a movable bottom, holding eight frames of about the dimensions of the Gallup; also one containing nine Langstroth frames. The surplus arrangement is a rack, something like the Heddon case, but it brings the sections nearer the brood combs than does the latter. He also has many other ingenious devices, among which is a shipping and introducing cage which is certainly far ahead of anything before made for this purpose.

Mr. Boomhower made his first purchase of two box hives nine years ago at which time he knew nothing concerning bees and had scarcely a dollar capital. To day he is giving his whole time to the business, owns 135 colonies, besides having a partial interest in 75 or 100 more. His annual receipts from the sale of honey and bees, about an equal amount from each, makes a very comfortable income. This Spring he had orders for all the bees and queens that he could spare ; and it is no wonder for he has a remarkably fine race of bees, gentle, extremely hardy-he has not lost a colony in wintering for the last six years-and what is best of all a race which works very largely on red clover. One-half of the surplus which he obtained last year was from this source. His bees will work on the second crop of red clover, making beautiful white honey at the same time that most other bees are working on buckwheat. In fact, his bees have no liking, apparently, for dark honey. Although there is much more I should like to speak of-his method for the prevention of increase, etc,-I fear that I have already occupied too much space. At another time I may write of this method, and also give you a glimpse at some other bee-keepers' homes.

SAMUEL A. MILLER. 28 Carteret St., Newark, N. Y.. June 19, 1885.

#### BOTANICAL.

FOR THE CANADIAN BEE JOURNAL.

E. ANDERSON, Ballantrae, Ont., sent us specimens of plants which we forwarded so Mr. Macpherson, our botanist, and here is his reply:

Specimen No, 1, with the "green berries" and purple flowers is *Solanum Dulcamara*, (bitter sweet). The berries become scarlet when ripe, and are in common with every part of the plant poisoncus, but possess valuable medicinal properties. It possesses little interest to the apiarist.

No, 2 with yellowish flowers is *Diervilla* trifida, (bush honeysuckle) once very common in our woods, but now rare in the older settled parts. It is a valuable honey plant and is well worth preserving.

And to the specimen from "Inquirer," ' Simcoe county:—

Your specimen marked "A" is Echium Vulgare, (blue weed) a member of the Borage Family. Twenty years ago the plant was scarcely to be found in Ontario, except in gardens where it was sometimes cultivated for its beauty. It is now only too common and rapidly spreading. From an agricultural point of view it is a pest difficult to eradicate and will us to accommodate itself to any kind of soil. This plant is naturalized from Europe and was a troublesome weed in Virginia and southward long before its introduction here. It is one of our best honey producing plants and blossoms from June till frost,

Prescott. Ont.

C. MACPHERSON.

R. KNECHTEL, WALTON, ONT.—Enclosed find honey-plant which has blossomed for a month and a-half, and is still in blossom. Please describe?

The plant referred to is the same as the one received from "Inquirer" fcr description of which see above.

For The Canadian Bee Journal

A BUMBLE BEE.

-



H. KIRBY, OSHAWA, ONT.—I send you
by same mail as this, a specimen of an
insect, found on the ground outside

one of my hives on the morning of the ninth, it being dead when found. I showed it to some bee-keepers here. One said it was a queen and others said it was some kind of an insect. I never had bees before this season and don't know much about queens. Please let us know, through your valuable paper, what it is. If a queen, whether an old one or not.

We sent it to Friend Brodie and here is his reply :

BOMBUS, CONSIMILIS. Cress.

Order HYMENOPTERA. Family APIDÆ.

This is one of our common "Bumble bees" denuded of the yellow hairs, which ornament the abdomen. Specimens are often found toward the close of Summer pretty well rubbed, but I do not remember ever capturing one so completely nude as this. Evidently, in some way, it has been very roughly handled, The fertilized female bumble bee survives the Winter, males and workers dying in the Fall. Soon after the life-giving warmth of Spring has roused her, she provides a nest in which she builds some five or six cells, depositing one egg in each. She gathers honey, feeds and attends to these larvæ just as honey bees do, and a brood of workers mature in about a month. The queen seldom goes out now but gives her time to the more especial duties of maternity within the nest. Soon the Workers are increased, sometimes to 100, when the whole effort of the community is expended in rearing queens and drones. From ten to thirty pairs is given as the product of a hive. The greatest number I ever found was twentyseven.

Toronito, Ont.

W. BRODIE.

For the CANADIAN BEE JOURNAL.

#### MOULDING WAX.

NOTE your comments in No. 14, of C. B. J., on the adulteration of wax. With all due respect for your experience, may it not be that some of the grease is all on the outside ? People generally use anything that comes handy, from a coffee cup to a wash tub, in which to mould their wax, and to prevent it from sticking they grease the inside of the vessel. Some are so liberal with the grease that much of it will adhere to the wax cake, and this has, perhaps, often given rise to the suspicion about adulteration.

Now, let me give you my method of moulding wax without grease. For small quantities I use small flaring tin pails, in which I can mould a cake of four lbs. or less. For larger quantities I use a common five gallon coal oil can with the top cut off. The can must have no projecting inside seams, (as some of them have) but be as smooth as possible. Although the sides are straight there is no difficulty in getting the wax out, as such a large cake will shrink sufficiently

to be perfectly loose, when it has cooled off. I quote from an old article of mine in the *Pacific Rural Press*:

"My strainer is made of a one inch board, with a circular hole, cut with a compass-saw, a little smaller than the top of the the pail. A piece of grain-sack is laid over the board; the round piece of board placed on the cloth and forced down into the place from which it was cut out. The cloth is now fastened with sixteen tacks around the hole, trimmed off, the round board removed, and the strainer is ready for use." After melting the wax, it is set aside a little while and then skimmed off. "Having previously provided plenty of boiling water in my tea kettle, I now carry this and the melting can to where the moulding cans are standing. I now place the strainer on one of the pails, pour about one half pint of boiling water through the strainer, then one-half of the wax. When the wax has nearly gone through, I pour the same quantity of water into the other pail (not through the strainer) quickly move the strainer over on that and pour in the remaining wax, until the refuse under the wax comes to the rim of the can; then stop. If the strainer becomes clogged, I pour the contents back into the melting can."

The pails are covered with a board to prevent the too rapid escape of heat, which would cause the wax to crack. The strainer is cleaned by pouring boiling water on its underside. "No grease is wanted in any of the cans. The steam from the boiling water prevents the wax from sticking to the tin." For a larger quantity of wax, a proportionally larger amount of boiling water must be used.

WM. MUTH-RASMUSSEN.

Independence, Cal., July 21st, 1885.

If we could ship you a few barrels Friend M. you could cut the cake in two and find that the grease was through many of them while others had grease in the centre with good wax all around. None of this wax came from We California or the United States. are compelled to cut open the cakes in order to determine der amount of adulteration and depth of sediment. Your method would take out all the coarse dirt or sediment, but we have been wondering if some of the fine sediment would not pass through the cloth. We like the plan of keeping the wax hot for a long time that the sediment may settle

to the bottom, next to the water which is at the bottom of the cake. We think however, that your plan would prove sufficiently satisfactory for all ordinary purposes.

### FOR THE CANADIAN BEE JOURNAL. BAY OF QUINTE BEEKEEPERS:

HE Association met in the Town Hall, Sterling, on the 16th of June, at 11 a. m., but adjourned almost immediately until 1.30 p. m. At the afternoon session, Mr. W. C. Wells, vice-president, occupied the chair; Mr. J. H. Peck acted as secretary. Amongst those present were Messrs. R. P. Gilbert, M. Peers, of British Columbia, B. Stillman and W. W. Wright.

#### SPRING DWINDLING.

The chairman remarked that one of the principal causes of spring dwindling was "honey dew." It fermented, became sour and produced dysentery.

E. Caverly attributed it to bad wintering. His bees kept crawling out of the hive and seem $\epsilon$ d to be disturbed. The cold Spring was disastrous to bee-keepers in his section.

W.W. Wright said that in Hillier township they were not troubled with honey dew owing to the absence of beech trees.

The chairman remarked that it was not certain that the "woolly aphides" confined their operations to beech.

Mr. Stillman inquired if bees would dwindle as much when kept in chaft hives.

Miss Fannie Boyer, of Campbellford, used double-walled hives and left them on summer stands. Very few persons now adopted that system in or around Campbellford.

Mr. Wright wanted "ventilation" discussed

Mr. Bassett, of Belleville, described a alized at least 11 cents per lb., whole ventilating hive with openings admitting sale, and  $16\frac{1}{2}$  per lb. for best comb honey, fresh air and allowing the noxious gasses and kept his dark honey to teed bees or

to escape. It was contended that foul gasses could be removed by forcing in sufficient pure air.

Double-walled hives next came under discussion.

S. Bassett said that the nearer we can keep our bees to an even temperature, say from 32 to 40 degrees, the better, and he did not consider that walled hives could be kept at an even temperature and bees could be kept better in a good cellar.

B. Stillman asked if bees kept in a single walled hive would breed faster if exposed to the sun.

E. Caverly had found that brood would come out faster by being so exposed.

W. C. Wells said he had used doublewalled hives for eighteen years and that he could not discover any difference and had abandoned the double-walled hives entirely and would not recommend them.

S. Bassett, Belleville, introduced a Langstroth hive with a *reversible top* or honey board with cotton tacked on to hold chaff or sawdust for winter use and as it can be reversed readily—it was considered very convenient.

Mr. J. H. Peck stated that on enquiry he had found where bees were put in cellars, on racks built for he purpose at least two fee! from the bottom of the cellar, and the bottom of the hive either removed or hung down on the outside of the rack so that all dead bees could fall to the ground, they wintered much bet ter than when the bottoms were left on as the danger arising from the foul gasses that emanate from the dead bees on the bottom of the hive is thereby out obviated and bees have come stronger and with far less casualties, The plan of ventilation recommended by A. McLatchie is doubtless one of the best and that is to have an air tube, say 4 x 4 with one inch opening, from the bottom of the cellar to the ceiling which will allow the different strata of gasses to escape more readily.

#### EXTRACTED HONEY.

E. Caverly worked for extracted honey generally, but thought every bee-keeper should work for both. He always realized at least 11 cents per lb., wholesale, and  $16\frac{1}{2}$  per lb. for best comb honey, and kept his dark honey to teed bees or sell to those who wanted cheap honey.

W. C. Wells said he would as soon sell extracted honey at 10 cents per lb. as he would bright comb honey at 20c. per lb., as it takes about 20 lbs. of honey to make one of comb.

W. W. Wright had a colony which made 50 lbs. of basswood honey in four davs.

W. C. Wells had one colony which gathered 42 lbs. of honey in one day, but during the night it shrunk by evaporation from six or seven pounds. Had the hive setting on the scales ten days making tests.

B. Stillman worked for comb honey being a new beginner.

Dr. Boulter, ex M. P. P., said he preferred 1 lb. boxes.

The secretary asked which was the best kind of foundation, light or heavy.

The chairman said from ten to fifteen sheets to the lb. was the best, as the light weight would remove the "bone," as it is termed among bee-keepers, which the heavy sheets will produce in foundation.

WHAT IS THE AVERAGE LIFE OF A QUEEN.

W. C. Wells said two years was long enough or a good queen, but he had kept a queen five years, but they were not worth much after two or three years.

E. Caverly said two years was about as long as he wanted a queen.

S. Bassett had kept a queen three years with good results, and it was claimed that the queen only mated once during life, and it is contended that a good queen will deposit during the brood

season about 3000 eggs every 24 hours. Dr. Boulter, wanted to know how to feed a weak colony.

W. C. Wells said he took a fruit jar and perforated the metal top, put in extracted honey, then turned the jar upside down on the honey board. His bees had emptied two quarts of honey <sup>in</sup> a day.

W. W. Wright asked if it was customary to winter bees on brood comb.

W. C. Wells said he took the comb out that had the least honey in and crowded the rest of the cards together, by the use of a division board and always aimed to have just enough combs for the bees to cover and to give each

and honey.

Mr. Peers, an old resident of Ontario, but for the last 20 years a resident in the district of New Westminister, British Columbia, said he found a bee tree there from which he extracted 30 lbs. of honey and 14 lbs. of wax. He said that bee-keeping in British Columbia was yet in its infancy, but think it is a good country for producing honey as the Winters are very short. Last Winter was the coldest ever known there; the thermometer registered three degrees below zero for one week. The " snow-fall " is very light and never remains more than two or three days at a He planted potatoes this Spring time. about the middle of March The farm crop is usually put iu during February aud March; there never is snow enough for sleighing; if bee pasture was cultivated it certainly would be a good honey producing country, but the people of British Columbia know very little about bee-keeping. He likes the country well and would not care to remain here during the winter season again. Some of the trees in British Columbia are simply monstrous; he has seen them 300 feet long, and the circumference in proportion to length.

I. H. Peck moved, seconded by E. Caverly, that the next meeting of the Association be held at the Town Hall Trenton, on the third Tuesday in October next (Oct. 20th, 1884).—Carried.

E. Caverly moved, seconded by G. H. Boulter, that the thanks of the Association be and are hereby tendered to the Reeve and Council of the village of Stirling .-- Carried.

Dr. G. H. Boulter moved, seconded by J. H. Peck, that the thanks of the Association be tendered to those newspapers which kindly gave notice of this meeting.

The Association then adjourned. The number present was not as large as usual, but still the meeting was a good one.

Our President, Mr. P. C. Dempsey, regretted being unable to be present in consequence of illness.

Some of our bee-keepers who lost so heavily did not put in an appearance being somewhat discouraged. That is the very time a person who has met hive not less than 30 lbs. of brood comb | with losses should attend and learn the cause if possible. At this writing—Aug. 11th—the increase in colonies has been good in the vicinity of Trenton. I know of several who have had five swarms from one, with a good supply of honey. In a year or two the old bee-keepers will have good stocks again.

J. H. PECK, Sect'y.

## QUERIES AND REPLIES.

UNDER THIS HEAD will appear each week, Queries and Replies; the former may be propounded by any subscriber, and will be replied to by prominent bee keepers, throughout Canada and the United States who can answer from experience, as well as by the Editor. This Department will be reserved for the more important questions, others will be answered in another place. We hope to make this one of the most interesting departments of the JOURNAL.

#### COMB BUILDING.

QUERY No. 30.—What is the best way to get worker comb built in brood chamber, when increase by division is practised? or how get the bees, in the circumstances named, (i. e., when do not allow swarming) to make comb cheaper than you can buy foundation? —J. C.

DR. C. C. MILLER, MARENGO, ILL, —I don't think I can do it. Small colonies are more apt to make worker comb than strong ones.

DR. J. C. THOM, STREETSVILLE, ONT.—Give them young queens and crowd the bees on as few frames as possible.

R. MCKNIGHT, OWEN SOUND, ONT.—Comb cannot be made cheaper than foundation, when the latter can be bought for \$1 per lb.

M. EMIGH, HOLBROOK,  $ON_{T}$ —Use full sheets of foundation. My bees won't make comb as cheap as I can buy foundation.

H. D. CUTTING, CLINTON, MICH.—This will require very careful experimenting to ascertain the correct facts. I use full sheets of foundation, but to say it is *cheaper* I cannot.

ALLEN PRINGLE, SELBY, ONT.-My opinion most decidedly is that with the most skilful manipulation you cannot get bees to construct worker comb cheaper than you can buy toundation.

 $D_R$ , A. B. MASON, WAGON WORKS, O.—Keep all colonies, made by dividing, strong, and furnish them with a young queen. I have not been able to get such comb made cheaper than I can buy foundation.

S. T. PETTIT, BELMONT, ONT.-Natural swarms | foundation.

will do better at building combs than when divided, but if you practice dividing your bees, by all means I would say give them combs or foundation. Don't think any one can do it and have nice worker comb built.

O. O. POPPLETON, WILLIAMSTOWN, IOWA.—TO the first part of the question I would answer, by using full frames of foundation. To the second part, would answer that I do not believe there is any cheaper way than by using foundation.

PROF. A. J. COOK, LANSING, MICH.—If we arrange for comb building, by giving empty frames, and make our colonies rather weak, we can easily secure worker comb. Strong, crowded colonies make drone comb, not weak ones.

G. M. DOOLITTLE, BORODINO, N. Y.—As soon as the made colony have started comb building in the frames, put on sections so they can build store comb in them which is always drone comb. If drone foundation is used in the section scarce a bit of drone comb will be built below.

BY THL EDITOR.-It is a very difficult matter in our opinion to get them to build worker comb cheaper than you can buy foundation, at least starters. We find it makes considerable difference whether the person is running for comb or extracted honey as to the quantity ∖Ve of foundation that may be used. have colonies containing young queens build most of our natural worker comb. We find when nuclei are very strong in bees and have each young fertile queens that they have no disposition to build drone comb unvil after they have plenty As the frames of worker of worker. comb are built they may be lifted out and given to old colonies, or to colonies containing old queens that refuse to build worker comb, and sealed or hatching brocd returned in their stead, thus keeping up strong nuclei with a scarcity of worker comb, which they supply very rapidly. Very large quanticies of worker comb may be secured by Pur suing this course, yet we do not think that it can be produced cheaper than

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## FOR THE CANADIAN BEE JOUNAL. SEVERAL QUERIES ANSWERED.

We print below Dr. C. C. Miller's answers to Queries Nos. 25, 26, 27 and 28, which, through some miscarriage, did not reach us in time to appear with the rest of them. For the queries to which these are replies refer to the last two or three issues of the JOURNAL.

No. 25.—The difference might be in the bees themselves. Still there are such differences that <sup>n</sup>o one can explain.

No. 26.—Over brood frames a cloth, over sections a board.

No. 27.-I would get both honey and increase from each.

No. 28.—With me it is. J. B. Hall has top bars one inch thick and I don't know that he needs the double air space.

## SUNDRY SELECTIONS.

BEES ON COTTON BLOOM.

S. H. BURGESS, CHESSIER, PIKE CO., ALA., I have some black Syrians that are away ahead bere; they are the first bees that ever worked **pon** the cotton bloom here. They have the tongues to reach the honey in that bloom which is the best here, being of good flavor and the flow of long duration. I like the JOURNAL very much: have been greatly benefitted by it.

#### NO CLOVER.

W. Couse, Meadowvale, Ont.—Honey gathering is done with us. The season has not been good.  $B_{asswood}$  yielded well but clover did nothing.

QUEENS NOT GOING OUT WITH SWARMS.

Garrett Blough, Paisley, Ont.—Let us know the reason of queens not flying when swarming  $W_e^{\text{cason}}$  of queens not hyperson  $W_e^{\text{cason}}$  and in a fermine the honey from two colonies and in a the hees flew few days they both swarmed. The bees flew around in all directions and went back to the hive again.  $q_{u_{een} crawling}$  ... Next morning ... When crawling outside the hive not able to fly.  $W_{hat}^{au}$  was the reason for not flying? Were they hurt in extracting, or what was the cause as both were the same.

You may have killed the old queen in extracting, or she may have been superceded when the first queen hatched, or **Possibly** she may have gone out to mate and got separated from the bees following until she returned to the hive again. If  $s_{he}^{\circ}$  was allowed to destroy the other  $o_{he}$ queens in the cells the bees would then remove them. The other day we got

between twenty and thirty queens in front of a small nuclei, many of them crawling around unable to fly.

#### HONEY FAILURE IN KANSAS.

I. W. Margrave, Hiawatha, Kan: This is likely to prove another "off" year in this region. The season has been cold and hot, so interchangable that but little honey has as yet been stored. I fear we may have to feed for winter yet, but I hope it may be otherwise.

#### CARBOLIC ACID INSTEAD OF SMOKING.

P. P. Johnson, Morriston, Ont.-Will you kindly let me know through the C. B. J., whether using carbolic acid for driving bees instead of smoke would be likely to injure them. A party told me that bees would get right away from a feather with acid on.

We have never used carbolic acid instead of smoke and do not imagine that we shall ever feel inclined to use it in preference. If anyone has used it with success we would like to hear from them.

#### SHAVINGS INSTEAD OF SAWDUST.

G. L. Pearson, Clarksburg, Ont.-Are shavings from the planing mill as good as sawdust for filling in a bee-house?

Shavings from a planing mill if dry are just as good as sawdust if they are put thick enough to make it equally warm, but it would require one-third more in thickness than with sawdust. If you have a cellar that the frost does not penetrate we would not advise you to build a bee-house and pack it with shavings. A few colonies will winter much better than in a bee-house.

#### BEER MADE FROM HONEY.

I am satisfied that honey must be turned to some other account or the bee business will be a failure. Don't you think it would make good beer ? About forty years ago I knew a man that sold honey to Davis the brewer in Toronto, \$103 worth at  $12\frac{1}{2}$  cents per lb. Barley was selling at the same time at 40 cents per bushel. I would like to see it tried. Cannot you manage it with some brewer? I think six pounds of honey will produce more sweet than a bushel of malt. What do you think about it ?

Our experience with malt is very limited and equally limited with beer, never having drank one glass in our life. We

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would much prefer to try and encourage theuse of honey for someother purpose. We are quite satisfied that there is 20 pounds of honey consumed now to 1 lb. twenty years ago and we see no reason why the consumption should not increase at the same ratio during any of our natural lives. There are some localities where honey is put on the market until it becomes a drug, but it is the fault of the producer and not of the con-Those who fool away their sumer. honey this year will have their reward in knowing that their neighbors get good prices. If the market is overstocked in any one neighborhood, take it to some other, retail it among the farmers and if possible put a stop to the habit of trying to undersell our neighbor in order to dispose of our own crop. The difference in price that you will get by a little effort in the right direction will more than pay the cost of marketing the entire crop.

#### FIGWORT OR SIMPSON HONEY PLANT.

J. M. McAinsh, Belton, Ont .--- Reading in the bee books about the great value of this plant, I procured seed and raised a lot of plants. I am satisfied that it produces honey in abundance, for it is covered from morning till night, even when it is raining, with a swarm of wasps and bumble bees. But, except in one solitary instance, I have never yet seen the honey bees working on it. My plants answer the description of it exactly, except that my bees do not work on it. I would like to hear the experience of other beekeepers who may have tried it.

#### SIZE OF BROOD CHAMBER.

What is the proper size of a brood chamber where it is not intended to take either comb or extracted honey, but rather from frames or boxes on top of it?

If we were going to take extracted honey we would have about eight frames in the brood chamber, about  $10\frac{3}{4}$  by  $12\frac{1}{2}$ inside measure, or in other words, our standard frame. For comb honey we would prefer from four to five frames. according to the strength of the colonies, the laying capacity of the queen and

the quantity of brood in the hive; the balance of the hive we would occupy with division board or section frames, or both, as the case may be, but it would be necessary to have a larger brood chamber for spring and fall, than during the time the surplus was being taken

WHEN TO CUT BOKHARA CLOVER. When is the proper time to cut Bokhara or sweet clover, to have late fall bloom ?

June is the time we usually cut sweet clover here. To have it bloom in the fall it may be mowed about half way down the stalk, or about a foot from the ground, then it will sprout out and bloom continuously until the cold frosty weather.

FALL FEEDING FOR BROOD REARING. How late is it advisable to feed bees in the fall so as to get young brood ?

Would not care to feed them to have young brood in the hive when they go Would Prefer into winter quarters. all the brood to be hatched out and the bees nikely clustered. This, of course, would oblige you to stop feeding about a month before winter set in.

#### BEE GUARDS.

Is the Jones' Bee Guard intended to prevent black queens from swarming out, or only ital ians? With me it fails to prevent the black.

If they are properly put on they will prevent the queens from escaping, but sometimes the corners are bent too long which elevates the corner slots sufficient When ly to allow the queens to escape. all parts of the guard touch the bottom board closely we have never known a queen to escape unless a very small one and before it had become fertile.

W. Tipling, Fenelon Falls.—Commenced red 1884 with 17 hybrids. Put 44 in cellar. some of the lightest with syrup and was too busy to give attention to Took out 35 spring dwindled to ten, but have made up inally this season. Cause of dwindling was principally due to frosts in the due to frosts in August stopping all bloom and my failing to feed for the

## August



We are very busy preparing for the exhibition, and we hope to see many friends there.

We have had 31 new subscribers since last issue. Our mailing list is growing splendidly, friends.

We hope we may never have much room to and fault with others; our first object will be to correct our own errors.

We regret to learn that Friend Locke of the Apiculturist has been unwell for some time. May he speedily recover.

Nearly everyone of our new subscribers ask for all the back numbers. This, we think, is a wise precaution, as they will then be able to refer to subjects right from the beginning.

Our presses are running day and night on Work for exhibitions, etc., and we are kept busy to get the JOURNAL out on time. We have not have not been behind time yet, and hope not to have to keep our readers waiting at all. Promptness, is in itself a splendid virtue, and one which in a large measure makes success in any undertaking certain.

#### LONDON EXHIBITION.

If all is well, our Mr. Macpherson will represent the CANADIAN BEE JOURNAL at the Pro-Vincial Fair, to be held at London, commencing September 7th. As he cannot be there more **Probably** be the days A large number of sample Copies will be distributed. Mr. R. H. Smith, of Eali-**Ealing**, is authorized to take subscriptions also, and he will likely be there all week. Our headquarters will be in the Honey-building.

## QUEEN BY EXPRESS TO CUBA.

On the eighth of July we shipped per express Na New York, a Holy Land queen to the Messrs. Casanova of Cuba, and of whose apiaries Mr. A. W. Osburn is superintendent. Friend O. writes Us under date Aug. 12, as follows: "The Last queen shipped us arrived in prime condition there. Both there was not one dead bee in the cage. Both they and queen were as dry and clean as though they were quietly enjoying the liberties and free

dom of the hive in a Canadian apiary. When bees and queen arrive in the condition these did I call it pretty near successful shipping from The Beeton, Canada, to San Miguel, Cuba. queen has now been introduced nearly three weeks and is doing well. She is a worthy representative of her race. Bees are doing much better than last vear."

STRANGWAY'S DRONE OR SWARM CATCHER

Mr. G. Strangway, of Elora, left us the other day a sample of a drone and queen catcher. It consists of a hollow tube (funnel shape) about four inches wide at one end, one inch at the other, and about eight inches in length. This is placed at the centre of entrance to hive and perforated metal is placed over the other half. allowing the bees to pass out of the perforated metal, while the drones have to pass through On the end of the tube is a box this tube. with perforated metal tube so that any worker bees that go through the tube may pass up and out through this box. On the end of the tube is a wire about four inches long so arranged, by ravelling out the wire gauge at the point, that when the drones pass out of the spout into the box they cannot return ; or should a swarm issue the queen may be caught in the same way. He claims that he can catch all the drones from any hive and retain them, and it certainly looks very reasonable.

#### SHIPPING COMB HONEY.

It is of the utmost importance that producers of comb honey should have it reach the market in as fine shape as possible, though it is sometimes hard work to have those freight-men handle it in a way to insure safe carriage. Perhaps. if the shipper were to be a little more careful to have some marks or instructions on the package, calling the attention of those who handle it en route to the nature of the contents. this evil might be remedied somewhat. We have just printed a lot of labels 6x10 inches for this purpose, calling attention to how the packages should be handled and explaining the way in which they should be placed in the wagon, car or boat, as the case may be. The price will be 12c. per 25; 20c. per 50; 35c. per 100; \$1.50 per 500; \$2.75, per 1,000. By the way, we forgot to mention that they are printed in red ink, so that they will be sure to draw attention. Then we have smaller labels which tell the weight of case honey, etc., gummed and ready to paste on. Prices, 50c. per 250; 75c. per 500; and \$1.00, per 100.

### PRICE LISTS RECEIVED.

George T. Hammond, Brockport, N.Y.-Apiarian supplies. Folding paper boxes a speciality. THE CANADIAN BEE JOURNAL.



D. A. JONES. BEETON, ONT.



THE CANADIAN BEE JOURNAL.

August



FROM ASIA AND FROM EURTPE. Cyprians, Syrians Carniolans, Italians

Smaller&darker Queens each 8.oc| 6.ool 5.ool 4.00 Owning an apiary in Cyprus and another in Syria, I have facilities equalled by no other person for obtaining choice queens of these races. I shall visit these apiaries during the coming winter and return in early spring binging with me a fine lot of queens. Those who desire Imported Cyprians, or Imported Syrians VERY EARLY can have them **malled direct from Cyprus** or **from Syria** to their addresses during March, and on all queens so sent I will assume three-fourths of the risks, that is, will replace at one-fourth the regular price any that die in transit, proat one-fourth the regular price any that die in transit, pro-vided the purchaser receives mail from New York City within five days time.

#### Imported Carniolans and Imported

of beauty, and far excel them in prolificness and hardihood.

All these queens are selected daugners of me imported stocks, are reared in full colonies, and are fertilized in Car-niola itself, where of course ONLY Carniolan bees exist. From these crosses bee-keepers may expect the best results which can be obtained through crossing any two distinct races.

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