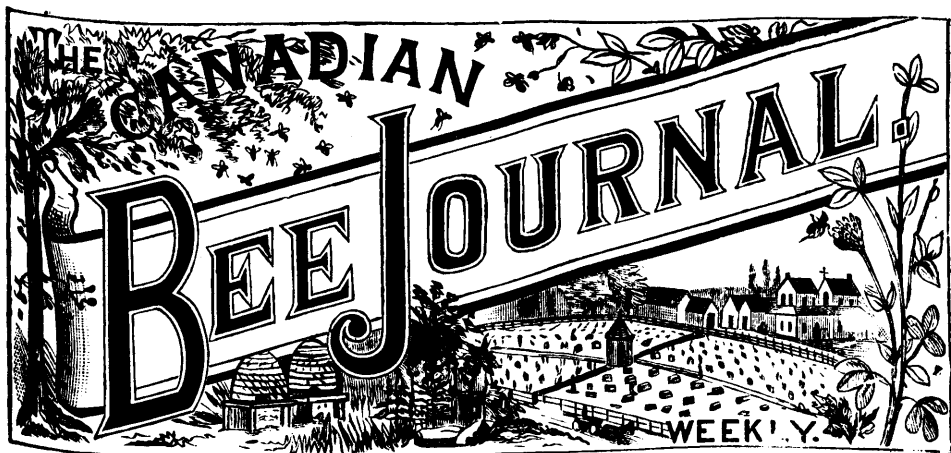


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"THE GREATEST POSSIBLE GOOD TO THE GREATEST POSSIBLE NUMBER."

Vol. I.

BEETON, ONTARIO, APRIL 29, 1885.

Nc. 5

THE CANADIAN BEE JOURNAL.

PUBLISHED BY

D. A. JONES & CO., BEETON,

WEEKLY - - \$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 five subscribers, we will send for one year, one copy of the JOURNAL FREE.

To any one sending us \$3.00 in cash, with the names of three subscribers, we will send for six months, one copy of the JOURNAL FREE, or for one year by sending 40 cents additional.

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 additional.

ADVERTISING RATES.

All advertisements will be inserted at the following rates:

TRANSIENT ADVERTISEMENTS.

10 cents per line for the first insertion, and 5 cents per line for each subsequent insertion.

Space measured by a scale of solid nonpareil, of which there is twelve lines to the inch, and about nine words to each line.

STANDING ADVERTISEMENTS.

	3 NOS.	6 MOS.	12 MOS.
One inch.....	\$ 3.00	\$ 5.00	\$ 8.00
Two inches.....	4.50	7.50	12.00
Three inches.....	6.00	10.00	16.00
Four inches.....	8.00	13.50	20.00
Six inches.....	10.00	15.00	24.00
Eight inches.....	12.50	20.00	30.00

TERMS—STRICTLY CASH.

Contract advertisements may be changed to suit the seasons. Transient advertisements inserted till forbid and charged accordingly.

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CLUBBING RATES.

THE CANADIAN BEE JOURNAL

AND "Gleanings," semi-monthly.....	\$1.90
"American Bee Journal," weekly.....	2.75
" " " " " monthly.....	1.40
"American Apiculturist," monthly.....	1.75
"Bee-Keepers' Magazine," monthly.....	1.75
"Kansas Bee-Keeper," weekly.....	1.75
"Bee-Keeper's Guide," monthly.....	1.75

TO CONTRIBUTORS.

We will always be glad to forward sample copies to those desiring such.

The number on each wrapper or address-label will show the expiring number of your subscription, and by comparing this with the Whole No. on the JOURNAL you can ascertain your exact standing.

Advertisements for insertion in the JOURNAL must reach this office the Friday previous to the week in which they are intended for insertion.

## BEST COMB FOUNDATION

—ON THE—

## GIVEN PRESS DIES.

Two sizes, 8½x17 and 10½x13. Prices reasonable. Also Bees in half pound lots for \$1. Italian and Cyprian Queens. Address

JOHN H. MARTIN,  
Hartford,  
Wash. Co., N.Y.

6-3m.

## DIXON AND DILLON,

Parrish, Franklin Co., Illinois,

Manufacturer of and dealers in all kinds of

## APARIAN SUPPLIES

at the lowest prices. Also pure Italian Bees and Queens. No other bees kept in our yards. † For further information, send for price list.

## BEES FOR SALE.

Owing to the increased work of publishing the BEE JOURNAL, we find it will be impossible to attend to all the Bees we have at present, and we will sell a limited number of

## ITALIANS, HOLY LANDS &amp; CROSSES,

Terms cash. Price \$10 per colony, free on board train here. They can be shipped at once. We will guarantee them to be in good shape at time of shipment. Each colony will have eight frames.

D. A. JONES,  
Beeton, Ont.

## FOR THE BEST AND CHEAPEST EXTRACTOR

SEND FOR THE

## "I. X. L."

No. 1, takes Quinby and smaller frames, \$9; No. 2, takes L and square frames, \$7.00. In ordering give outside measure of frames. The Excelsior Cold Blast Smoker is what you want. Sent post paid for \$1. Circulars free.

W. C. R. KEMP,  
Orleans, Ind., U.S.

5-3m-p.

**ITALIAN QUEENS.**—After June 15th, I shall be able to send out **Warranted Queens** for \$1 each or six for \$5. Am bound to satisfy all customers. Try me and see.

J. RAYMOND BALL,  
Knowlton, Que.

**ITALIAN BEES.** Dollar Queens and Nucleus Swarms, by the dozen very low. My bees are of the golden colored strain and for business qualities are surpassed by none. Send for circular to

W. H. PROCTOR,  
Fairhaven, Vt.

**FRIENDS** If you are in any way interested in

## BEES AND HONEY.

We will with pleasure send you a sample copy of our **SEMI-MONTHLY GLEANINGS IN BEE CULTURE**, with descriptive price-list of the latest improvements in HIVES, HONEY EXTRACTORS, COMB FOUNDATION, SECTION HONEY BOXES, all books and journals, and everything pertaining to Bee Culture. Nothing Patented. Simply send your address on apostal card, written plainly

4-t.f.

I. ROOT, Medina Ohio

## FOR SALE.

Settings of Eggs from Pure Black Spanish Fowls, \$1.50 for settings of 13 Eggs. And a few colonies of Italian bees.

4-t.f.

JAS. STEWART,  
Meaford.

## COMB FOUNDATION.

**FIRST PRIZES.**—Toronto Industrial Exhibition, September, 1884; London Western Fair, September, 1884. Root's Simplicity Hive and Supplies. Circulars free.

4-t.f.

WILL ELLIS,  
St. Davids, Ont.

## Floralia Apiary

GRANBY, P.Q.

William Nixon - - Proprietor.

Wholesale and retail dealer in all kinds of Apian supplies, Italian Bees and Queens, Pure Extracted and Comb Honey, and manufacturer of Comb Foundation. Agent for D. A. Jones. Send for circulars.

3-m.

## Beeton Printing &amp; Publishing Co.,

## FINE BOOK, JOB, &amp; LABEL PRINTING.

Send for our FREE "Honey Label" circular. Printing furnished promptly, and neatly done. Estimates of "circular" and other work on application.

3-t.f.

F. H. MACPHERSON,  
Manager, Beeton, Ont.

FARMERS BUY THE CELEBRATED

## LARDINE MACHINE OIL,

—AS IT—

## EXCELS ALL OTHERS.

Manufactured solely by

McCOLL BROS.,  
Toronto

2-1y.

## E. L. GOULD &amp; Co.,

## BRANTFORD, ONT.

ARE PREPARED TO FILL ALL ORDERS PROMPTLY FOR

## HIVES, EXTRACTORS, SMOKERS, FOUNDATION, ETC.

SEND FOR CATALOGUES.

"KANSAS BEE-KEEPER,"  
ESTABLISHED 1881.

A 24 Column WEEKLY journal. Devoted exclusively to bee-culture, at

ONE DOLLAR A YEAR.

Three months on trial for twenty-five cents. Address,

SCOVELL & POND,  
Columbus, Kansas, U.S.

3-t.f.

# The Canadian Bee Journal.

D. A. JONES & Co., Publishers.

## ADULTERATION OF HONEY.

**B**EE Journals have much need to "cry out" against those unscrupulous and unthinking people who are always talking and writing about "adulterated" honey, "glucose" honey, and honey *manufactured* by human hands. Almost every day in glancing over exchanges we come across some item or other which is a reflection on the honest profession of the apiarist. But all other trades and professions are treated in like manner, so that bee-keepers are not alone in their grievance. By the way, do not bee-keepers in writing, very often talk of syrups, &c., which are now placed on the market, as being miserable, adulterated, poisonous trash, while they are upholding the good qualities of their honey. True they *are* in many instances just what they are classed but just here we may find the fountain head whence springs all or most of these stories about adulterated honey; a sort of retaliation as it were, and it is only human. Beeswax comes in for its share of the "cry" too, as will be seen by the following item, clipped from an exchange the other day:—

"Why do bees make wax?" asks a farm journal. We do not know unless it is because no one has told them that the honey manufacturers are willing to make it for them out of paraffine."

Because somebody at sometime may have experimented with paraffine, the word goes forth to the world that all beeswax of modern date is nothing more or less than paraffine. Why, in the name of common sense, would beekeepers be offering 40 cents per pound for beeswax, if paraffine would answer equally as well at 15 to 20 cts. per pound. This fact of itself should be sufficiently con-

demning to wipe such a ridiculous statement out altogether, as anything that touches the pocket is generally a pretty clinching argument. Another proof that paraffine is of no earthly use is that it will melt at a temperature of 110 to 120, while the temperature in the body of the hive during the honey season is not as a rule much less than 100 to 110, and nothing but the purest of beeswax will withstand that temperature.

But from the following article, which we know has been in at least fifty in one hundred of our Canadian newspapers it seems that honey is "blown in by machinery." This article was headed, "The Busy Bee's Occupation Gone," and shows the very voluminous amount of imagination that some reporter or newspaper writer has been possessed of

"The spurious honey is now put up in little square boxes, which sell for from twenty to thirty cents a pound. It looks like honey, and it is said that it takes an excellent judge to tell that it is a fraud on the bee. The comb is manufactured with such skill that but few can tell it from the genuine article. It is made from paraffine or beeswax, and the honey is blown into it by machinery. Another kind is put up in glass vessels like ordinary jelly packages, the centre of which contains a piece of honeycomb, and the honey is made by pouring about six parts of glucose around one part of honey in the comb. Some of it is adulterated with glucose, with cane sugar, with the syrup of inverted cane and others by heating ordinary sugar with an acid; but it all resembles honey and to a certain extent has its flavor and color."

We cannot think that the public are so easily "gulled" as to believe any such statement. One cannot blame them perhaps for suspecting that the honey they eat is made of sugar syrup, fed to the bees and by them stored in the comb, because beekeepers write and talk about the amount of "sugar syrup" fed to their bees each Fall to prepare

them for winter quarters, and unthinking people are apt to imagine that they are made the victims by having to purchase all that happens to be left in the hive in the spring. They do not know that every bit of the honey left in the hive is consumed by the bees in brood rearing, &c., as well as what they gather along in the spring from fruit blossom &c., long before there is sufficient honey flow to allow of the apiarist taking any surplus honey from his hives. At exhibitions and fairs the question is being continually asked by the purchasing public, "What becomes of the "sugar syrup" which is left in the hives in the spring?" and when it is explained to them properly they go away well satisfied with the explanation. They know that it is not *all* consumed in winter, and it is but reasonable that they should want to know what becomes of the balance. If beekeepers will impart this knowledge to their purchasers, the cry of "adulteration" will possibly soon sink into oblivion.

### BEES BY WEIGHT, &C.

SOME NEW FEATURES ABOUT HOW TO DO IT.

**S**INCE comb foundation has made it possible to build up small nuclei into full colonies, at any season of the year when the weather is warm enough for the bees to keep up the necessary heat in the hive, the utilizing of bees in any numbers sufficient for work, has become a matter of much importance.

As a dealer in bees, I confess that buying and selling bees has not been altogether satisfactory to me.

Fat stock are properly sold by weight because the value of such a product depends on bulk and condition. But not necessarily so with breeding stock, they are sold by the "head," because high "condition" is not essential to the purposes for which they are employed.

Bees are properly classified with breeding stock, and are in fact "beasts of burden," so far as their usefulness to man is concerned. They are heavy, or light, in proportion to the burden they bear in their honey sacs. For this reason no uniform results can be obtained by the use of

the scales.

A "sweet" advertiser has told us that there are 4000 bees to the pound, live weight. But he does not tell us how much the result can be changed by weighing the bees "loaded" or "unloaded." (?) From some experiments I have tried, a bee can carry a load in its honey sac equal to its own weight. In theory then, a half pound of empty or unloaded bees can be loaded with honey till they will weigh a full pound, Of course such a result could not be made altogether practicable, because all the bees cannot be induced to fill their sacs with all they will hold. Enough variation, however, can be shown to make the plan of weighing bees impracticable. It is most fitting that bees should be sold or bought by the "quantity," because their value depends on the greater or less surface they can cover on the combs, and as their number cannot be ascertained by weighing them, for the reasons given above, some other method must be resorted to. A more accurate way is to measure the bees in a glass measure—graduated like a druggist's measuring glass.

By practical test I have found that a square inch of space will contain 38 bees when closely "clustered." To find the number I measured and counted the bees several times, and then took the average of the several results. Of course such a method, will not give uniform results, but it answers for practical purposes. Applying this rule and speaking in round numbers, in a pint of bees we have 1,300. A quart gives 2,600. A gallon will count out 10,400, and a half bushel measure of bees would count 41,800. And now, if you had a "bushel of bees in that swarm" or in "that hive," as we sometimes hear an extravagant enthusiast exclaim, there would be a little over 83,600 in the lot. Of course I do not pretend to give accurate figures.

From the above I think it will be seen that too high an estimate has been made of the number of bees in the ordinary colony.

It is not likely that 40,000 bees occupy the same hive in a normal condition, any great length of time.

A half bushel measure of bees, nearly 42,000, would more than fill the space between 20 L. frames. It is not difficult for one to deceive himself as to the great number of bees in a hive, when judging from the "piles" of bees which are sometimes seen "laying out" in hot sultry weather.

I have often opened hives under such circumstances to look for the cause of such behavior of the bees, and have generally found the combs but thinly covered by mostly young bees. This indicates that the trouble is caused by bad ventilation, rather than from crowded conditions.

If we conclude that one thousand bees is the least number that can be safely trusted with a queen on combs with brood to begin with then we have a beginning point, and we may sell and buy bees by the thousand. The numbers can be ascertained by measuring them in a glass or tin measure graduated from one thousand to our thousand. The last number being sufficient to make a good strong nucleus. For each one thousand bees the measuring glass must contain  $26\frac{1}{2}$  square inches of space.

In a future article I will give my method of repairing bees for shipping to distant points.

Last season I shipped bees—4000 in the package, to nearly all points in the U. S. and Canada, and in every case they went safely, sustaining no material loss of bees.

G. W. DEMAREE.

Christiansburg, Ky.

Your experiments are very interesting and appear to demonstrate an easier method for securing desired quantity of bees without weighing. As you say it makes a great difference whether bees have their sacs filled with honey or empty, also a material difference whether they are clustered closely together, or hanging loosely, as they sometimes do when clustering outside the hive. As you live so much further south than we, you will doubtless be able to supply some of our friends with bees by the pound. We receive many inquiries from beekeepers as to where they can purchase bees in that way. We shall be pleased to have your experience in shipping bees long distances, as that is a matter, which at the present time, needs to receive considerable attention.

#### HOW TO BECOME A PROGRESSIVE BEE-KEEPER.

**I**N compliance with your kind request to write a few lines for the CANADIAN BEE JOURNAL I feel somewhat at a loss to know how or where to begin, as I have little or no experience in writing articles on Apiculture. The only instance in which I made the attempt does not furnish much encouragement, for the journal collapsed shortly after I became one of the contributors. Whether there was any connection between these facts I have never been able to ascertain; but as I would regret exceedingly if

such a result should follow the noble venture you have made, I have a little hesitancy about assuming the role of one of your correspondents. However, with the understanding that you have full permission at all time to consign to the waste basket whatever is not fitted to interest your readers and advance the pursuit it is intended to promote, I may occasionally send you a short article. Amongst your numerous readers there will, doubtless, be many beginners and I may be able to furnish a little food for babes, leaving it to the veterans to furnish the strong meat which the more advanced require. Now that we have Bee-Journal of our own it is surely the duty of all Canadian bee-keepers to sustain it and do all they can with their pen and voice to secure its success. Permit me to congratulate you on the general appearance of your youthful progeny. It is just like its Pa, good looking and full of intelligence in reference to bees. If properly fed and cared for it will doubtless thrive and become better if not larger every year. Considering the size and style of workmanship it is certainly remarkably cheap, in fact a marvel of cheapness. A weekly bee-journal on beautifully tinted paper for only one dollar! Surely everyone in anyway interested in the study of the "blessed bee" will become a subscriber at once. This is one of the best ways in which every bee-keeper can sustain you in your laudable enterprise. No one certainly is worthy of the name that does not take some journal and no one can be so beneficial as one adapted to our own climate. As one who has been largely benefitted in this way and who attributes any success achieved to it, I would say to all now engaged in keeping bees, or who thinks of getting some, if you want to succeed you must take some live bee-journal. You cannot make the most of even one colony of bees without it. Don't delay then, but become a subscriber forthwith. It will pay—pay better than any other investment you can make.

J. CARSWELL.

Bond Head, April 3rd, 1885.

Friend Carswell allow us to thank you for your good wishes, and to express the hope that we shall try to merit them. We are sure your article never caused any journal to collapse. We shall be pleased to have you write us frequently. Suppose you send us an article on bee-keeping as adapted to ministers. If we have not been misinformed you have been successful in bee-keeping almost beyond your expect-

tations. An account of your success would, doubtless, be very interesting to other ministers, and they may "go and do likewise."

---

REV. W. F. CLARKE.

AS one of the pioneers of beekeeping in "this Canada of ours," you would naturally expect me to be among the first to hail the appearance of the new bee journal instead of coming in "at the tail end of the hunt," as I fear I am doing. However, this tardiness is rather my misfortune than my fault. I have been living for more than a year past, in a rather out-of-the-way place, only visited by the mail twice a week. Through some unlucky accident, No. 1 of the CANADIAN BEE JOURNAL only came into my hands to-day (April 10) along with No. 2, and in the hope that I may have some chance of sending it to Guelph or Fergus without waiting for our next outgoing mail I pen this brief communication without delay. You have my best wishes for the success of your enterprise, and with Dr. Miller, of Ill., "I am glad you are able to squander some money on a bee-paper," though if the bee-keepers of Canada are only alive to their duty and interest, it will be well supported from the word "go," which I sincerely hope may be the case. You can rely on any co-operation it is in my power to render.

You ask for reports from correspondents. Mine is easily given. For some years I have been too unsettled to do much as a practical bee-keeper, but made a small start last summer, and have tried, with poor success, to make two stocks *hibernate* during the last winter. Dr. Miller's "baby" would state the result. 2-1. In my anxiety to give plenty of ventilation, and not counting on so severe a winter, I over-did the air supply with one stock which succumbed to the extreme cold of the last week in March. I am satisfied from this winter's experience that a much more limited air supply than I had supposed will suffice if it be only *pure* and *uniform*. The stock which has come through would, I am certain, have done better with less ventilation.

---

THE "POLLEN THEORY."

IF late much has been said both wise and otherwise about the "pollen theory." No doubt much of the difference of both theory and opinion arose from our diversity of experience. All localities do not give the same amount of pollen. To illustrate fully my meaning I will state that my bees gather so much pollen that it

becomes necessary for the safety of the stocks to examine them at least once a year and remove the superabundance of that talked-about article. I often find whole sheets of comb one-half to two-thirds, and sometimes more, filled with pollen. These in the brood chamber isolate the bees like so many boards and in that case they first suffer with cold, then eat pollen, get uneasy, move about, get up an abnormal heat, commence to breed, get diseased, foul their hives and die. On the other hand, we, I presume, are all aware that in many places pollen is rather a scarce article. Hence, many good bee-keepers, not having had experience with these two opposite conditions of things, are as far apart in their opinions as they are in their real knowledge of the facts of the cases in dispute. My queens are sometimes crowded out with pollen. Cards used exclusively in top story for extracting are burdened with pollen, they even pack it into drone combs. If our hives were of uniform size I would like to supply those who want it, for I have hundreds of pounds of pollen in my honey house which will cost a good deal of work both for myself and bees to remove from combs. All colonies here are not equally afflicted with pollen, nor do I go over all the hives annually, but sometimes I pay the penalty. I will conclude by saying that I do not consider pollen objectionable, but the superabundance of it is what plays the mischief. However, bees sicken and die from other causes than pollen.

S. T. PETTIT.

Belmont, Ont., April 11th, 1885.

You are no doubt right, Friend Pettit, regarding the difference of pollen in various localities just the same as a marked difference is often found in honey produced in places only a few miles apart. If we had hives with the superfluous amount of pollen you mention we should give the combs containing it to the nuclei building up; by this means we save them the trouble of gathering it, which our bees will not do when pollen is given them, such at least has been our experience. This may account to a very great extent for the difference in opinion on the "Pollen Theory." Mr. Heddon, we believe, deserves all or nearly all the credit for bringing the "pollen theory" prominently before bee-keepers, but if we mistake not, he is not the *originator* of it as many years ago,

Friend Root, of Medina, Ohio, and others talked up pollen, and made some experiments. Prof. Cook's late microscopic examinations prove beyond a doubt that all honey contains pollen, and that pollen is one of the causes of dysentery. When bees are properly prepared for wintering, with all the stores that could be desired, either left on their summer stands or placed in a suitable repository our experience has been that no difficulty ever arose from the presence of pollen in the hives.

### THE DUTY ON BEESWAX.

ENCLOSE you Mr. Hesson's last letter. You will see that he was alive to our interest.

You cannot fail to discover that had Mr. Hesson received proper support our wishes would have been carried out and beeswax entered free. Did our committee not want to act? If such is the case, why take the responsibility and allow it to fail on account of their tardiness, they cannot be tired for they have never moved; this somewhat deprecates my confidence in bee-keepers after all.

Well, you will see by Mr. Hesson's last letter that the Government receives \$5,119.20 of revenue, import duty on beeswax; what is that to the great Dominion of Canada; to place embargo on an infant industry that is soon to make the world wonder at the wealth of Canadian flora. It is the purest and finest honey known. Does it injure anything to keep bees? We know every honey producing plant is benefitted by the bee; overstocking is nonsense whilst the honey flows. We do not produce enough to get a good market for it. It is not even advertised by its present producers. Some able writers refuse to contribute to Bee Journals their knowledge of the business, for fear of overstocking and glutting the bottle. I am only a novice but I judge from the immensity of the produce while the flow lasts, that we cannot overstock. But one thing will soon take place, the raising of alsike clover seed. Farmers begin to find the benefit of this plant for both hay pasture and hay seed. We could not raise a good crop of it without the bees to fertilize it. Seed merchants tell me that clover seed raised here is far better quality than what is raised farther south, so the inference is plain; if we have the bees we will also have a larger yield to the acre. Clover seed raising, especially "Pea Vine" and "Alsike" will lengthen the season of honey flow materially.

Even as it is, for the capital invested, no pursuit pays as well as bee-keeping. But this hide-bound theory of overstocking and over-production is incompatible with the liberal principles of bee-keepers in general. I would like to see our country flowing with honey when we can export it in barrels and crates to the people that need it and like it, and will pay us for it, it would suit us better than the present method of driving hard bargains with our grocerymen, who would like to vend in lieu of it some of their glucose mixture. Therefore, anything to hinder the advance of bee-keeping either as an embargo on wax or what we want to carry on this business to advantage will never meet my views.

GEORGE BROWN.

Molesworth, Ont., April, 1885.

It is now a well known fact that bees instead of injuring improve the flowers and crops which they forage on; the clovers are improved and the quantity of seed increased; the fruit crops are also benefitted. Many of our best fruit growers encourage the keeping of bees in the neighborhood of their orchards for the above reasons. In our last issue we mentioned that there was no likelihood of having the duty removed off beeswax on account of our case not having been properly worked up before the House met. The fact that many bees are dead and that much comb will be melted up into wax will tend to reduce the price of wax and of foundation as well. In fact we are having so much wax offered us that we have had to reduce the price a little already.

### 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.

QUERY No. 8.—BEEBEE PLAINS, VT.—How far apart should I put brood frames to get the best results in the production of comb honey during the time surplus is being stored?

DR. C. C. MILLER, MARENGO, ILL.—From 1½ to 1¾ inches from centre to centre.

DR. J. C. THOM, STREETSVILLE, ONT.—Little



more than bee space should be left between brood frames.

O. O. POPPLETON, WILLIAMSTOWN, IOWA.—I prefer not less than  $1\frac{1}{8}$  and not more than  $1\frac{1}{16}$  inches from centre to centre of frames.

G. M. DOOLITTLE, BORODINO, N. Y.—I always use brood frames  $1\frac{1}{2}$  inches apart and consider it right after much experimenting.

H. D. CUTTING, CLINTON, MICH.—In making good comb honey I put the brood frames about  $1\frac{1}{2}$  inches from centre to centre of frames,  $\frac{1}{8}$  top bar. 5 frames to the hive.

ALLEN PRINGLE, SELBY, ONT.—The two surfaces of the contiguous combs ought only to be far enough apart to include between them one layer of bees, or, in other words, far enough apart to allow a bee to pass freely and perform the functions of unloading, nursing, etc.

PROF. A. J. COOK, LANSING, MICH.—This is not a matter of great importance. I think if the frames are so that no combs will be built between them, it is all right. They should never be much less than  $\frac{3}{8}$  in. and it will do no harm if they are half an inch.

H. COUSE, THE GRANGE, ONT.—As far as has been my experience with comb honey, I think frames should be placed a little less than  $1\frac{1}{2}$  inches from centre to centre. I believe that 8 frames to 11 inch space have been used with good results. Many good authorities claim that any plan which allows of one or more inches of capped honey to be placed between the brood and sections is defective. The above refers more especially to raising honey in cases above the brood chamber, which plan I am convinced will give the best results.

BY THE EDITOR.—Barely enough room to allow one row of bees to pass between the combs and nurse the brood. When bees are to go in boxes, if the combs are crowded up  $1\frac{3}{8}$  inches apart it will generally force them into the boxes at once. When combs were spread  $1\frac{1}{2}$  inches or more apart, we have known bees to loaf and they would not enter the sections, but immediately the combs were crowded allowing but space enough for bees to pass between they would en-

ter and go to work. Where cells are too full to crowd all parts of the combs they should be shaved off even with the capped brood, when I believe much better results will be secured. If combs are perfectly straight they may be placed about  $1\frac{1}{4}$  inches apart.

## QUESTIONS & ANSWERS.

### TRANSFERRING.

A. LARMOUTH, LACHUTE, QUE.—I want to transfer my bees from your single to your double walled hives, as soon as I put them out in the spring. Is this practicable and safe for the bees?

Yes, all you have to do is to lift the combs out and set them in the double-walled hives; take the old hive, shake out the bees which remain in the hives on the ground at the entrance of the new hive, allowing them to run in the same as a swarm. In fact it is just what our men are doing now in the different apiaries, lifting the combs out of some and placing them in other hives. We do this every Spring when setting them out: the emptied hives answers for the next colony, so that with one empty hive to start with you are enabled to pass over and clean all the hives in the yard,

### OLD COMBS, TRANSFERRING, &c.

REV. P. NICOL, ALBION, ONT.—I am greatly pleased with the JOURNAL. Read most eagerly every word in both numbers. Found excellent practical information. But, oh, grief! my best hive died of starvation since my last letter to you—all from over confidence in its good condition last fall. I took three frames of honey from them and some seven pounds from a box on top last August. They gathered none after, I suppose. Left five frames, but did not look how much of that was brood, &c., for being only a "beginner" I thought if I had 22lbs. gross weight in the three frames, the five remaining would be ample stores and did not trouble my pets by looking closely into them. Have only two left and one of them in good condition, but it simply makes me more anxious to do better next time. Now will you please bear with my ignorance and mismanagement and answer through the JOURNAL a few questions:

1. The combs in the hives are beautifully straight, and I want to transfer out of my two boxes into your hives. Would it be safe for me to use these old combs by putting them into the Jones' frames and giving them to my bees when transferred? I ask this because in picking out the dead bees they break and smear the combs a little and there is a little brood dotted here and there. How should I treat these combs to get them cleaned? And how best get out the dead bees? Some frames are literally filled with dead bees and I have been picking away patiently?

2. How best transfer from box hives into yours?

You forgot to weigh the hive and ascertain the exact amount of honey in it in the fall, which is very important. We never think of putting hives into winter quarters without first ascertaining how much honey each contains, though we have about 1000 to go over. You took out the three back combs in all probability, containing as much if not more than the other five, on account of their being behind the brood nest. Had you left them in until Spring you would doubtless have had a strong colony instead of as now the hives and empty combs. If you hang the combs about 2 inches apart in a dry room they will be in good condition to give to a colony or swarm early in the season.

1. You can transfer all your nice straight worker comb and clean the comb which contains the dead bees. With a pair of tweezers you can remove them, or by taking a pin and bending the point like a hook, slip it in between the side of the cell and the bee, hook it into the bee and draw it out; what is better still is to take a long needle, hold it in the flame of a candle sufficiently long to take the temper out of it, bend it to a hook and you can remove them very rapidly. If you had a large number of combs it would probably be too much work; by setting them on the floor about 2 inches apart and allowing mice to get to them they will remove the greater part of the bees. Yet we do not care to allow the

mice to do much beekeeping for us, preferring to do it ourselves.

2. You should not transfer until the warm spring weather about fruit bloom. The hive should be turned upside down and the bees drummed out; if there are not many bees or much honey it is even not necessary to drum them out. Merely cut the comb loose from sides or hive, split off three sides, take a thin board or shingle allow it to lean up against the comb, cutting the comb off at the bottom (which was the top before being inverted) then lean the comb over on the board allowing the board to settle down gradually. By this means you have the comb on the board without lifting it with your hand. The bees may be swept off into the hive to which they are to be transferred. By laying another board similar to the one holding the combs, on top, and turning the comb over, you can lift off the top board and sweep the bees off that side of the comb. Continue this until all the combs are cut out, when they may be transferred into frames, and the frames placed in the hive. The bees left in the old box should then be shaken down in front of the new hive and they will pass in. If properly done every good piece of worker comb may be saved.

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## SUNDRY SELECTIONS.

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WM. A. PERSON, LACOLLE, QUE.—We have 82 colonies in cellar. They are wintering well. We do not put them out before May 1st here.

GEO. E. HILTON, FREMONT, MICH.—Have just returned from a tour amongst the bee-keepers around Grand Rapids, and find heavy losses everywhere. I am fortunate in only losing ten per cent.—six out of sixty. I winter in double walled hives, filled with dry fine sawdust.

JOSEPH H. SCHARBONNEAU, PLANTAGENET, ONT.—I got about forty-five pounds of comb honey from common boxes, as I had only two swarms in Jones' hive, and from these I got fifty-four pounds of section honey in one pound boxes

per hive. Last fall I built a bee-house on top of a hill facing the South, banked the back of the house about thirty inches in the clay ground, filled the wall with sawdust one-foot thick, and as I had not enough of sawdust, I filled part of one side and back with pea straw. When I examined them in February, there was ice in the boxes. I had put nineteen swarms into winter quarters. When I was making my bee-house it rained very hard, as it was late in the fall. I did not put in a floor, but I put a stove into the house to dry the ground. I looked at them a short time ago and there were six dead ones, so I put the rest up stairs to thaw the ice out of the boxes, and afterwards returned them to the bee-house, and they are now all dead but one.

EDMUND CAVERLY, STERLING, ONT.—I herewith forward you a report of last season's work. I began in the Spring with fifteen colonies, increased to twenty-five, mostly by natural swarming. A few of them were weak in the Spring, caused by cellar being new and walls damp. Extracted 1450 lbs., and took 30 lbs. comb honey from one colony during basswood harvest. On Nov. 19th I put 25 colonies and two nuclei in the cellar; I examined them this evening, April 14th, and find one colony has died from dysentery and four or five more are badly affected. Nuclei in fair condition. Snow going nicely, hope to get them out in a few days.

EDMUND DECEW, DECEWVILLE, ONT.—Thank you for the timely appearance of the CANADIAN BEE JOURNAL. I have long desired to see something more than fugitive pieces in isolated journals from your pen, and I think you have hit upon what exactly meets the requirements of our country. I don't keep many bees; am a new beginner though an old man. My profit last year was about ten dollars per hive, but I have lost heavily this winter. Illness prevented my crowding them together as you recommend for wintering. Our Haldimand Bee-Keeper's Association has been a success, and the interest is not declining. It is our good fortune to have an editor, (E. C. Campbell, of the Advocate), for our Secretary, and in that way we send a post card, with printed program, to each member previous to each meeting. Wishing you every success.

The Haldimand Bee-Keeper's are indeed to be congratulated upon having for the Secretary of their Association, such a thoroughly enthusiastic and progressive bee-keeper as is friend Campbell, and, if recollect aright, friend

DeCew was President for quite a time, which has a good deal to do with the interest which they have awakened in the art.

REV. D. PATTERSON, ST. ANDREWS, QUE.—The ground here is still deeply covered with snow and no possibility of bees being out for several days yet (April 13th). Last spring they were set out on the 9th and 10th of April. The extraordinary cold of the past winter, quite unprecedented in the steady continuance of it, froze tanks and wells and penetrated cellars, and has been fatal to one-fourth, at least, of the few colonies I possess, and I fear for some of the rest.

R. B. WOODWARD, M.D., SOMERSETT, O.—Enclosed you will find \$1 for the CANADIAN BEE JOURNAL. We are much pleased with the first two issues. My eleven colonies all wintered splendidly and are in fine condition. Fully one-half of the bees in this portion of the state died during the winter—they froze. I know colonies in box hives that died with from forty to fifty pounds of good honey in the hive. But all colonies properly prepared with the modern improvements, came through in good state.

W. ELSON, NEW WESTMINSTER, B. C.—We are a long way ahead of you in the early season and I question if the CANADIAN BEE JOURNAL will be of much use to us. The bees were out in February and have been collecting the whole of this month, (March). The willow bloom was over by the 10th inst., and wild gooseberry and wild plum takes its place. I expect early swarming should this fine weather continue. Wishing you success in your venture.

Glad to hear that you are ahead of us in British Columbia; that is just the locality we want to hear from as often as possible. We learn more from those who are ahead of us than those who are behind. While you are ahead of us regarding the season, you may be behind when the year's returns are made up. We shall be pleased to receive reports of the weather and flora of the country. Tell us if you find any of the sages which produce such large crops of honey in California. We have on doubt but that British Columbia is a grand field for bee-keeping, and that those who embark in the business there will

skilful and energetic, succeed. We will try and keep you posted on the latest improvements in regard to all appliances used in apicultural pursuits.

#### MODERN BEE-KEEPING IN TUNIS.

THE reader will call to mind the cry of the Roman orator which rung out so clearly and forcibly in the Senate: *Carthage must be destroyed* then the news which followed: *Delenda est Carthago*. Nearly on the site of the ancient city stands Tunis, the capital of the province by the same name. Extensive ruins, which cover the country for many miles about, form a strange contrast to the modern industrial undertakings that are springing up here and there. If we let old Carthage represent the prejudices and errors of bee-keeping in Tunis we can almost apply in this direction the sentences of the old time Romans. To be sure these prejudices and errors are not wholly destroyed. They exist still, and will continue to do so for some time. But a good strting blow has been dealt them through the establishment of a model apiary of forty hives, to be conducted on modern methods. The name chosen is "The Kassartyr Apiary," the estate to which it adds a pleasing feature being known by the name "Kassartyr." On page four allusion has been made to this undertaking, and all will be interested in knowing something of its success, which I feel is an assured thing. The movable comb hives were not all in place and the stocks in suitable condition to take full advantage of the first yield of honey—that from wild rosemary blossoms, but some surplus has been obtained and many combs have been constructed, so that when the jujube blossoms open next month an excellent harvest may be safely counted upon. The rosemary yields wonderfully, and as thousands of acres are covered with its pale blue blossoms during January, February and March it will be a great dependence. A medium stock transferred the last day of February has yielded up to date over forty pounds of extracted honey, besides building out several frames of foundation. The rosemary is the plant from which the famous Narbonne honey of France is gathered, and the Kassartyr

honey is most excellent in quality. Some of it is quite transparent, very thick and possesses a pleasing aromatic taste. Altogether the proprietors of "The Kassartyr Apiary" have every reason to feel encouraged in the work they have undertaken, and it has already begun to have its influence, as two other apiaries on the same plan are soon to be established in the province, and several enterprising parties are talking or introducing the culture of bees on their estates.

A few words about the bees of Tunis. They are dark—even darker than our common black bees, but strange to say, possess nearly the qualities of Syrian bees, and show, except in color, very little resemblance to the black or German bees. Like Cyprians and Syrians they are somewhat smaller-bodied than are the common bees, adhere very well to the combs when handled, but can be shaken off readily. They are also active energetic workers, but unlike Cyprians and Syrians, they are liable to fly at one and sting him when he approaches the apiary and yet does not molest the hives. They bear smoke rather better than other Oriental races: queens show a tinge of bronze color and are very prolific. On the whole Tunisian bees are not to be despised even if they are true Africans in color. I've been wondering how this race of bees got here, and have only been able to offer the following explanation: Early Greek colonists must have brought Hymettus bees with them. History might lead us to this conclusion and it is indicated by their color, qualities, etc., and particularly their disposition to submit to smoke, as well as by the fact that other Mediterranean countries from which bees might have been brought here at an early date all have as their general types yellow races of bees.—*Frank Benton's Bees.*

A. PRINGLE, SELBY, ONT.—We were naturally anxious to see the first number of our new JOURNAL. It came at last, and we were not disappointed. It is convenient and neat in form, the paper is good, the matter good, and the whole mechanical get up is excellent. You certainly deserve much credit for bringing forth so fine an offspring after so short travail. May the youngster thrive abundantly, and grow and ultimately "survive" as the "fittest."

# THE CANADIAN BEE JOURNAL.

D. A. JONES.

F. H. MACPHERSON

## D. A. JONES & CO.,

EDITORS AND PUBLISHERS,

BEETON, ONTARIO.

WEEKLY, \$1.00 per Year, Postpaid

BEETON, ONTARIO, APRIL 29TH, 1885.

### HONEY DEW.

We have received from G. W. Ferguson, of Lambeth, a small bottle of stuff gathered by the bees in his section, for which he wants a name. One taste decides us in the opinion that it is a pretty strong sample of Honey Dew, though a little different in taste from any we have yet come across. We have placed it on exhibition with our other curiosities.

### A SLIGHT CHANGE.

At the request of Friend Garwood we have made a slight change in his advt. this week, and we wish just to call your attention to this change. We expect to have a model in a few days and may be able to say something more about it.

### BEESWAX.

The demand for foundation is such that we have reduced the price for brood to 55 cts. and section 70 cts. Beeswax is only worth 37½ cts., delivered here at the present time, and till further notice. So many bees are dead, and so much wax is offered that this is the best we can do for the wax. We have a large lot of wax on hand.

### BACK NUMBERS.

We presume that most of those who subscribe along toward the outset of our publication, will want back numbers and with this idea in view we are printing each week a number in excess of what is actually needed. When ordering please be sure to say whether you desire the back numbers or not, and if you have received the first two or three tell us which you have and we will send you those intervening.

### HONEY AND BEESWAX MARKETS.

Friend Muth, of Cincinnati, O., has generously promised to keep us posted on the prices of honey and beeswax in his section of the country, and just as fast as possible we will arrange to have reports of the markets in all large points in Canada and the U. S., also in Liverpool and London, Eng. We would especially commend the system of marketing honey which Friend McKnight writes of on page 52 (issue of April 22nd) as being the one best adapted for all beekeepers for years to come.

### AMERICAN DRAFTS.

We must ask our friends in the U. S. not to send us drafts for small amounts, unless they include sufficient in the drafts to cover cost of exchange here. It costs 25 cents to get any kind of an American draft or cheque up to \$100, cashed at any of our Canadian Banks, and on a draft for \$1 we have to pay just the same as on \$100, and on that small amount, it is too much to pay. If the amount be enclosed in U. S. currency or stamps (for fractions of a dollar,) and registered we will agree to run the risk of safe arrival. Money orders cost nothing for us to get cashed, and where it is practicable, that is a good way. Unless they charge less for drafts there than they do in Canada, it will pay far better to get a money-order than buy a draft.

### OUR OWN APIARY.

On the 20th of April we set our bees out from their winter quarters, or at least a large number of them. As we had no room in our bee-houses for all our colonies last fall, we packed a number out of doors, in different ways, to test the difference in results between colonies wintered outdoors and those wintered indoors. Those which were packed and left outdoors we will report on soon, we have not yet completed our examination of them all, but thus far they appear to be in very good condition, in fact one of the clamps containing about fifty colonies, was stronger apparently than when packed in the fall, many of the colonies having brood hatching and very few dead bees in any of them; hives and combs dry and free from mould, and bees in extra fine condition. All were alive with the exception of a few that died apparently from starvation and a few queenless. There were some colonies placed in winter quarters which were too weak in bees to keep up the temperature necessary to successful wintering either indoors or out. A few of these succumbed. At one of our bee-farms, where we had about 250 colonies, part were packed in clamps and part indoors, one of those packed in the bee-house died from starvation, the rest we set out in much finer condition than it has been our pleasure to have them for a long time. Those packed in clamps were in about equally as fine shape, but several were found to be queenless, and two colonies at one end of the clamp where the rain had wet the packing, died from that

cause we suppose, as the packing was frozen solid to the hives. It was not intended that the packing should have been so exposed, but the clamp was not completed in one day, only a portion of the hives being set in and covered. The end which was left exposed suffered the effects of a sudden and heavy rainstorm, the packing from that end should certainly have been removed and replaced by dry, but it was not, and we paid the penalty with the loss of two colonies.

About 3 o'clock on the morning of the 20th we set out the bees at our home apiary. The foreman came to our window and awoke us by shouting "Get up! It's time to set out the bees." On going out we found him and about a dozen more of our hands with lamps and lanterns ready to enter the beehouse which contained 400 colonies.

They first placed the lights at suitable distances around the yard so that it was quite light. The sky was clear and the stars shone brightly; there had been a very slight frost and the atmosphere was chilly yet had every indication that the coming day would be warm and pleasant. The men arranged the hive stands placing a lid at the side of each and all being ready to carry out we opened the doors. Thermometers indicated 44° at lower part and 46° at the upper. The bees occupied rows of shelves around the outside and two double rows in the centre, leaving three narrow halls between the hives. A man placed himself in each hall for the purpose of lifting the hives from the shelves and handing them to the several carriers allotted to his division, who, like so many trained soldiers, after receiving their precious load marched out deposited it on its stand, commencing at one row, when that was filled then another, and so on till the work was done. Immediately they set a hive on its stand the lid was placed upon it the entrance left open. The bees did not offer to fly out though some would run down off the combs to the entrances but the cool atmosphere and darkness of the night prevented them from venturing further. Occasionally one would crawl out from under the cloth into the bosom or sleeve of one of the carriers which fact was usually made known by the increased celerity of the party. In less than an hour all the colonies were set upon their summer stands, and were left to cool off be-

fore daybreak. The sun rose very bright but was soon hidden behind a cloud remaining hid for several hours. A few bees ventured forth but as they would light on the ground they soon became chilled and appeared as if dying. The foreman came and said: "It will not do to allow the bees to fly yet as the weather is not warm enough." We went into the yard and finding a large number lying about on the ground, chilled, and more coming forth from many hives, ordered the entrance blocks to be placed on all, closing them up tightly, and preventing the bees from coming out; we kept them thus closed until about 10 a.m., when the clouds passed over, and the sun shone forth very brightly. Those chilled and lying about began to revive, and some in the hives began to crowd away their entrance blocks. We then opened the entrances allowing them to have a purifying flight, and oh, such a sight! Fancy the bees from about 400 colonies flying in the air; it was enough to make any bee-keeper happy. The bees that had been chilled had fully revived, and in less than two hours were flying in the air with the others but seemed lost not knowing which hive they had come from, more especially as the hives were set closely together, the rows being from six to eight ft., and the hives from two to four ft. apart in the rows. The lost ones appeared to be willing to enter any hive, and after flying about some time they gradually settled and passed into a few hives, thus giving these hives an unusual number of bees, which we found very convenient as we occasionally came across a colony not quite up to the standard in strength, and we would take from each of the strong colonies a comb having bees clustering on it, then shake the bees off in behind the division board of the weak colony thus strengthening it at once with bees that would accept the situation and not go back; in this way all the weaker colonies were strengthened. We find that bees when being set out upon their summer stands will accept any location, and if strong colonies are divided with weaker ones they will not return to their original hives, neither do they ball their queens if properly united. Several queenless colonies yet strong in bees were found, so we searched out the ones containing queens, carried them over to the stronger queenless colonies, lifted out

the queen and bees from the weaker and united with the stronger, and in no instance was the queen injured. Had they been left for several days before performing this operation they would have marked the location and would not have accepted the queen without her first being caged. We shall this spring be able to supply many of our friends, who have not been so successful in wintering, with a fresh stock of bees, as we can spare \$4000 or \$5000 worth and yet have all we can possibly care for. We intended starting more yards this season, but with the care of the BEE JOURNAL and the increase of our supply business we shall be unable to do so.

EAST ELGIN BEE-KEEPERS' ASSOCIATION, in St. Thomas, at the Hutchinson House, on the second Saturday in October—18th—at 1 o'clock. JOHN YODER, Secretary, Springfield P.O.

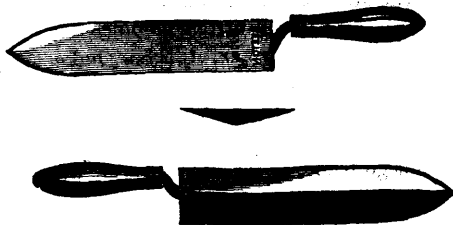
SOUTHERN WISCONSIN BEEKEEPERS' will hold their next meeting in the Court House, Janesville, on Thursday, August 27th, 1885, at 10 a. m. C. O. Shannon, Sec.

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Though these sections cost more to make than the old style, still we are supplying them at the same price. We keep in stock 3 1/2 x 4 1/2 (ours), and 4 1/2 x 4 1/2 (Langstroth), and can make any other sizes to order on short notice. Prices:

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At greatly reduced prices. After June 15th I will sell two frames of Nuclei, with two pounds of bees in each, no queen, for \$2.25. Tested queens, \$1.50 each. Warranted purely mated, \$1 each. Untested, 75 cents each; to Canada 10 cents more each queen, unless five or more are taken at one time.

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TESTED \$2.00 TO \$4.00.

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Sheets 12 inch, wide cut to order.

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We have just bought a large lot of Tinned Wire, No. 30 which seems to be the number best suited for wiring frames and we are able to sell it very low:

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The spooled wire is much more convenient than that on reels as there is no danger of tangling. These prices will supersede those in our price list.

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—DIRECT—  
FROM ASIA AND FROM EUROPE.  
Cyprians, Syrians, Carniolans, Italians  
AND PALESTINES,

ALL REARED IN THEIR NATIVE LANDS.

## Imported Cyprians and Imported Syrians.

Grades and Prices of Queens:	before	July	After
	June 1	June	Sept. 1st.
Finest Selected Queens, each	\$12.00	10.00	9.00
Fine Prolific Queens, each...	10.00	9.00	8.00
Smaller & darker Queens each	8.00	6.00	5.00

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 bringing with me a fine lot of queens. Those who desire Imported Cyprians, or Imported Syrians VERY EARLY can have them mailed 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, provided the purchaser receives mail from New York City within five days time.

## Imported Carniolans and Imported Italians.

Grades and Prices of Queens:	before	July	After
	June 1	June	Sept. 1st.
Finest Selected Queens, each	\$7.00	\$6.00	5.00
Fine Prolific Queens, each...	6.00	5.00	4.50

I have several times visited both Carniola and Italy, inspecting at each visit a large number of apiaries, and also have, for several years, kept side by side imported stocks of both of these races, and I unhesitatingly give the preference to the Carniolans. They are the gentlest bees known, equal the Italians in honey-gathering qualities and in point of beauty, and far excel them in prolificness and hardihood.

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Prices two thirds those of Imported Cyprians and Imported Syrians.

All these queens are selected daughters of fine imported stocks, are reared in full colonies, and are fertilized in Carniola 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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(SO-CALLED "HOLY LANDS.")

Prices three-fourths those of Imported Cyprians and Imported Syrians.

Though Palestine bees possess some valuable qualities common to Cyprians and Syrians, still, on account of their very bad temper and poor wintering qualities I cannot recommend them for general introduction. To fanciers, however, who desire them, I will say I can furnish as fine imported queens as are to be had in Palestine.

During five years experience in bee-culture in the Orient, three of which were passed there, I have neither seen any foul brood or sign of foul-brood, nor have I ever heard of its existence there. None exists in this portion of Germany, and having examined the apiaries from which my Carniolans and Italians come, I can also testify as to their healthful condition.

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Any Six Queens 5 per cent. discount; Ten Queens, 10 per cent.; Twenty Queens, 12 per cent.; Forty Queens, 15 per cent.

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"The Bavarian Apiary,"

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