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Queen Breeders Journal

PUBLISHED MONTHLY BY E. L. PRATT AT MARLBORO, MASS., U. S. A.

Vol. I.

MAY, 1889.

No. 5.

Our Queen Breeders Journal.

DEAR READER :—We present you with a copy of our new Journal. We trust you will read it carefully and notice the valuable information furnished for so small a sum.

The Queen Breeders Journal is only 50 cents per year. It is as you see unique, brainy, original and advanced. Our correspondents are from the superior minds of the apicultural world. You will find it all bright and profitable reading.

An apiary with inferior queens is worse than no bees at all. So you see how necessary to your welfare as successful apiculturists is a journal giving the vital points of our pursuit.

The newest and the best points will always be found in our Journal.

A large number of advanced bee-keepers have gathered valuable points from our Journal worth many times the trifling cost of a year's subscription.

We have a most interesting advertising specialty department as you will see by examination. These pages are well worth your study.

We reach a large and very valuable constituency, bee specialists all over the country. These are the most brany of men, who are accustomed to using the mail freely to order goods and supplies.

We wish to call attention once more to our superior strain of Carniolan bees. Our queens are reared with great care and we pride ourselves on the excellence and purity of our stock. They have no equal. They generally manage to gather honey when other bees are starving. This last poor season we had a large quantity of the finest honey ever produced about here, which sold readily for 30 and

35 cents per pound alongside of ordinary honey at inferior price.

We have published a neat little book of 8 pages, fly leaves and cover, by G. M. Doolittle on "Early Queen Rearing", telling in a plain practical manner just how to go to work for early queens. Price of book, post-paid, only 5 cents.

The coming season will undoubtedly be a good one for bee-keepers. This is the time to invest in bees for pleasure or profit.

To insure success subscribe for the Queen Breeders Journal. Stamps taken. Only 50 cents per year.

E. L. PRATT, Pub.

Marlboro, Mass.

A first class spring feeder can be made out of section boxes (the dove-tailed are the best for this purpose) by tacking a piece of linen on to one side under thin 3-4 inch strips all around to raise it so the bees can cluster under it well. Place the feeder on to the frames directly over the cluster and fill about with newspapers spread out smooth. Spread the quilts over all and tuck them up well. This will keep the feed warm and the bees also.

A TABLE, that should be familiar to every bee-keeper, is the following :

	Q'n W'k'r Drone			
Egg,	3	3	3	
Growth of larvæ,	5 1-2	6	6	1-2
Cocoon,	1	2	1	1-2
Rest,	2	2	3	
Pupa,	4 1-2	8	10	
Winged insects,	16	21	24	dys

WE HAD DRONES flying on the 6th of May.

The Best Bees.

I was glad to read the articles of Brothers Andrews and Lockhart and Brother J. E. Pond in your issue for April. It gives me a chance to make myself a little clearer. I believe I said I never had tested the Carniolans, and further that I could not condemn them from actual experience, but my experience with other bees and my observation, experience and reading with regard to the introduction of new races was evidence enough to warrant me in saying to bee keepers, "Be careful how you bring new blood into your apiary or allow it to mingle with what you already have, provided what you have you consider superior." Acting upon this advice, I have ever been clear, in this vicinity, from the Cyprians and Syrians, and now from my observation (not a bit of experience, you see) I can almost say that I positively know that had I brought in Cyprians and Syrians I would have greatly diminished the value of my apiary, and been sorry over and over again. Do not be in a hurry about the Carniolans. No one praises them so highly, no one has taken me to task so vigorously regarding these same Carniolans, as were the praises on the one hand and rebuke received on the other, when I disparaged the Syrians and Cyprians. I would like to answer some of Mr. Pond's points of argument. He says, "The Italian bee has fought its way to a permanent foot-hold in this country, having been here over thirty years, and is the best strain or race extant." I agree to all this except the last sentence, which is not at this day generally admitted among our most successful honey producers. It is admitted that for certain valuable traits of character these bees are excellent, and the same may be said of the Syrians. It is also admitted by every bright, practical and honest bee keeper, that there are most valuable qualities for which the black

bees are excellent. Here I can use Mr. Pond's words: "This is not a matter of conjecture, but has been proven time and time again." He asks what I am asking bee keepers to do, and he answers it by saying to throw aside the best bee in the world for the purpose of adopting a hybrid. He is pleased to use the word "hybrid," for the simple reason that the catch-hybrids were all the crosses we knew till our leading honey producers discovered that a little good management would produce a hybrid vastly superior to all other races. But that word "hybrid" got a bad name at that time, and no doubt when Mr. Pond is making an argument against crosses he will hereafter use this term. It is a prejudicing term, and he will need to use prejudicing terms, I think, if he succeeds in keeping up his end of this argument. Mr. Pond, however, is one of those who make it their business to win their cases, whether it is done by prejudice or argument. Listen: He says, "Will our bee keepers do this? I trow not, just yet." The cross I advise is one between the best strains of Italians and Germans, and he objects, saying that their qualities are not fixed. Will he be so kind as to tell me how many apiaries there are in the United States containing bees with fixed qualities? Did he ever see an apiary of Italian or German bees, no matter how pure, that was not constantly changing in the characteristics of its bees? Does not every practical honey producer know that some strains of German bees are vastly superior to very many strains of Italians, and that too, in almost every respect, and do they not also know that some strains of Italians are infinitely superior to some of the little, mean, belligerent, black bees? I have been raising and selling these crosses for over ten years, and at the same time I have been selling strictly pure Italian queens of the best strain I could

get—raised in my other apiary six miles from my home apiary, and how does Mr. Pond account for the fact, which I can at once prove to anyone, that I have received ten times more testimonials from these “unknown qualities” than I have from the pure Italians? And after the pains I have taken I am sure I have raised and shipped out the best Italians to be found in the country. It is the very Italian strain that I use in getting my crosses. I am willing to grant that if a bee keeper buys one of my queens of this cross bred variety and puts it in his apiary carelessly to mix with his other bees, he will soon be in possession of an “unknown quality.” The very same thing will be true, and usually in less time, if he buys any race of bees in its purity. In my former article I tried to state why these bees were superior to any other, and in my next will give the very simple and practical methods I use to keep this strain or any strain of bees from crossing with their inferiors.

JAMES HEDDON.

Dowagiac, Mich.

What Bees to Breed.

This question is one of importance to the general bee-keeper, for he is the one who is to be benefited, if any, by knowing which breed or race will produce the best results.

Queen breeders, whether exporters from abroad or importers at home, are interested more in starting booms on new varieties in order to get enhanced prices, than in the question of the best for general use, consequently as a rule will not be as safe advisers as those whose particular interest does not lie in this special direction.

In order to reduce this matter to a position where all can fairly understand it, we are led to the inquiry, “What race has led the world for years, and (if any such there is) has

attained prominence solely on its own merits?”

The answer is simple enough. The Italian bee has stood just this test, and for more than thirty years; and not only has it stood the test, but it has done so in the face of great opposition. When first introduced it had no friends, and for years had to fight its way, till now its supremacy is established.

This is not my dictum, it has been proved, and is being proved every day. The evidence is constantly and continually coming forward, from experts and novices alike, and in the face of it all, the conclusion is inevitable. The Italian is the bee now, and will be for all coming time in my opinion, no matter what interested parties may say to the contrary.

J. E. POND.

North Attleboro, May, 1889.

Transporting Drones.

The article of John Nebel & Son, page 55, Q. B. J., calls to my mind some experience in shipping drones as long ago as 1877, and since then at different times till the present time.

In the spring of 1877 I had but one queen that was just what I wanted to breed from, and in April I sent to C. C. Vaughn for a four-frame nucleus containing a queen bargained for the fall previous, and to have two of those combs contain drone brood as far advanced as possible when he shipped them. About the fifth of May he sent me a letter that he would ship the nucleus the next week, and it came to me about the 13th. On receiving his letter I set up a nucleus for cell building, and on receipt of the Vaughn nucleus I found a fine lot of drones hatching, and with the drones from that nucleus I mated over thirty queens in May, and before my neighbors' black drones began to trouble me any. Having such good luck in '77, I tried carrying drones in '78. (From 1865

Interesting Talk, No. 3.**HOW TO FORM NUCLEI.**

till 1881 I only had bees located in Woodbury, Conn.) In Naugatuck, about twelve miles from me, there was an apiary so located in a warm hollow that the bees began to breed between three and four weeks earlier than with me at Woodbury, therefore I arranged to go to Naugatuck for drones in 1878, and I had to make three trips before I was able to carry safely one-fourth of the drones that I started with. At least one dozen successive trips were made during 1878 before I learned that to confine a drone was to kill him. Live drones can only be carried in a queenless colony and must have double the amount of air that workers need, and more than four times as much provision. In '79 and '80 I tried carrying live drones, and each year I became more convinced that the drone of any age would expel the genitals during shipment, if for only a short time confined and during that time there was no agitation at all.

Since that time (1880) I have carried dozens of frames of drone brood from place to place that I might have queens mated with drones from some particular queen, and always endeavor to not have them over a day or two old when carried, and I never would have them hatched before they arrive at their journey's end if I could help it.

The carrying of hatched drones causes premature ripening of development, and they are not nearly as good as if not so much hurried to maturity.

When shipping drone brood use as few workers as possible, perhaps one-fourth or less. I have often carried capped drone brood for three or four days, only wrapped in three or four thicknesses of flannel, and it came out all right and every drone hatched.

H. L. JEFFREY.

NEVER SAW cherry blossoms yield as they have this season.

When a large number of nuclei are wanted the shifty queen breeder will resort to every available method to increase the number of his nursing nuclei as fast as he needs them to take charge of cells and young queens on hand. He may form nuclei by simply taking frames of brood from which young worker bees are rapidly hatching, and set them in a nucleus hive or a full sized hive with a division board at the side, and confine the bees for a day and night till enough young bees have hatched out to keep up the temperature in the hive and care for the unsealed brood, and get along without the old bees, which are sure to desert the new location and return home. Colonies that have cast swarms may be divided up into good nuclei. But the following method, which I believe I was the first to make public, gives the most reliable nuclei of any plan I have tried.

When I begin, in the early part of the season, to prepare nuclei, I place frames of hatching brood in full sized hives as I draw them from strong colonies, till the hives are full of frames of brood out of which worker bees are rapidly hatching, and suffer them to remain together till the hive is well filled with young worker bees. When these are divided into nuclei I have nursing nuclei that will turn out a larger per cent of vigorous laying queens ready for business than can be had in any other way. It is a fact, which I believe I first pointed out, that more young queens are lost at mating time because of abnormality in the nursing nuclei than from all other causes.

Good, healthy, young worker bees are always anxious for the presence of a queen, but when bees become old and "disappointed" they not only become indifferent to the future preservation of the colony, but they actually

become hostile to the presence of a queen, especially to a young queen when she essays to leave the hive in quest of a mate.

SIZE OF NURSING NUCLEI.

In my opinion, most queen breeders make their nursing nuclei too small. Nuclei made up of two or three standard frames of brood are far safer than smaller ones; they are not likely to be robbed, having strength and courage to take care of themselves, and are much less liable to swarm out or "ball" the young queen when she takes her wedding flight.

HIVES FOR NUCLEI.

When I first began to rear queens on a large scale I made up a number of nucleus hives for the purpose, but I have since discarded them and now use the brood chamber of an ordinary L'hive for all my nuclei. A shallow super is used on the hive for ventilation and for convenience when the nuclei are to be fed during the summer heated spell. This arrangement enables me to feed all waste honey, scraps of every sort, above the brood nest, protected by the super from all robbers. By means of a division board I can handle such nuclei with great rapidity. G. W. DEMAREE.

Christiansburg, Ky.

To Amateur Queen Breeders.

It is impossible in an article written for a bee journal, as it would require all the space of several numbers to give a full and complete idea of how queen breeding should be carried on, in a scientific and economical manner. The amateur therefore should at once familiarize himself with the theory of the matter by reading carefully the directions given in the text books, on that subject. The writer for a journal is warranted in supposing that its readers know general principles, and look in their

journal for such new points as are being ascertained from day to day by bee keepers of experience.

The rule, however, does not always follow. As very many seem to think that by subscribing for such journal they will obtain in its pages, all they may require to know.

If such could be the case, there would be no need or call for text books, and the bee journals would soon be obliged to look to amateurs alone to fill (?) their subscription lists.

Bee keeping today is a science and one that can only be learned by close application both to study and labor.

The bee journals only supplement the text books, and that by keeping pace with the advance made from day to day, and thus giving its readers the opportunity to know just what that advance really is. Bee keeping again is now divided into several points such as queen breeding, the obtaining of surplus comb and extracted honey, hive-building, etc., and these points are also sub-divided in order that the most perfect arrangements can be made, and that the structure as a whole may be finished and completed in perfect form.

Don't call then for too much from the bee journals; remember that you get from them for a small price the new matters that are constantly arising, and bear in mind that to fully appreciate them preliminary study and practice is required.

J. E. POND.

No. Attleboro,

THE QUEEN, if taken away at this season of the year, will not seem to be missed by many colonies until they are hopelessly queenless. In such colonies, have a care if you are to introduce a strange queen. Don't attempt to place a queen with a frame of brood into such, for she will be balled every time.

The Queen Breeders Journal

MARLBORO, MASS., MAY 1889.

Cells With Queens Present.

The queen rearing branch of apiculture is rapidly advancing. Henry Alley of the American Apiculturist, Wenham, Mass., has just come out with an eight-page supplement to the May number of the Apiculturist, telling how queen cells may be secured in full stocks with a fertile queen present. This method will greatly reduce the labor of queen rearing and do away with queenless stocks almost entirely. In the prelude Neighbor Alley says:

REARING QUEENS IN FULL COLONIES.

Rearing queens in full colonies while a fertile queen has the full liberty of the combs and entire freedom of the brood-nest must be considered among the new things connected with bee-culture.

I will not claim that the idea of rearing queens in full colonies without first removing the reigning queen is wholly original with me, yet I shall claim the credit of being the first to make such an undertaking a success.

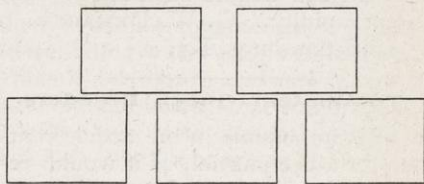
I think several well-known beekeepers have made an attempt to rear queens while the laying queen was in the hive. In some cases the queen was caged, but the queens reared in that way have proved worthless in my apiary.

I hardly think there can be found one person among all those engaged in or who are interested in bee-culture who has experimented in this direction to the extent that the writer has in order to discover some method by which queens can be reared without depriving a colony of its queen. Even now I feel bound to acknowledge the fact that the present method was more the result of an accident than of any well directed experiment which I had tested.

Cary-Lewis Hive.

THE WAY WE USE IT FOR COMB HONEY.

In the first place we make a stand of 1-2 bricks or stakes driven into the ground, so that, when the hive is placed upon it, it will be perfectly level from side to side and the back about two inches higher than the front, so as to shed the water. We use the tiering up system with full cases, and, as the season draws to a close, we taper down until there is but one row of sections to be completed. The other spaces are closed with enameled cloth or thin boards. One super is used as a part of the hive both summer and winter. After the fall flow of honey is through, we allow the bees to glue a super down tight, and when cold weather comes on, we lay strips of thin board across the tins so as to maintain a good winter passage over the frames. Now we tuck the blanket down on to these strips so as to allow no warmth to escape, and fill the balance of the super with some absorbing material—a pillow of chaff is best. If cellar wintering is to be practiced, we pack in the same manner, omitting to use the covers. In the cellar we pile the hives thus:



This hive is very simple, inexpensive and easily managed. We can make upper stories for extracting for either Langstroth or Cary frames.

The T super can be used with or without separators. The slatted or zinc honey-board is adapted especially to this hive.

During very warm weather, when the bees "hang-out," the cases can be slipped forward enough to show the

frames for ventilation. When the sun is very hot we turn the cover over and this answers for a shade board. As spring comes on we can examine the colonies and do all that is necessary to be done without trouble. When brooding commences in early spring we lay several thicknesses of newspaper between the frames and cushion to retain all the heat of the colony. As warm weather comes on, we remove the cushions and paper and substitute enameled cloth.

We hive on four full sheets of foundation and four starters alternated. After the swarm is well settled in the new hive, it is placed on the old stand and supers transferred thereto.

We always have a lot of nuclei to strengthen, and we use the brood from which the swarm departed for that purpose. If the brood is not capped, or nearly so, we carry them, frame and all, to the nuclei. Those containing all capped brood are shaken before the new swarm. The cells are worthless unless from approved stock and should be pinched off.

In-Breeding and Breeding for Color.

We had intended to go into the matter of "in-breeding," "breeding for color," etc., but the matter under head of "Manager's Corner," in the May Apiculturist, so covers the ground that we quote a great deal from it in the following. Speaking of bright colored Italians, Mr. Alley says:

"Does the reader know that those handsome bees are the poorest honey gatherers of any race or strain of bees we have? It is a fact, and I know it from thirty years' experience. I must say those beautiful bees, so pleasing to look upon and whose bodies are as yellow as gold and have from one to five yellow bands, are as worthless as flies, so far as gathering honey or of being any profit to the bee-keeper. I am aware that this statement will stir

up in a certain quarter some bad blood, as our statements did a few years since concerning the puffed-up and worthless Albino bees. That inferior strain of the Italians has almost ceased to exist, and those who came down on me for what I said are very quiet just now.

"In-breeding will produce beauty in the Italians; but, in breeding for those beautiful golden Italians, all other qualities are destroyed. Stick a pin in here, reader, for I am stating only facts.

"I tell you, friends, that it is the proper selection of the queen mother that turns poor luck to good success.

"Let me tell you another thing. It is this: The most prolific queens are not the best" for honey gathering progeny.

We have been reminded of the elegant lady part of this world by those beautiful bees ("four banded," "bright yellow" "Albino") etc., for the reason of their listless, lazy, good-for-nothingness. Strong colonies are hard to get among two of the kinds mentioned above, and, even if they are gotten, they are merely consumers of time, space and honey. Once in a while you will find fair working qualities, but not often (this is the stumbling-block on which we ourselves fell). They are generally poor winterers, poor honey-gatherers, and poor stock to breed from.

"I rather have a pint of bees that are full of life and business than a bushel that have no disposition to work."

IF YOU WERE TROUBLED with a short crop, not enough honey for your bees to winter on try, the Carniolan bees this season. They are good honey gatherers, prolific, gentle and hardy. We will furnish you with a nice pure queen from imported mother for \$1 each. H. E. and E. L. Pratt, Marlboro, Mass.

"Doolittle on Queen Rearing" Reviewed.

The first chapter is given up to introductory remarks, a sort of brief history of the author's first lesson in queen rearing.

In chapter II the importance of good queens is set forth in strong and all-convincing language.

Chapters III and IV are reviews of Mr. Doolittle's faith in nature and nature's way of rearing good queens.

Chapter V pounces upon the old methods and VI reviews the best of the later methods—ten in all—including the embryo cell method first used by Mr. Doolittle.

Chapter VII gives a new way of rearing queens, by the manufactured cups of melted wax cast from sticks formed in the shape of the inside of a queen cell, which was illustrated in *Gleanings* some time since. Mr. Doolittle has made a success of it by simply adding a little royal jelly, well stirred up, to each cup, and transposing the larvæ thereto. An illustration of the tools used in this transposition method occupies page 50. On 54 is a cut of Mr. D. himself attaching cells to sticks.

On page 56 is an illustration of a prepared frame of cells, as a colony about to supersede their queen had completed them. This is from a photograph and shows it to be very complete and perfect work. From this colony were taken a great many perfect cells built out from these manufactured embryo cell cups, all the cells giving queens of a high grade. By removing as fast as capped and replacing another prepared frame, it seems a colony will construct any number of cells, and by placing them above excluding zinc, he has had in the same super, cells in all stages from the just prepared larvæ to ripe cells.

The points claimed in this new method are: The cells are all in one

frame and close together; they can be removed with ease and are never attached to each other; they need no trimming to go into cell protectors or cages; they will stand rough usage without injury; and they will be accepted by a swarming colony.

The sticks containing the prepared cells can be placed in different parts of the hive and worked on, if separated from the old queen with excluding metal. A queen was hatched, fertilized and commenced to lay above this metal in the same hive with the old queen.

Chapter VIII is given to getting the bees off the cells. The oft-repeated advice not to shake or jar them is emphatically borne down upon.

[Continued.]

CAPPINGS.

BE CAREFUL not to drop any sparks from the smoker now that the packing is on. Rags, sawdust, shavings, and the like burn like powder.

SIX AND EIGHT frames of solid brood in most of our colonies on the 12th of May.

READ THE ADVERTISING pages carefully. You will find where you can get the best bargain in just what you will need this season.

THE WARM and early spring is a boon to northern queen breeders. We have at this date (May 6th), a large number of fine large queen cells almost ready to cut.

THE GOVERNMENT has recognized the importance of apiculture. Blanks have been furnished us to fill out. This is the work of the committee appointed at the Chicago convention in the fall of 1887, says T. G. Newman.

THE CANADIAN Bee Journal has added a poultry department, improved its press work and discarded its cover, doubled in number of pages and adopted the small sized engraved head

which is a great improvement. Go it, C. B. J.

IT WOULD BE WELL to place queen excluding metal over the grand entrance of a hive worked for queens in upper stories until after the young queens above had mated, to prevent any possibility of their getting in with the old queen. By doing this there is no reason why any queens need be lost in this way.

BY THE NEW METHOD of rearing queens in upper stories the honey producer can, without much trouble, commence each season with a young and vigorous queen at the head of each of his colonies, and then, to a great extent, keep down swarming just at the right time. He can also select his cells from the colonies giving the best results each season, all without the loss of an hour to any of the old queens in egg laying.

BE ABSOLUTELY SURE of the life of the queen you are taking from any colony at this season. If she can not be immediately shipped to some customer, the safest way is to form a nucleus about her and build it up rapidly to a strong colony. The time is but a small matter compared with the amount of work you can get from her in egg-laying.

THE RECENT DEVELOPMENTS in the use of excluding-zinc in connection with queen rearing will cause a revolution in this branch of apiculture. There may be no more use for nucleus colonies for queen fertilization.

DOOLITTLE ON QUEEN REARING has been received from the publishers (Thos. G. Newman & Son, Chicago, Ill.). It is neatly bound in cloth, nicely printed, and well illustrated. We commence a review of it in this number of the Queen Breeders' Journal. The book contains over 160 pages and sells for \$1. Mr.

Doolittle dedicates the book to Elisha Gallup, his teacher in bee-keeping, from whom he learned his first lessons in queen-rearing, and who truthfully claimed that around the queen centered all there was in apiculture.

Remarks.

If you receive more than one of this paper, will you kindly hand one to your friend who is also interested in Apiculture. Sample copies will be supplied at any time for the asking.

To those of our friends who will help to extend the circulation of the Queen Breeders Journal by getting up clubs, we will give an extra copy for every club of five with \$2

When writing to us and the heading of your letter is different from your post-office address, give your post-office, and write all names plainly and it will insure a prompt reply.

The receipt for subscription money sent us will be given on the address-label of every paper. The first figure is the vol. and the last figure shows the number inclusive. If your date is not changed on the next number after sending money, notify us at once. Don't wait! Do it now.

We have not time to answer all letters of kindness, never-the-less, we appreciate them more than we can tell on paper.

Standard Works.

Bee-Keepers' Guide, or Manual of the Apiary, revised, by Prof. A. J. Cook. By mail. \$1.50.

A B C of Bee-Culture, by A. I. Root. By mail. \$1.25.

Bees and Honey, by Thomas G. Newman. Price, bound in cloth, \$1.

A Year Among the Bees, by Dr. C. C. Miller. Price 75 cents.

"How to Raise Honey," by Oliver Foster. Price 5 cents.

How to Propagate and Grow Fruit, by Charles A. Green, contains over 20 illustrations and two large fruit plates, etc. Price 25 cents.

The Hive and Honey Bee, by Rev. L. L. Langstroth. Price, in cloth, \$2.

Success in Bee Culture, as practised and advised by James Heddon. Price in paper covers, 50 cents.

Production of Comb Honey, by W. Z. Hutchinson. Paper, price 25 cents.

A Birds-eye View of Bee-keeping, by Rev. W. F. Clarke. Price 25 cents.

Bee-keepers' Handy Book, by Henry Alley. Price in cloth, \$1.25.

Quinby's New Beekeeping, by L. C. Root. Price in cloth, \$1.50.

How I Produce Comb Honey, by George E. Hilton. Price 5 cents.

G. M. Doolittle's Method of Rearing Queens, published by E. H. Cook. Price 15 cents.

Q. B. Journal, Marlboro, Mass.

The Carniolans.

Extracts from the A. B. J. page 775, 1886. This refers to the progeny of a Carniolan queen sent Mr. C. J. Bertel, June 15, 1886.

"I at once introduced her to a three frame nucleus of Italians. At the beginning of the present month (November,) while overhauling my colonies preparatory to packing for winter I had opportunity to compare their condition with Italians, All bins, Syrians and Blacks, in all their purity, and hybrids and crosses of every description; not one could show as much honey as the Carniolans; they were strong in number, and their hive was solid with honey from side to side in combs nearly as white as snow; there was no soiling of combs by the bees running over them, and I thought that like the cleanly house keeper they wipe their shoes before they enter the house. I attribute this to the fact that they use little or no propolis. They are not as bright in color as the Italians and therefore perhaps to a casual observer, not as attractive, yet to my eye they are beauties, and answer all points given by Mr. Frank Benton, and others. And as for docility, they are superior even to the Italians. Their frequent swarming, so much urged against them, I think not a serious fault for they are more easily manipulated than most others. I would rather handle ten colonies of Carniolans than one of Hybrids. So far as my experience goes I am sure owing to their prolificness, docility, beauty and white comb building they will play a prominent part in the future. Next to Carniolan I find the Syrians the best honey stagers, but they are so nervous the least jar will start them, and often make things very unpleasant; but of all the nasty vicious creatures under the sun the offspring of a Syrian queen mated with a Black or Hybrid drone is the worst."

C. J. BERTEL,
Easton, Pa.

Thomas B. Blow F. L. S. etc., in the British Bee Journal thus sums up a long, well written article entitled "Among the Carniolan Bee-keepers," written after having spent six weeks among the Italian and Carniolan bee-keepers. My conclusions are that as a race the Carniolans are ahead of any race of bees that I know of, and that their merits are inherent, for no attempt has been made to improve the race by cultivation, by the selection of the fittest, etc. Being natives of a cold and windy climate, they are admirably adapted for our climate. They can be handled without smoke, will rarely sting, and do not run in heaps at the bottom of the bars, or fall off the combs. For honey getting they are excellent. These bees have undoubtedly a great future before them, and will, I am convinced, in a few years come into very general use."

Rev. E. T. Abbott of St. Joseph, Mo., in The Busy Bee says: "The queens are prolific. They are more inclined to swarm than the Blacks, but not any more so than the Italians. However this fault can be overcome by giving them plenty of room. A Carniolan queen mated with an Italian drone produces a very fine and desirable bee. We have a number of such colonies that are very fine workers and easy to manipulate. We are confident this race of bees cannot fail to grow in favor."

Mr. D. A. Jones in the Canadian Bee Journal vol. II, page 452 says: "Carniolans are very gentle and thus far have proved themselves valuable honey gatherers; would prefer them for capping comb, and we think they are not so much inclined to swarm as Italians." On page 267 he says: "Carniolans are better breeders than Italians, mine this season proved to be better honey gatherers. I also found our Carniolans more industrious than others, and a large number of hives containing Carniolan queens seemed to give the best results late in the season, when honey was scarce."

Mr. Robert Sproule of Dublin, Ireland, in Gleanings, page 177, volume XIV says: "My opinion of the Carniolans is that they are the best bees we have. The queens are conspicuous, the bees are gentle, and good honey gatherers, and they are very hardy. To show the industry of the Carniolans I may mention that I sometimes feed my stock by placing a supply of syrup out doors at some little distance from the hives. The Carniolans are the first to find it out, and have every drop taken away before the blacks begin flying for the day. The crosses with the blacks are almost as gentle as the full bloods."

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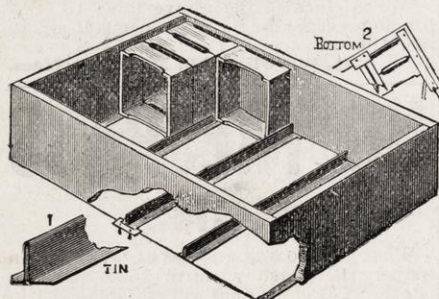
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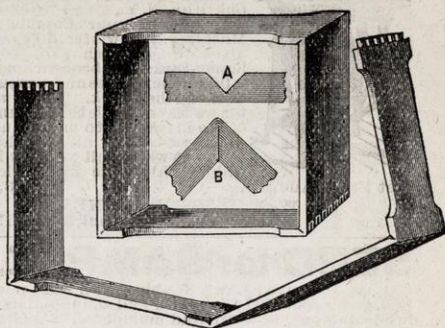
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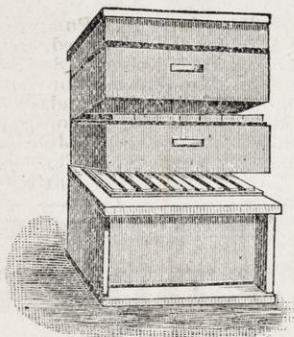
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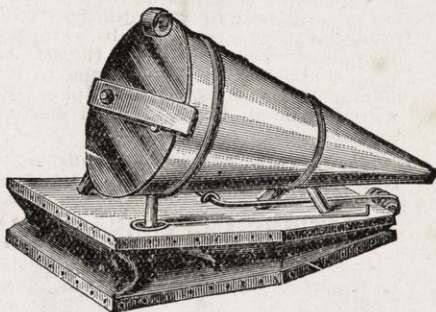
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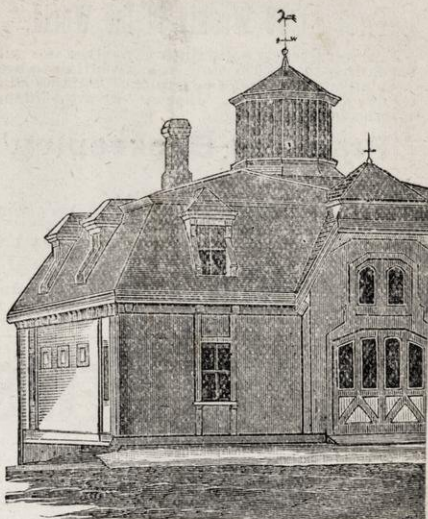
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