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THE

NATIONAL

BEE JOURNAL.

SEMI-MONTHLY.

MOON & SCHOFIELD, Publishers,

Indianapolis, - - - - - Indiana.

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Vol. III.

MARCH 15, 1872.

No. 6.

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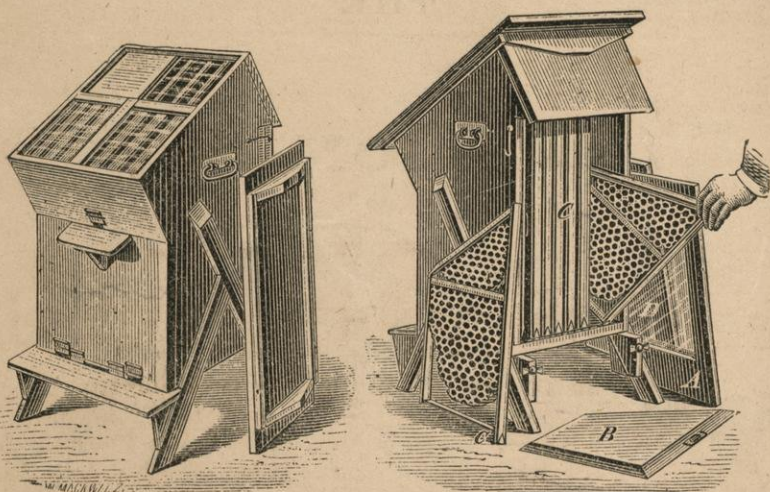
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TERMS:

Two Dollars Per Annum.

Single Copies, Fifteen Cents

THE QUEEN BEE HIVE



The above Engravings represent THE QUEEN BEE-HIVE, patented August 10th 1869, by THOS. ATKINSON, of Memphis, Tenn., and acknowledged by all who have used it, to be the *greatest improvement of the age*

Some of the advantages claimed in this Hive are: 1st, Simplicity of construction and cheapness. 2d, Ease of access to the brood frames (C in engraving), without having to remove the cover, surplus frames or honey boxes, the brood frames being removed from the back of the hive, without, in the least, injuring the combs or disturbing the working of the bees. 3d, Perfect ventilation, winter and summer, and security from sudden changes of temperature, having inner movable sides (B in engraving), making double sides with air chambers between. Also, when said sides are drawn out gives ample room to remove the frames (C), without the least injury to the combs, let them be ever so wavy or crooked. The Hive is enclosed by two doors, the one glass (A), for observation, and can be placed any where before the frames, so as only to expose a portion of the Hive at a time; the other door is plain, thus making the back of the Hive also double. 4th, The top used for surplus honey can have four honey boxes, 6x8 inches and 5½ inches deep, or two honey boxes and eight surplus frames, 8x5½, or sixteen surplus frames can be used, with four pieces of glass to cover the whole to keep the hive warm and tight, and are easily removed when the whole or a part of the frames are filled with honey, either for market, or to be emptied by the mel-extractor, and the combs returned to the hive for refilling, making a great saving in the time of the bees making new comb, when they should be kept busy gathering honey. 5th, The best and most roomy arrangement for fertilizing the queen. 6th, Adaptation to the wants and instincts of the bees. 7th, Perfect artificial swarming arrangements. (C showing the frames as turned out and removed.) Every section or frame is free, independent, movable and self-adjusting, all the same pattern, and will fit any Hive. 8th, Economy of animal heat. Before winter the surplus frames or honey boxes are removed and the space-filled up with dry corn cobs or cut hay to absorb the moisture from the bees, thus making a perfect Hive for wintering out doors. 9th, In a word, all the advantages of any or all other movable comb hives, especially as regards the building straight combs. The cross-bars are so arranged as certain to prevent the bees building across the hive; and to corroborate this statement, we would refer inquirers to disinterested parties who have used the Hive.

THE QUEEN BEE HIVE will prevent bees from swarming by removing a few frames into a new hive, and by this process of artificial swarming, the colonies are rapidly and successfully increased. The Queen Bee Hive has met with unparalleled success, and the most unqualified recommendations are offered; yet the only recommendations we desire to offer are the merits of the Hive itself. Yet it may not be amiss to state that the Queen Bee Hive took the first premiums at the Indiana State and County Fairs held at Indianapolis; and at the great fair held in St. Louis, Mo.; also several other State and County Fairs where it has been exhibited.

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National Bee Journal.

DEVOTED TO THE CULTURE OF THE HONEY-BEE.

Vol. III.

MARCH 13, 1872.

No. 6.

[For the National Bee Journal.

Begin Right By All Means.

Mr. Martin Terry in giving suggestions to beginners in the last number of the JOURNAL, pages 101-2, requests experienced bee-keepers to correct him when in error.

I wish to say a few words in reference to his article, which may be of benefit to him as well as to others.

My experience is, the Italian bees, for the last seven years, proves that they are decidedly more peaceable to handle than the black bee.

In regard to setting hives immediately in front of one's dwelling, as Mr. Terry suggests, I am very much opposed, because some people, being afraid of bees, are very liable to get stung when visiting, as bees go right after those who are afraid of them. When returning from a drive if you should happen to

drive in front of the house, as is most customary, and the the team should be perspiring freely, they would be apt to get stung to death. Again, the bees may swarm, settle and finally go to the woods without any one being aware of it, as the women folks most always, as a general thing, stay in their kitchens, which are generally located in the rear of the house; therefore I think, if natural swarming is to be allowed, bees ought to be put in the rear of the house.

As to making stands for setting hives on, that is a useless expense for nothing; brickbats are cheaper and a thousand times better. When Mr. T. says to make the stands two feet high, it is my opinion that he makes it just *two feet too high*. When hives are set so high, hundreds upon hundreds of bees are apt to get lost when return-

ing home laden, as they can not always make their entrance at such a distance from the ground especially late in the afternoon. The nearer the hives are to the ground the better for the bees, even though one has to stoop in examining them.

As to getting better queens in natural than artificial swarming I very much doubt.

I have kept a record of all my queens and have found out that forced queens live as long, are just as prolific, as large and well marked and as good in all and every respect, if not better, than queens raised in natural swarming.

Comb for guides can be fastened in frames or boxes by holding near a hot stove and sticking it on, just as easy as go to grass, without rosin, glue and all that sort of stuff.

With a little practice any one can trim comb with a cold knife much better than when made warm by sticking it in hot water.

Mr. Terry has no confidence in the fertilization of queens in confinement. Well, suppose he has not? That don't prove that the thing can't be did. If Mr. T., or any other man, has any greenbacks to put up on it, I'll double their pile that I can succeed in having nineteen out of every twenty queens fertilized in confinement, and prove it too, beyond all doubt.

Mr. T., like a great many

others, does not believe that drones are pure whose mother has mated with black drones. I know that drones raised from a *pure Italian queen* that mated with a black drone are pure, everybody in the world to the contrary notwithstanding.

With the above exceptions Mr. Terry's article is most excellent.

L. C. WAITE.

St. Louis, Mo., Feb. 4, 1872.

[For the National Bee Journal.

Bees.

Messrs. Editors:—Our bees are in fine order and have began filling up with eggs and brood. We have had them carrying in rye flour for more than a week; it is now the 19th of February.

We find the time again rolling around to make our order for imported queens, and we do wish we knew of some foreign apiary that packed their queens so that more than three out of fourteen would arrive at New York in good order—(that is last year's experience.) We have tried several firms and still the old complaint, the comb breaks down and drowns the bees.

We expect to give Mr. Gray an order, as he is going after his queens himself. We shall also order some direct as usual.

Hoping, now that Mr. Moon has reconstructed things and taken in a new partner (no pun intended,) that the NATIONAL

will come regular to all its old patrons and add many new ones to its list. With many earnest wishes for your success and that of the JOURNAL,

We are yours truly,

OWEN & LADD.

Brentwood, Tenn.

[For the National Bee Journal.

Experience in Bee Keeping.

Messrs. Editors:—Having had very bad luck with my bees through this winter, having lost sixteen out of twenty-seven stands, I thought I would pen a few lines to the JOURNAL, perhaps some friend could tell me what was the matter, as I am young in apirian science. I purchased one colony of Italian bees, in a moveable comb-hive, three years ago and I fancied I was doing extremely well for a novice; in fact I had the bee fever to an alarming degree, and it appeared to be contagious, for there was considerable excitement created in this vicinity in reference to movable comb-hives, but there seems to be an abatement of the fever, in my own case, so that I can now take a rational survey of the case before me. To be short, my bees done extremely well until about the middle of June, the drought having set in so severe by that time as to cut short the flowers, and it continued so throughout the ballance of the season, so breeding stopped with some

in October. I saw, also, that they had not honey enough to last them through the winter and but very few had any bee bread. I saw the case was a bad one but I fed common coffee sugar dissolved in water, two parts sugar and one water, and doubled up to make them strong enough, as I thought, and honey enough to last until spring. When the weather become cold I put them in the cellar where I have always kept them in winter time. I examined them occasionally through the winter and saw that they were dying fearfully and avoiding their excrements on the hive and combs, and an unpleasant stench arising from them, so the first warm day I set them out of doors and since they have not died. My own view of the case is, that the bees having no bread was the cause of them becoming diseased, but I would like to hear from those that have had more experience. R. MUGG.

Quincy, Inniana.

[For the National Bee Journal.

Walks and Talks in My Apiary.

Messrs. Editors:—As you have requested me to give some of my experience in the apiary; the pleasantest and most profitable accupation known to me; an occupation that the mechanic, the farmer, as well as the fairer sex can engage in, I will do so with this proviso—

that you allow me to give the experience of a neighbor of mine who is just commencing in this, at first, rather difficult business. I will begin by reporting a conversation which occurred between us a day or two ago. His name is Lewis P:

"Good morning Mr. M. I came over to see if it was about time to let my bees out. I have had them shut up pretty closely all winter, and as I do not understand all their wants, etc., I thought I would ask you."

"Well, well, neighbor, I suppose it is about time your bees were let out, at least they should be allowed to fly long enough to void their faces, and while they are out I think it would be a good plan to put some unbolted rye flour where they can get it. This will answer very well in place of pollen which they can not get at this time of the year. It will serve to stimulate them, and it will have a tendency to prevent their robbing. Did you try wintering in the cellar this year?"

"Yes, I put part of my stock in the cellar, but I was not careful enough to give them ventilation and lost some of them. I expect it was because I did not leave off the caps of the hives when I put them in."

"More than likely, but I will speak of that at another time. How are they off for honey. Have they plenty?"

"Well, no, I hardly think they have."

"Just so. You should have began feeding last October—that is your weak swarms—but as you did not do that you will have to commence at once to feed your poorest stock. You must feed only just enough to keep them well supplied to prevent starvation. Feeding too much would induce breeding too rapidly for such weak colonies, it being too cold as yet to keep the brood warm. For your feed, make a syrup of about five pounds of No. 1 coffee sugar to two quarts of water. Make the syrup as follows: Put the sugar and water together, put it over the fire and bring it to a boil; skim off the skum; when cold it is fit for use. Put your bees in a warm, dark room; if in the common box hive, turn them bottom side up, lay on a piece of dry comb, fill up the piece of empty comb with your syrup, keep them ventilated and perfectly dark—not allowing them to escape—repeat the feeding as often as you think they need it, until a sufficient amount is given. Should the weather become too warm it would be better to place them on their summer stands. As soon as the trees begin to bloom they will come out all right. Should the weather be rather cool it would be best to examine them often. This will

enable you to judge of their condition. If your bees was in the movable frame hive you could take from your strong stock and give to your weak ones and save a great deal of trouble."

"Well, Mr. M., my bees, many of them, fall on the snow and die. What shall I do with them in this case?"

"You must not let the sun strike the hive. On such days as it is too cool for them to fly and return, be careful to keep them from the warm rays of the wind as well as the sun. Should the warm winds strike the hive your bees will come out rapidly, and many of them will never return."

"Well, I will see to that at once, as I wish to save all my bees. I am much obliged to you for your advice. I am taking the JOURNAL, which is worth everything to me. Good day."

A. M. MOON.

Paw Paw, Michigan.

Under the title of "Walks and Talks in My Apiary," we present the first of a series of articles from the pen of one who, having passed the greatest portion of his life under the same roof with us, we think capable of giving some very useful lessons on bee culture in the way he proposes.

"We want every man and woman that has something of value to impart to send it along,

we will try and make it readable and useful to every beekeeper. Our motto is "onward," and from the present indications we should say our reward would be "Prosperity."

Ed.

[For the National Bee Journal.
The Langstroth Hive.

Messrs. Editors:—In looking over one of our bee journals recently, we see the claim again reiterated that the Langstroth Hive is so greatly superior to *all* other hives for use in the South, on account of its superior ventilation.

Now we have had some experience with that hive, and have come to the conclusion that a great part of this talk is "Much ado about nothing."

All the openings for ventilation in the Langstroth Hive, in hot weather, that we know of, is at the entrance and corresponding opening in the rear of the hive, called a ventilator, both at the bottom of the hive. Now we know that the heated air of the hive will ascend and seek an outlet at the top; the honey-board is stuck fast, air tight, and the openings in the honey-board are covered by the boxes, and they are also made air tight by the bees. Where then is the outlet for the hot air? Mr. Langstroth gives a solution to this problem as follows; he says: "A file of ventilating bees stands inside and

outside of the hive, each with heads turned to its entrance and while, by rapid fanning of their "many twinkling" wings, a brisk current of air is blown out of the hive, an equal current is drawn in." (See Langstroth on the Honey Bee, p. 89.)

Well, if we are to depend altogether on "ventilating bees," why so much talk about the superior ventilating capacity of this hive. The openings in front and rear answer a good purpose to feed the hive with fresh air if there was any opening provided for its escape, after becoming heated.

Again, in his book, page 94, he says: "In very hot weather, especially if the hive stands in the sun, the bees can not have too much air; and the ventilators in the upper part of the main hive should be kept open."

We have used the "Simon pure" Langstroth Hive, as furnished by owners of territory for it, but have not, as yet, been able to find the "ventilators in the upper part of the main hive." True, we find illustrations of the hive in his book, showing an opening in the front of the hive near the top, but this opening seems to have been ignored when the hives were made, that were furnished as sample hives to make by, and it is of these *hives* that are proclaimed "from the house

top" as being the best ventilated ones in existence, that we speak.

We have seen the bees constructing comb in the portico of the Langstroth Hive when they had plenty of room to store honey inside of the hive, could it have been ventilated so that the bees could work in it without danger of their additional heat melting the comb.

Seeing friend Argo's article on hives, recently, and knowing that he was "sound" on the bee question, we had the curiosity to examine W. R. King's "Triumph" hive, and are so convinced of its superiority in respect to ventilation that we shall try it the coming season. In our opinion it will obviate this difficulty of upward ventilation that is so objectional in the Langstroth.

But we have other hives, in our opinion, that are better ventilated than the Langstroth, or at least the bees "hang out" less on them in hot weather than they do on it.

We may be alone in our experience with the Langstroth, but we have given it just as it is, let the fault be where it may.

W. E. LADD.

Brentwood, Williamson Co., Tenn.

[For the National Bee Journal.

The Drone Question.

Messrs. Editors:—I have been very much interested, and not a little amused, by reading

the different articles in your JOURNAL on the above subject. I say *interested*, for I consider the purity of the Italian Queen a matter of vital consequence to bee raisers. It is evident that ignorance of, or indifference to, this item, has flooded the country with grades of that beautiful insect as numerous as those of the Morgan horse. It is my opinion, (and I am not alone in that opinion,) that the only reliable test of the purity of the Italian Queen is the fact that she will *invariably duplicate* herself. A virgin queen is not properly a pure Queen any more than a Princess is a Queen, for as the latter can not govern a kingdom, neither can the former sustain a colony however numerous. A Queen that has mated with a black drone is not *pure*, however she might have been before. That the purity of a Queen is affected by the character of the drone she mates with, is evident from the experiments of W. R. King and many others. A pure Queen must be *purely fertilized*, as well as originally herself pure.

Again I say *amused*, I mean at the looseness with which some people talk on this subject. "A hybrid is an animal or plant produced from the mixture of two *species*." This is Webster's definition, and I believe all naturalists agree with him. Such crosses in ani-

mals, with a few exceptions in the first degree, as the jack and the mare, are barren. That the progeny of the Italian Queen, crossed with the black bee, even to the fourth part of a quadron are fertile, is proof positive that they are both of the same *species*. That the Italian bee is a distinct *variety* I have no doubt, probably as distinct as the short horns and Ayershires among cattle, which are different *varieties* of the same species. Let us call things by their right names and then we shall understand better what we are talking about. For Italian Queens we want *thorough-breds*, not *grades*, then the character of that lovely insect will show itself.

D. W. A.

Du Quoin, Feb. 6, 1872.

[For the National Bee Journal.

Could Not Stand It.

Messrs. Editors :—I wish to say a few words in reply to W. M. Robinson, on page 99 of the JOURNAL, February 15th. He says that Mr. Hosmer proposes to obtain two thousand pounds from ten colonies during the season of 1872. Then he declares that he could not stand it and breaks out with emphasis and makes a statement of how much would be required to be gathered by each colony, and makes a little mistake in the aggregate of only ninety-nine thousand five hundred pounds,

and also speaks of sealing it over, what we never thought of, or at least never put into our offer, as we know that it is more expense to the bees to cap honey than it is to gather it. Now, Mr. R., when I made that offer at Cleveland I considered it liberal. I offered to back it up with a gift of sixteen hundred and twenty dollars without any forfeit on the part of the one who bought the bees if I failed. I had two objects in view; one was to sell my bees for cash, the other to see what could be done in our favorite occupation. I have had offer after by letter, but when I answered them to come on at once, I have heard no more from them. It is now getting late, but I would still be pleased to have some one come forward with the cash and give me a chance to see what could be done.

Now, Mr. R., I would like to have you back down a little before you again call me a dog (though a good one,) through the JOURNAL. Let us see what you say. You say that each colony will be required to gather fifty-five and one-half pounds per day from April to October. Now make a little deduction—say take off the fifty and then you will have room to fall several more bats before you make your statements true to figures. I always wish to be taken at a discount, but that is

to big a discount for me. Then again, I expect to increase the colonies to one hundred before the honey harvest is over. What do you say to that? I do not wonder that the bees have not done well in your part of the country.

J. W. HOSMER.

[For the National Bee Journal.

Bee Journals.

Messrs. Editors:—I have received my second number of the JOURNAL, and am highly pleased with its appearance and contents, and glad to see a bee journal devoted to the interest of all bee keepers, "not a few." In your JOURNAL, with its present manager, we trust we shall get a paper devoted to the general interest of us all—one that will enable many of us to instruct others in apiculture.

I am devoting my time to the study and cultivation of the honey bee. We take the *Bee-keeper's Journal*. We intend to get all the information on the subject we can.

Had it not been for your BEE JOURNAL, I should have lost a colony of bees. In reading your article headed "Dysentery," on examining my bees, I discovered one of them to be badly effected with it. I set myself at work, according to your direction in the JOURNAL, and I succeeded admirably, and to-day they seem to be all right and

lively. So much for the JOURNAL.

Some of our bee-keepers here take up their bees to get their honey. Some of them say the drones were the ones that laid the eggs; the one we call the queen they call the king bee. We would like to convince these men of their ignorance, but can not, as yet. The JOURNAL is doing a great deal to enlighten the inexperienced.

Our bees done very well last year, and so far, I believe, are doing well. JNO. S. SLEITH.

Chenca, Ill., February, 1872.

[For the National Bee Journal.]

Management of Bees in Movable Comb Hives.

Messrs. Editors:—With my short experience with the movable comb hives in handling bees by dividing, I have come to the conclusion that it is not the best way, especially for those that are not well posted with the nature and habits of the busy bee. The movable comb hive is indispensable to successful bee-keeping, I admit; but natural swarming, in my opinion, is the safest and best for the inexperienced even in movable comb hives. I have come to this conclusion from the following facts:

First. I have had my bees swarm naturally after taking out as much as three frames of bread from one hive to build up new swarms; so you see by this,

that to take one or two frames from each hive to build up a new one, would not check the swarming at all when the swarming fever is up; so to be successful, you must have one wing of your queen cropped, and be on the lookout in swarming time.

My second objection is, that combs are not all perfectly true and strait, therefore in dividing the frames from several hives into one, the frames and comb will not fit with exact nicety, as it would if builded by the bees themselves; also, when taking but one frame out of a hive and putting in an empty one, unless the honey is caped over they will lengthen out the cells, and not build in the empty frame.

Third. Swarming is their natural way of propagating their species, therefore is surest and best, in my opinion.

We should endeavor to secure all swarms that issue. This can be done by cropping one wing of the queen when she becomes fertile. When they swarm, by looking in front of the hive, you will find the queen; secure her; have an empty hive, and when they begin to come back, as they are most sure to do, put your queen down in front of the empty hive, and they will go in without clustering on the timber. To prevent second or after swarms, open the hive, cut out all your queen cells except

one; when she hatches, and has had time to become fertile, open again and see if she is laying and all right, and if so crop her wing.

R. MUGG.

Quincy, Owen Co., Ind., Feb. 25, 1872.

[For the National Bee Journal.]

Information Wanted.

Messrs. Editors:—For the first time I will try and make a few inquiries, at least. I had two stands of bees last spring, and have had them two years. They are in the Quimby movable frame hive. Two years ago they did not swarm, nor make any honey, save enough for themselves. Last spring I divided them, one moon-light night, by taking out half of the frames and putting them in a new hive. They done remarkably well, but made no surplus honey. One hive I let swarm. They came out about 4 o'clock in the afternoon, and settled on a cherry tree near the hive. They soon rose and went to the woods. But none of them gave me any honey. They seemed to be in fine condition, and could sting as hard as any bees I ever saw; yet I could take out the frames and put them in very easy by giving them a little smoke, being gentle with them. I want to get a little honey for family use, but they don't go into their boxes. I have three glass boxes on each hive, and in all last season I did not get honey enough to feed a well-fed mouse. Now

can any of you bee-keepers tell me the cause that my bees give me no spare honey? My neighbor's bees, in the old box hive, give plenty of honey for the family use, and some to sell, and a good swarm every year. The white clover is plenty, and in the fall there is plenty of buckwheat near the hives. I hope I may be able, through the JOURNAL, to find out what is wrong with my bees that I get no honey.

Yours, truly,

GEORGE C. KARR.

Hamilton, Illinois.

If our friend will use good, fair sized wooden boxes for his bees, he will be very apt to get his share of honey, providing there is any to get, and a good colony to gather it. The boxes are too smooth for the bees to cluster handy. consequently they refuse to adopt them.

ED.

[For the National Bee Journal.]

Dysentery.

Messrs. Editors:—I see, over the signature of Eli Frazier, in your issue of February 15th, a question, "What is the matter with my bees?" etc. Mr. Frazier, your bees have what is called by bee men, *dysentery*. If your coffee sugar syrup was a good, refined article it did not produce the disease, unless too thin. An over amount of water in syrup or honey will produce

the same effect. It was produced by the long cold weather and the weakness of your colonies.

There are four causes that will produce dysentery. 1. Watery food. 2. A lack of proper animal heat. 3. Coarse food. 4. Too long confinement to the hive. But if everything is just right—the food and temperature of the atmosphere—they will do well six months in a good repository.

So soon as bees can fly out to discharge their fæcis and get a supply of fresh, good food, the dysentery leaves.

A. SALISBURY.

Camargo, Ill., Feb. 26, 1872.

[For the National Bee Journal.

Infringements.

Messrs. Editors:—In the first of March number of the NATIONAL BEE JOURNAL, pages 141 and 142, I find a communication from the far West, with the name of Wm. McK. Dougan subscribed thereto. In the article referred to, our friend says some very hard things against the inventors of movable frame comb bee hives, alledging that there is not a few hives that are using L. L. Longstroth's patented features. He goes still further, and says that nearly every hive that is offered for sale are infringements on the celebrated Langstroth hive.

Will our worthy friend be

kind enough to enlighten the public wherein said inventions are infringements? It is certainly not in the movable frame that was in use before Mr. Langstroth was born; and so far as the dead air space and perforated honey board are concerned, these features are conceded to have been in use in Europe long before Mr. L. obtained his patent. Neither can it be the beveled edge; that was patented by Mr. Clark. But yet there is one feature, I believe, belongs to Mr. Langstroth. Oh, methinks I hear you exclaim, "What is that?" Well, friend McK. D., I will be frank with you, and say it is those little blocks with which you contract or enlarge the entrance of the hive and capture the much dreaded moth miller. This is, undoubtedly, Mr. Langstroth's invention; and here let me ask our worthy friend, what would the Langstroth hive sell for if the well-meaning and unsuspecting farmer knew just how much of the thing exhibited you could make with a legal right to?

I have no doubt our friend will find himself drawing comparisons between moth traps and moth blocks, and settle down to the conviction that there are some very thin places in the ice, and that he is approaching them very fast. Give us more light. E. H. BARBER.

Wood Bank, Ind., March 7, 1872.

[For the National Bee Journal.

Short vs. Long Articles.

Messrs Editors:—I congratulate you upon the improvement made in our JOURNAL since the late change of editors. I am pleased, too, to make the acquaintance of so many new friends, for I feel as though I had met with, and was well acquainted with, the numerous correspondents of the JOURNAL.

It is very interesting to hear occasionally reports from all parts of the country, from so many reliable bee brothers, and more especially the *sisters*, giving their success and failures, with the many new incidents, etc., etc.

But, Messrs. Editors, there is one thing that some few are getting to do, that is a great draw back to the interest of the JOURNAL, that is, *too long articles*. We want articles that are short and sweet, just to the point. Not that I am finding fault with the *quality* or subject of any article; far from it. I never tire reading about bees; but then we must all remember that some one else wishes to speak through the JOURNAL, and if you publish all these long articles it cuts off us "little fry." Write short articles, brethren; "yes, and *sisters*, too;" write to the point, and then we will have a greater *variety* of reading, so everybody will find something interesting in the JOURNAL.

Remember, if you write long articles, and the editor sees fit to condense them, you will say he left out "*just what I wanted, most of all, printed,*" and then somebody is—well, no, beekeepers never get mad, if they do not get stung.

Condense your own articles, and say just what you want printed, and if you have more to say, say it next week, and by following this course the JOURNAL will have such a great variety and number of good articles, that the first thing we know, Bros. Moon & Schofield will be sending the JOURNAL *weekly*.

Now what do you say, friend? Shall we have a great variety of reading matter, and a weekly, or the old semi monthly, with a few *long* (too many) dry articles? Short and sweet, is my motto.

H. NESBIT.

Cynthiana, Ky., March 7, 1872.

[For the National Bee Journal.

Odds and Ends.

Messrs. Editors:—I have been thinking, for sometime past, of complying with your request to write for the JOURNAL, but have been so busy that I really could not find time to do so. But the busy season now being over, I will endeavor to occasionally try to add my mite to the already well filled and interesting columns of the NATIONAL BEE JOURNAL.

From the many reports we

have seen and read, it seems that our brother bee-keepers of the West have been reveling in a flood of delicious sweets during the past season. If there be anything that will make the bee-keeper good natured and amiable it is an abundant yield of nature's most delicious sweet, the pure white honey. It ought to at any rate, but it would seem that there are certain bee-hive venders who do not manifest a very sweet disposition just at present. We presume a plentiful shower of green-backs would help to soothe their nervous systems, although we imagine that the time is past when they can scare honest apiarians into paying them royalty for that which they receive no equivalent in return. We hope that the day will speedily come when this vexed question of "infringement" will be definitely and forever settled.

We see that there is a desire manifested by many bee-keepers to have the JOURNAL published weekly instead of semi-monthly. However desirable such an arrangement may appear to many, we think that our interests will be better subserved with the JOURNAL twice a month than oftener. In the first place, the great mass of bee-keepers will read it more closely and carefully now than they would if it were a weekly; besides the editor will have

more time to devote to the paper, thereby enabling him to present us with a better paper than he could if it were a weekly. Of course this is merely our opinion; our readers may coincide with our views or they may not; but we find it requires much time to *carefully* read the three periodicals now published, which are devoted to the interests of apiculture in America. We hope that all the bee-keepers will give their hearty support to them, for they are all *worthy* of a generous patronage. The present advanced condition of our lovely pursuit of bee-culture is owing more to our ably conducted bee journals than to any one—yes, to all other things combined. But we find that we have run off the track—a common fault of ours—for we started out with the intention of telling you something of the condition of bee-culture here, the past honey season, etc. Bees have been kept in this section ever since the first settlement of this part of our country; some bee-keepers having large apiaries nearly half a century ago. But the advent of the moth miller, combined with careless management, "bad luck," "poor seasons," and many other excuses, which shiftless bee-keepers are ever ready to bring up; and last but not least, the introduction of a host of the (so-called) improved

bee-hives have been the means of greatly reducing the total number of stocks kept, so that the busy little bee has, on the whole, seen rather hard times. But this state of things is rapidly passing away, and an enlightened and systematic method of bee-culture is fast dawning upon this fair land of ours. Many intelligent people are becoming interested in our pleasant pursuit, and the fact that it can be made not only pleasant, but highly profitable, also serves to increase their ardor and enthusiasm. Prominent among the scientific bee-keepers of this section is Mr. J. M. Beebe, of Cassadaga, N. Y. He has made this subject a study for several years, and has made it a practical success. He has perfected several valuable improvements, which we consider to be of much practical value to the bee-keeping public. Among these is his new style of bee-feeder, so arranged that honey, water and rye meal may be fed at one operation. Our readers are probably well aware of the great benefits to be derived by stimulating their bees in early spring to rear large quantities of brood, and we recommend the Beebe feeder as being best adapted to the purpose for which it is designed, of anything yet brought to our notice.

Upon the whole, the season has been about an average one

for the bee keeper here. Although we have not been favored with such a superabundant yield of nectar as our Western brethren have, we have secured a fair yield, enough so that our bee-keepers wear smiling countenance and appear to be happy generally.

The spring opened mild and early, but May was a cold, backward month, which retarded early swarming. Basswood did not yield the usual quantity of honey, owing to the cold weather.

Honey is of an excellent quality this year, and as most swarms have enough to carry them through the winter, we look for strong swarms next spring.

Well, we have hardly begun our story yet; but, lest we weary you, Mr. Editor, we will defer the rest for some other time.

I hope this may find friend Moon, with quill and scissors in hand, in the editorial chair.

HERBERT A. BURCH.

Fredonia, Chautauga Co., N. Y.

The above article was written some time in December or January, but was, by accident, laid aside in the envelope it came in. Friend Burch will pardon us this time, and we will be more particular next. ED.

J. ARCHER, of South Haven, Vanber Co., Mich., took from one swarm of bees, last season, 253 lbs. of honey in the comb.

[For the National Bee Journal.]

Returned Answer to Gallup.

Messrs. Editors:—In the first place, I would ask my friend Gallup what he meant in his article in reply to friend Sallee's inquiry. If not, as he stated, page 570, October number, 1870, as follows: "Yet as a queen cell built over an egg, and fed as a queen from the start, I have not been able to discover why they are not as good as natural queens."

Now, reader, I take exceptions to the above, on the ground that if we deprive a colony of its queen, they immediately commence on a grub to rear another, and not the egg, and believed that my friend Sallee could not succeed in rearing queens on the above plan, unless he removed all combs containing larvæ and give egg only in their place. Having tried rearing queens by giving eggs only, and found the bees would commence enlarging their cells immediately, also deposit royal filly before the eggs were hatched, and found such queens invariably small, and I considered them worthless; hence my objections to Gallup's theory.

I then stated how the reader could prove which theory was correct, Gallup's or mine, which I will state again, as follows: Deprive a colony of its queen, all the brood and eggs, etc.; then

give a frame of brood containing eggs and larvæ in all stages. Twenty-four hours after, examine and see if they have commenced to enlarge the cells containing any of the eggs. I think you will find that they have commenced on cells containing the larvæ in every instance. Any one following the above directions can prove whether my idea is correct or not.

The other plan was this: Deprive a colony of its queen, larvæ and eggs; now give this colony a frame of comb containing eggs only that have not been laid over twelve hours; twenty-four hours after, go back and mark every cell where the bees have commenced enlarging the cells containing the eggs. Now, reader, be sure and keep track of these cells. For why? Because the bees will be very likely to rear more queens from the larvæ, after they become a suitable size to raise good, large queens. Now, right here, is a chance to prove the correctness of my ideas, that is, if the bees have commenced on a cell containing the egg, and then commence on a grub several days later, mark those two cells, and when they hatch, see which is the largest, nicest queen. Put them in two different hives, and see which is the most prolific and longest lived.

Now, reader, I think I have stated the matter at hand so that

any one can understand it, even Gallup.

Gallup, in his reply to me, page 108, says: "Benedict said further, on the above article, I think they will find they have commenced on the cells containing the larvæ in every instance, [if they have both eggs and larvæ.] He then goes on to tell how to proceed to test the matter. Mind, reader, after saying they never commenced to enlarge the cell containing the egg, [if they have larvæ,] but always commence on cells containing larvæ, [if they have them.] Then he wants me to go back and mark every cell where the bees have commenced with the egg [where they have no larvæ.]

Now, reader, the above in brackets I have added, as they are in the experiment alluded to, but Gallup saw proper to leave them out for some cause. "O consistency, thou art a jewel." Probably this is the reason why my friend G. can not get the hang of my scribbling any better than he could understand me when I was trying so hard, at the Indianapolis Convention, to tell him how to raise queens.

But to the point, again. Gallup gives us two more ways to raise good queens in his reply to me. If I understand him correctly, he says the bees first construct incipient queen cells, then eggs are deposited in

them; when they hatch, the bees feed so-called royal jelly, finish out the cell, etc. Now, if I understand Gallup aright, he says to Sallee, "A queen cell built over an egg, and fed as a queen from the start, they are as good as any." His next idea is, that the bees build incipient cells first, then the egg is deposited in it, and the queen raised will also make a good one. Now I doubt whether there are ever many queens reared in either of the above ways in natural swarming.

Now, to my friend's third way of raising queens I will quote *verbatim*, for I enclose his plan here laid down, which is this: "Deprive a strong colony of bees of their queen at or about swarming time, or at any time when they have an abundance of brood in all stages, abundance of nursing bees, and are gathering forage, and a large majority of the queens you raise under these circumstances, will be good ones—prolific and long lived."

There, reader, I could not tell better how to raise queens than the above, if I should try.

AARON BENEDICT.

Bennington, Ohio.

P. S. Gallup says I do not like the terms natural and artificial. I would rather prefer natural than unnatural. All right, again. We agree exactly. Bees know but little how to make

anything that is unnatural or artificial. They can't see it.

A. B.

Now, reader, what looks most singular to me in all this is, that Gallup has come right on to my plan, the one I have always advocated, and, also, the one that has led to this controversy. Mind, reader, he has told us, time and again, if we deprive a colony of its queen—as he now recommends—that the bees will commence on larvæ so far advanced, as workers, they were worthless. Now, kind reader, we are coming to a point, which is this: My opinion is, that if we deprive a strong colony, as represented, eggs and larvæ in all stages of development, the bees will take a grub in a certain stage of development, according to their instincts, and develop a bonafide, genuine queen. Why bees do not sometimes commence on a grub, too far advanced, I leave to others, but I suppose their instinct teaches them better. I find the first queens hatched are as large and well developed, if not more so, than those hatching several days later. One would naturally suppose that if bees took grubs as far advanced as workers, as Gallup supposes, they would be small, and resemble the workers, but I never have seen such cases in first queens hatched—hence, my conclusions—but I find if we give bees eggs only,

and they commence immediately to rear queens, all such queens are invariably small. I have seen them not much larger than a house-fly, with wings reaching farther back than their abdomen.

Now, one word in conclusion. Gallup tells us that bees commence enlarging cells over the egg; again he says they build their cells first, then the egg is deposited, and then he tells us to deprive a strong colony of its queen, etc., and let them take a grub, or he says they will, and tells us the bees will rear good queens in either, or all these ways. Methinks my friend Gallup is just leading me on, as he says, which I will repeat, blanking one of his words, as I claim I have not attained to it. Here it is:

“Well, now, kind reader, we had our friend G. try to tell us how to raise queens, at the Indianapolis Convention, and I really wanted you to know some of his superior—— on this question, therefore I have led him on as I have.”

Now, again, in conclusion, I wish to say to the kind reader, if I have showed any superior—— I wish them to lay it all to our friend Gallup, for he has led me into it, and I will tell them in my next how I believe queens are raised in natural swarming.

AARON BENEDICT.

Bennington, Ohio.

[For the National Bee Journal.

Correction.

Messrs. Editors:— Having been traveling in the West for a month past, I have not seen the late numbers of your valuable JOURNAL; but since my arrival here I learn that one of your correspondents has given publicity to a report that reflects unfavorably upon the decisions of the examiner in charge of agricultural implements. I first heard the story about a year ago, but the Commissioner of Patents was the party named, with whom I was not personally acquainted, but I have known Prof. Brainard, the examiner, for many years, and I assure your readers that the report, so far as it reflects on his character must be false. He was Professor of Chemistry in the Medical College of Cleveland, Ohio, and when he received the appointment as Examiner here, he was placed at the head of one of the most important departments in the Patent Office, namely, Agricultural Implements and Products of Agriculture.

It is a common remark of attorneys here, that Prof. Brainard is one of the most thorough, critical, and conscientious men in the office. They say his initials are on most of the drawings in his department, and a case is sure to be lost if there is any evidence of priority of

invention in any one of the thousands of applications for patents on agricultural implements in his department. It is possible that some seek to obtain patents with money where their case lacks merit, but no one acquainted with Prof. Brainard could believe for a moment, that he could be tempted from the path of duty.

He authorizes me to say that while it is true that he has consulted Mr. Wagner in reference to his knowledge of foreign inventions, he has never communicated to him regarding pending applications, nor received from him gratuitous advice relating to official business.

H. A. KING.

Washington, D. C., February 26, 1872.

[For the National Bee Journal.

Non-Flying Fertilization.

Messrs. Editors:—As the inquiry by private letters for my method of fertilizing queens in confinement are becoming numerous and troublesome, and to undeceive those who have been misled, and to guide those aright who are in search of the true track, we subjoin a minute and accurate description of my arrangement and method to secure the fertilization of queen bees in confinement. Before I begin I wish to say to Dr. Jewel Davis, that I am not *dead*, but have been quite poorly all winter with bronchitis, and not

much prospect of being any better before the May flowers bloom, when I can get around among my pets, the bees.

First. We build the fertilizing room, which is in dimensions six feet by eight, and eight feet high to the square. This room is studded, as though we were going to weatherboard it. We put in a frame, two feet by three, at one corner for a door. We make a tight floor, and plank up the sides and ends two feet high, commencing at the bottom. We now get eighteen yards common brown cotton cloth, (not too open,) cut it into two pieces, of nine yards each, sewing the two together lengthwise. These two widths of the cloth will cover the remaining open space not planked up, with the exception of the top and door. It is best to stretch the cloth on the inner side, putting in a tack now and then, until it is tightly stretched all around. It will take two persons to accomplish this, so it will be done right. After getting it stretched right lay sticks of wood or a lath over the cloth on each studding and nail them down. This will prevent the wind from tearing the cloth loose; also tack the cloth to the edge of the plank, placing a strip over the edges as over the studding. Having done this much, we finish the roof by getting us a pole, or studding, ten feet long, which we set up

right in the center of our room, nailing it fast to the floor, and bracing it by nailing to it four braces, four or five feet from the floor, nailing the foot of each brace to the floor.

We now get sixteen yards of common, dark calico, and cut it into six bias pieces and sew them up, when they will be in tent shape. We leave an opening at the top for our pole, having a gum strap fastened in said opening, that it may fit closely around the pole, coming down on a pin, which we have put through, two or three inches from the top. We now tack the bottom edges of the calico to the inside of our frame, covering or overlapping the top edge of the cotton cloth. We now have a house of whose roof is made of calico in tent shape. We next make a tight fitting door of plank, leaving an opening near the top twelve or fifteen inches square. This opening we cover with a piece of No. 12 or 16 wire cloth. In the far end from the door, and near the top of the room, we arrange a shelf, upon which we place old honey combs, the cells of the upper side of which we fill with sweetened water and honey. We are now done with the fertilizing room; but have just reached that part of the programme which is to be strictly followed, or you will fail in every instance. Altho' it may seem that all is yet to be

done is merely to set in the room a colony or nucleus, with an unfertile queen, with plenty of drones, and the work will be done. I tell you this is not so. You may make the finest greenhouse in the world, and fill it with all the honey-producing plants, even though you have enough to produce honey sufficient for ten or twelve strong colonies, and yet you will fail to have queens fertilized therein. And why? From the simple fact that the drone is intimidated by the presence of the fiery workers. If you so arrange it that the drones and queen can fly in and out your nucleus boxes, while the workers can not, you have it right. I know some of you have already said it can not be done. Well, we shall see.

2d. In the first place we never raise our queens in little boxes, six or eight inches square. We form our nucleus in our hives, four to a hive, with three full sized brood frames to each, by using division boards—letting the bees out from one in front, from another at the back, and one out at each end. Thus they do not conflict with each other; and should you on any occasion let them fly in the air for fertilization, the young queen will seldom get into the wrong place when she returns. We raise our queen cells in the full colony, discarding every cell that

is not capped over by the ninth day, and especially all the small ones. We insert our queen cells in our nucleus, and on the top of the board that covers the nucleus, we paste a piece of paper, on which we note the time when it will hatch. We now make some fertilizing boxes (so called). These are all made so that they will receive two brood frames each. Let the frames hang upon a small strip tacked on the inside. Have your boxes wide enough that you can easily get your finger and thumb between, to handle the frames readily. Make the bottom of these boxes of No. 10 or 12 wire cloth. When the frames are hung in the boxes they should not touch the wire bottom. Nail a strip three-eighths of an inch square on top of the wire cloth, all around the bottom of the box. This is to hold the wire cloth up off the brood frames, upon which we will place it.

We now have several queens which have just hatched. We go to a strong colony, open it, and pick out two combs that have plenty of maturing workers with their heads sticking out of the cells. They are making their first appearance. We shake, (not brush), all the bees off; if there is only one left, we pick her off. Be sure not to leave a single worker in these two combs, unless it has just crawled out of the cell. We

now place these two combs in our wire-bottomed box. (We forgot to say that we have a three-quarter inch hole in one end of this box, near the bottom, with a button over it). We then go to a hive that has plenty of fine drones. We open it and select (not an old drone that has been flying in and out of the hive for weeks,) but those that have light colored heads. They are young drones, which have never yet seen the outer world; (you do not want those that have emerged from their cells, but those that are a week or ten days old. They can easily be told if one is familiar with the inside of a hive), and when you turn them loose in the houses we have built, they will not know but that is the dimensions of the world in which they are to play their part and die. But if you take an old fellow, he is like a spoiled child. When you attempt to curb him he will laugh and attempt to get out. We put these young drones in our wire-bottomed box, through the three-quarter inch hole, for it will not do to take off the cap of the box, as the young bees just hatched would crawl out. We next go to our nucleus hive and put in the young queen. Then we place these boxes over the brood frames of a strong colony, and let them remain there five or six days. At the end of

that time, we take off the boxes with the young *unfertile* queen, drones, and young workers, and set them in our fertilizing house on the floor, with a woollen cloth or piece of carpet under each.

3d. Let us now see what we have in these boxes. *First*, a young unfertile queen, six or seven days old, anxious to meet the drone. She passes in and out three or four times a day. *Second*, we have twenty or more drones, that have never flown in the open air. They are not conscious of a larger and brighter world abroad. They fly around and around, and are satisfied—even glad to know that they have such a world as this, free from the firey old workers. Here they have it all to themselves. *Third*, we have a fine lot of young workers, only six or seven days old, too young by ten or fifteen days to leave the comb, even for play. Do you now think we let the queens and drones fly without the workes?

As soon as a queen begins to lay, we remove the box, making up a colony from the frames that were in them, and giving it the queen. If not, we place these boxes out under a shed setting them on an old blanket or other woollen cloth, until such time as we wish to use them. When we want more queens fertilized, we proceed

as above. We never leave any of those boxes in the fertilizing house till the workers began to fly out. Here is the whole secret of fertilizing in confinement. Keep out the workers. We know that when the queen meets the drone on the wing naturally, the workers are far beyond, at a distance, sipping nectar from the flowers. During the month of June, when we have thousands of drones, if you wish to know where the drone yard is, take the course that your bees are flying from the apiary, and by the time you have traveled six or eight hundred yards, you will come to a place where the whole atmosphere seems filled with bees. No man ever heard more buzzing. Some would think that a large colony of bees were passing over head. No, they are drones from your apiary. Here are tens of thousands of them. When your young queen leaves the apiary, she takes the same course led by the hum of both workers and drones. On and on she goes, and before she is aware of it, she has reached the desired haven. But do you find any workers flying around in this locality? No, not one. They are all beyond in the fields.

Now, brother bee keepers, I fear I have wearied you; but it takes considerable space to explain this non-flying fertiliza-

tion, so as to make it fully comprehended. Although I have been very particular to describe it in detail, I doubt not some will fail to understand it, for I know it is next to impossible for half a dozen men to read an article, and all understand it alike. If there are any questions to be asked, please ask them through the *JOURNAL*, between this time and the first of April, as I shall be too busy after that date to furnish answers. When any man tells you he has had queens fertilized in the hive, and four at a time, just tell him for me, that he says—what's not true. No man ever yet contracted the entrance to his hive and let out the workers, and kept the unfertile queens from coming out, and thus had them fertilized in the hive. If he did, all I have to say is that he either has larger unfertile queens than I have, or his workers are smaller than mine. It can't be done. I have had many queens fertilized last season by the foregoing method, carrying out every maneuver just as I have presented them; and my old fertilizing room now stands in Trimble county, Ky., where I had my apiary the past summer. But whether I will build one here is not yet decided. I think I shall not have use for one, as I find but few colonies of black bees near me. W. R. KING.

Franklin, Kentucky.

EDITORS' TABLE.

A Few Words to our many Readers.

When we commenced the publication of the NATIONAL BEE JOURNAL we had one great object in view. That object, gentlemen, was to publish a Bee Journal in the interest of the people—not to advocate selfish motives for any one. We have endeavored to deal alike to all, giving each and every one the same privilege in every instance when asked. Articles have been sent for publication from different parties and have received a hearing, which has caused quite a fluttering among some of the bee keepers. Yet we have not taken sides with any one, nor do we intend to, unless we are forced to it from justice to ourselves. Furthermore, we wish it distinctly understood that we do not wish to lend the pages of the JOURNAL to vindicate the validity of patent bee hives, as there is a way that these matters can be settled correctly, and thus save the BEE JOURNAL much credit from wrangling and discord. Still further; we do hope that there is not a bee man in the land, who possesses so thick a piamater over the

brain, as to even think the pages of the NATIONAL BEE JOURNAL will be lent to any one in this wrangling about who is right and who is wrong upon a matter that the justice and wisdom of an impartial court should have decided years ago, and would had they had an opportunity.

The object of the JOURNAL is, or should be, to advance apiculture, and not wrangling and discord; and we believe all those that are looking and wishing for the great overthrow of ignorance and error, and the building up of this our more noble cause (apiculture in our country), will ask us to publish anything that even will excite those that are seemingly more fond of such reading than that that will advance the true principles of apicultural literature.

We wish to publish the JOURNAL for the benefit of every bee keeper in the land, and we can assure our many readers that we are gratified to hear reports from all parts of the country congratulating us of the flattering prospects of the JOURNAL. Our motto is on-

ward, and we trust prosperity will be the reward.

WE have received many valuable communications within the last few days, but they will have to lay over for want of room, also several advertisements to late for this number. In our next we will try and get out some of those that have been on hand for sometime. Our friends will see the importance of being as brief as possible with their communications. If you will follow friend Nesbit's advice given in this number, you will have a better JOURNAL. That is right, friend Nesbit, your head is level. Give us articles often and brief as possible, thus enabling our readers to hear from a great number of correspondents, for such we have.

IN February, No. 15, page 116, there occurred several mistakes. In tenth line read "reports," instead of "upstarts." In next to last line of first paragraph, read "advisedly" instead of "advesably." In fifth paragraph, 14th line, read "securing" for receiving, and 16th line, "covered" instead of "carried." in 7th paragraph, 4th line, for "interwoven," read "*interrorem.*" In 5th line, for "skinners" read "skunks." In 13th paragraph, for "exception" read "reception." In last par-

agraph, "sinking" in place of "Sneaking."

We did not read the proof of the above article, or perhaps we should have noticed the mistakes, which we cheerfully correct.

OUR readers will notice the advertisement of Wm. H. Furman, of Cedar Rapids, Iowa, for Italian Queens, full stocks, etc. Mr. Furman has been a breeder of Pure Italian Bees for a great many years, and has now a reputation that will commend him to the public. His queens is of such stock that he can recommend them to any one. Give him a trial.

IN our last issue we stated that Mr. Huff, of Michigan, had sold all his Alsike Clover Seed, but we were misinformed. He has seed yet to *sell*. See his card in another column.

HOLMESBURG GAZETTE, a local paper, edited by W. F. Knott, of Philadelphia, is one of the best local papers we have chanced to see. It contains Agriculture, Horticulture, Apiculture, and in fact all that is necessary to make an interesting paper. Success to its Editor.

LADIES OWN MAGAZINE, a progressive literary, household and fashion monthly, edited by Mrs. M. Cora Bland, of this city, is on our table. The fol-

lowing are among the embellishments for March number: Beautiful plates of spring styles for 1872, engraved expressly for the *Ladies Own Magazine*. The magazine is gotten up with much taste, filled with the choicest reading matter of the day. Mrs. Bland is certainly deserving of much credit. The magazine should be read in every family. Price \$1.50 per year; single copies 15 cents.

Questions.

Colonel Joseph Leffield wishes us to answer the following:

"After a queen has been dead from three to six months, can you tell if she has been a pure Italian queen, mated with a pure Italian drone, or if she has been mixed with the black bee, or has been fertilized by a black or hybrid drone?"

We will answer the Colonel, by saying that we think it impossible to tell. However, we can not tell what might be the result, were that "microscopic" brought to bear in this case. It might throw much light upon the subject, as we are told it never lies, when brought to bear.

BEE KEEPERS' ASSOCIATION, N.Y.
The attendance at the Onondaga Bee Keepers' Association at the City Hall yesterday was very slim, owing to the very stormy weather, no doubt. Not much business of importance

was transacted. The following resolution was offered by T. L. Hosford, and adopted:

Resolved, That in the opinion of this Association, L. L. Langstroth is not entitled to a re-issue of his patent bee hive, from the fact that he has not improved it any for twenty years and others have made improvements they can not afford to do without, and it would not be fair to pay him for their own improvements.

The meeting adjourned until March 21st, at the same place at 10 A. M.

WILLIAM H. FURMAN,

BREEDER OF


PURE ITALIAN BEES,

And Proprietor of the right of the Langstroth Hive, for Iowa.

I have been engaged in breeding Pure Italian Queens for the market for the last twelve years. My prices are as follows:

One stock of Italians, with Langstroth hive	\$20 00
One stock and farm right of Langstroth hive	25 08
One Queen, warranted pure ...	5 00
Three Queens, warranted pure..	13 00
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 I may have a large lot of queens fertilized in confinement, at a heavy expense; for these my terms shall be as follows:

One Queen, under the care of Dr. N. C. Mitchel.....	\$30 00
One Queen under the care of Mrs. E. S. Tupper, or Wm. R. King	50 00

Please do not send orders for these too fast. Address

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ITALIAN QUEENS, bred in full colonies, and warranted pure. For price-list, etc., address, with stamp, to T. H. B. Woody, Manchester, St. Louis Co., Mo.

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Cards inserted in this Directory, and copy of the paper sent one year, for \$10 per annum, cards to be four lines or less. For each additional line \$2 per annum will be charged. A line will average six words.

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Pure queens, tested in my apiary, \$5.00.

Full Stocks in single chamber, Langstroth Hives, \$15.00.

Queens sent by mail, post paid. Purity and safe arrival guaranteed. Stocks delivered at this express.

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*Delaware, Grant, Randolph,
Jay and Blackford,*

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MUNCIE, IND.

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A little book that reveals much that is new, and places the bee in a ration light. It develops a perfect system, reducing the multiform and crude theories of the laws of apine instinct to consistency. The following paragram headings will give some idea of the character of the work: 1. Bee keeping 20 years ago. 2. And now. 3. 500 or 700 pound colonies. 4. 1,000 pounds in prospect. 5. Why not all? 6. How to do it. 7. Bees devoid of reason. 8. Educating bees. 9. Design. 10. Immutability laws. 11. The Queen not a Queen. 12. Eggs. 13. Drones an abnormality. 14. Cause of the production of drones and queens. 15. Laying workers. 16. A plebscete. 17. Why workers lay eggs. 18. *Parthenogenesis* and organic reproduction. 19. All eggs are buds. 20. Vegetable reproduction. 21. A normal colony. 22. A fact. 23. Another fact. 24. Perfection not yet. 25. Workers in classes. 26. A perfect colony. 27. A natural swarm. 28. A living hive. 29. How they start. 30. How they progress. 31. Honey storing. 32. The brood nest. 33. Honey-dome. 34. Brood-nest limited. 35. Comb-building unlimited. 36. All worker comb. 37. Bee bread. 38. The queen on her circuit. 39. Eggs and larvæ. 40. Wax-workers. 41. Comb builders. 42. Honey gatherers, and old age. 43. Bee life. 44. Want of room. 45. The hornet's nest, an analogue. 46. More room. 47. Breaking the crust. 48. Cracks and holes. 49. The full hive. 50. In the honey boxes and "hanging out." 51. An independent cluster. 52. The unity broken up. 53. More room. 54. When to give room. 55. A hive ten inches deep. 56. A hive three feet deep. 57. Queens on the bottom of the comb. 58. Brood crowded out by honey. 59. The remedy. 61. Loss by swarming. 62. Why attempts to control swarming fail. 63. The Mel-extractor over-rated. 64. Drones again. 65. Spaces between and around frames objectionable. 66. Empiricism in bee culture. 67. A falacy. 68. Experiments and results. Now in press. Price, by mail, 20 cents. The third volume of "Annals of Bee Culture" will be ready in April. Price 50 cents.

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To Bee-keepers everywhere; an examination of fifteen minutes will, I believe, satisfy any disinterested, practical Apiarian, big or little, of the superiority of the

"PEERLESS" HIVE

over any and all others; and I challenge comparison with any hive on the American Continent, North, South, East or West.

Peerless Circular and Beginners' Manual sent free to any address on receipt of two stamps.

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Farm Right and Sample Hive	19 00
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State Rights will be sold at reasonable prices for cash, bankable paper or exchanged for unencumbered real estate at a fair valuation.

Any township or county, not sold, will be exchanged for Bees, delivered in good order, transportation paid, at the Depot of the L. & N. R. R., at this place.

Send all money by Express, Registered Letter or P. O. Money Order on this place.

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Ask for your tickets via the I. B. & W. Route, and see that they read via Indianapolis and Peoria.

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Gen'l Manager, Urbana, Ind.

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I AM still rearing the ITALIAN BEE in Purity. Queens and full Stocks for sale.

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People going to Iowa, Nebraska, Kansas, California, or any point in the Territories, will study their own interests by going "By way of Burlington," for the rates of that line are always as low as any other, and it is the best Route in the West, therefore you are more sure of your *safety* and *comfort*.

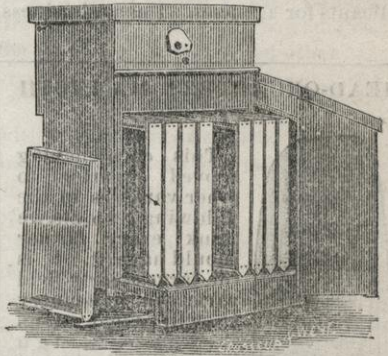
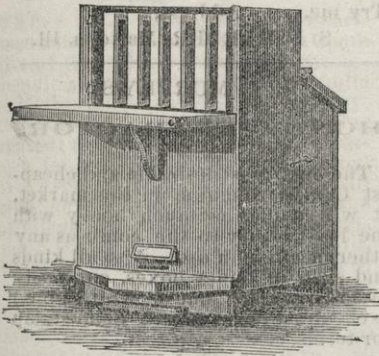
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Movable Frame Bee Hives.

THE WESTERN QUEEN BEE HIVE.

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This is an indispensable article for the home of the honey bee. It is not only a perfect Bee Hive, but an equally perfect Queen Raiser, Feeder, fertilizer, Nuclei Box, Surplus Honey Department, etc., all combined under one head, which makes it the most complete and perfect Hive in use. This language may seem strong and bold, but, nevertheless, they are not half told. One must see it and know its practical workings to know its perfections, as pertaining to the Home of the Honey Bee; and its first cost does not exceed that of other practical Hives of the day.

State Rights Low For Cash.

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FOR THE STATE OF OHIO.

Farm Rights and Hive \$8.00. Townships from \$25 to \$100. Counties from \$100 to \$400.

Will exchange Township and County Rights for horses, sheep, etc.

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Send for our Circular of Queens. Full Stocks, (in any style of Hive,) Bee Veils, Queen Cages, Bee Books, and everything in the line of Apiarian supplies. Our Circular contains much information of value to the amateur bee keeper, Send for it to

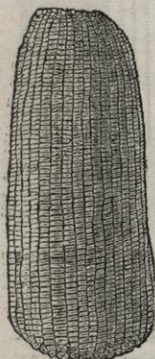
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Italian Bees, Queens, Hives, Rights and Territory for sale at lowest possible rates. Warranted as good as the best. Agents wanted everywhere; large commission given. Circulars and price list sent free. Special Circular to applicants for agencies. I mean business. Try me. Address,

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This corn having proved superior to the following varieties in the other respects, we think every farmer should have it. It is the largest early field variety in the country. It will yield more, shell more, weigh more, fill better at both ends of the ear, has greater depth of grain, and will do better on all kinds of soil than any other variety. Price of select

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No corn sent C. O. D. Send stamp for circular. Address

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PRICE—including two hives—\$15.00.

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The best, most desirable and cheapest Geared Machine in the market. It will empty as much honey with the least injury to the comb as any other machine in use. Also all kinds and sizes of honey boxes, cut ready to nail together (out of white pine,) as cheap as the cheapest. Send stamp for terms, etc. Address

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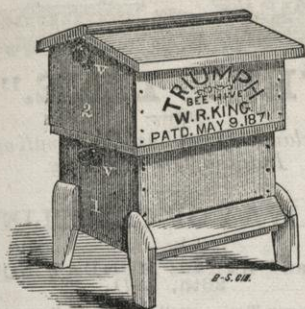
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THE ALLEN HIVE has no superior for cheapness, simplicity of construction, durability and convenience. It contains nine comb frames, eleven inches deep by fourteen inches long inside the frame. It can be converted into a two story hive by simply dispensing with the bottom board of one, and the cap and honey-board of another, and setting the one on top of the other. When thus arranged it can not be surpassed in adaptation to the use of Honey Extractor. The outer case can be lifted off, which gives access to the combs on all sides. The combs can also be lifted out at the top.

Hives by the single number,
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Farm Right... 5 00
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One hive and Farm Right... 8 00

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 One sample Hive and Farm Right 10
 One Hive to those wishing to try it. 5

Send for circular and price list.

Italian Bees and Pure Tested Queens.

For full colonies in Triumph Hive \$20
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 For 6 " " " " . . . 30
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New and Valuable Vegetables,

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 Marblehead, Mass.

BEEES! BEEES!!

PRICE LIST, and much other original and valuable matter, will be found in our circular for 1872. Sent for one stamp. QUINBY & ROOT,
 3t-4 St. Johnsville, New York.

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FROM THE
KANSAS APIARY.**

Pure Italian Queens, Colonies, Movable Comb Hives, Individual, Township and County Rights and Books on the Bee supplied to order. For particulars, address.

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Baldwin, Kan.

ALSIKE CLOVER SEED
For Sale. Per pound, 30 cents; per bushel, \$15. Address,
HENRY HUFF,
Jonesville, Hillsdale Co., Mich.

E. KRETCHMER, Importer and Breeder of Pure Italian Queens. For circulars and particulars, address, Coburgh, Montg. Co., Iowa.

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ROUTE WEST.
23 MILES THE SHORTEST.**

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The ONLY Line running PULLMAN'S celebrated Drawing-Room Sleeping Cars from

**NEW YORK,
Pittsburgh, Columbus,
Louisville,
Cincinnati and Indianapolis
TO SAINT LOUIS,
WITHOUT CHANGE.**

Passengers should remember that this is the GREAT WEST BOUND ROUTE for *Kansas City, Leavenworth, Lawrence, Topeka, Junction City, Fort Scott, and St. Joseph.*

EMIGRANTS TO KANSAS, for the purpose of establishing themselves in new homes, will have liberal discrimination made in their favor by this Line. Satisfactory commutation on regular rates will be given to Colonists and large parties traveling together; and their baggage, emigrant outfit and stock, will be shipped on the most favorable terms, presenting to **Colonists and Families** such Comforts and Accommodations as are presented by **no other Route.**

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JOHN E. SIMPSON,
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"BEE LINE."

Cleveland, Columbus, Cincinnati and Indianapolis Railway.

BY WAY OF CRESTLINE

ON and AFTER MONDAY NOV. 26th, 1871,

Passenger Trains will Leave Indianapolis, and arrive at points named below as follows :

STATIONS.	No. 4.	No. 6.
Indianapolis	10:10 a m	*7:55 p m
Muncie	12:36 a m	10:12 p m
Fort Wayne	4:00 p m
Union	*1:45 p m	11:29 p m
Bellefontaine	4:10 p m	1:46 a m
Crestline	*6:40 p m	4:20 a m
Cleveland	9:45 p m	*7:30 a m
Buffalo	4:10 a m	2:00 p m
Niagara Falls	10:10 a m	4:30 p m
Rochester	*7:15 a m	5:20 p m
Albany	4:10 p m	1:30 a m
Boston	11:20 p m	11:00 a m
New York City	6:30 p m	6:40 a m
Indianapolis	10:10 a m	*7:55 p m
Sidney	3:16 p m	12:52 a m
Toledo	5:40 a m
Detroit	9:10 a m
Crestline	*6:40 p m	4:20 a m
Pittsburg	1:25 a m	*12:10 a m
Harrisburg	11:25 a m	10:35 p m
Baltimore	3:05 p m	2:30 a m
Washington	5:00 p m	5:50 a m
Philadelphia	3:05 p m	3:00 a m
New York City	6:00 p m	7:00 a m

Palace Day and Sleeping Cars

Run Through as Follows:

On "No. 4"—From Indianapolis to Crestline, Cleveland, Buffalo and Rochester, without change, and from Crestline to Pittsburg, Harrisburg, Philadelphia and New York without change.

On "No. 6"—From Indianapolis to Crestline, Cleveland, Buffalo, Albany and New York, without change.

On Saturday "No. 6" runs through as usual, either by way of Cleveland or Pittsburg, reaching New York on Monday morning at 6:40

All trains leave Indianapolis daily, except Sundays.

*Stop for meals.

Union Accommodation leaves Union Depot at 3:35 p. m.

Ask for tickets over the "Bee Line," via. Crestline.

E. S. FLINT,
Gen'l Sup't, Cleveland.

C. C. GALE, Div. Sup't, Indianapolis.

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Ft. Wayne, Jackson & Saginaw RAILROAD.

The most direct route to

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Trains Run by Chicago Time.

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	Mail.	Express.	An. Acc.
Jackson.....	7 15 A. M.	12 17 P. M.	4 25 P. M.
Hanover.....	7 55	12 52	5 14
Jonesville.....	8 25	1 17	5 57
Reading.....	8 55	1 47	6 40
Fremont.....	9 31	2 25	7 37
Angola.....	9 53	2 49	8 05
Pleasant Lake.....	10 05	3 02	
Summit.....	10 17	3 14	
Waterloo.....	10 34	3 29	
Auburn.....	10 48	4 42	
Fort Wayne.....	11 45	5 55	
INDIANAPOLIS.....	6 20 P. M.		
CINCINNATI.....	8 50	6 30 A. M.	
LOUISVILLE.....	11 00		

TRAINS GOING NORTH.

	Angola Acc'n.	Express.	Mail.
LOUISVILLE.....		8 30 A. M.	11 00 P. M.
CINCINNATI.....		...	7 00 A. M.
INDIANAPOLIS.....		3 50 P. M.	10 25 P. M.
Fort Wayne.....		11 10 A. M.	4 10 P. M.
Auburn.....		12 08 P. M.	5 13
Waterloo.....		12 20	5 27
Summit.....		12 37	5 42
Pleasant Lake.....		12 49	5 54
Angola.....	6 15 A. M.	1 20	6 20
Fremont.....	6 47	1 42	6 43
Reading.....	7 42	2 21	7 20
Jonesville.....	8 25	2 50	7 45
Hanover.....	9 05	3 18	8 13
Jackson.....	10 00	3 45	8 50

At JACKSON—Close connections are made with Michigan Central, Jackson, Lansing & Saginaw, and Grand River Valley Railroads.

At JONESVILLE—With Lake Shore & Michigan Southern Railroad.

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W. A. ERNST, Sup't.

ROBERT RILLIE, Gen'l Ticket Ag't.

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THE

Indianapolis, Peru & Chicago RAILROAD

Are now running two through Express Trains daily to Chicago via Michigan City, without change of cars, making close connections

At CHICAGO for Milwaukee, Janesville, Madison, LaCrosse, St. Paul, Rockford, Dunleith, Dubuque, Peoria, Galesburg, Quincy, Burlington, Rock Island, Des Moines, Omaha and San Francisco.

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At LAPORTE for Elkhart, South Bend and Goshen.

At PERU for Fort Wayne, Toledo and Detroit.

At BUNKERHILL for Marion and points East.

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All night trains are provided with the newly improved and luxurious WOODRUFF PARLOR AND ROTUNDA Sleeping Coaches.

Baggage Checked through to all points.

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Indianapolis, Cincinnati AND LAFAYETTE RAILROAD.

The Great Through Mail and Express Passenger Railway Line to

CHICAGO!

Kansas City, St. Joseph, Quincy, Des Moines, Omaha, Milwaukee, Burlington, St. Paul,

And all points West and Northwest.

THIS IS THE ONLY LINE Running the Celebrated

PULLMAN PALACE SLEEPING CAR Between Indianapolis and Chicago.

This is the only Line Running 3 THROUGH TRAINS DAILY From Indianapolis to Chicago.

After December 1, 1871, trains leave the Union Depot:

3:10 A. M. FAST LINE; arrives at Lafayette, 5:40 a. m.; La Crosse, 8:25 a. m.; Crown Point, 9:45 a. m.; Chicago, 11:50 a. m. Daily, except Sunday. PULLMAN'S PALACE SLEEPING CAR on this train.

12:55 P. M. MAIL AND EXPRESS; arrives at Lafayette 3:45 p. m.; La Crosse, 6:30 p. m.; Crown Point, 7:50 p. m.; Chicago, 9:45 p. m.

This train connects at Chicago with C. & N. W., C. R. I. & P., and C. B. & Q., for all points in the West and Northwest. Daily, except Sunday. PALACE DAY CAR on this train through to Chicago without change.

8:00 P. M. NIGHT EXPRESS; arrives at Lafayette 10:45 p. m.; La Crosse 2:30 a. m.; Crown Point, 4:00 a. m.; Chicago, 5:50 a. m.

This train connects at Chicago with C. R. I. & P., C. & N. W., and C. B. & Q. R. R.'s, for all points in the West and Northwest.

Daily, except Sunday. PALACE SLEEPING CAR on this train. Berths can be secured at Telegraph Office in Union Depot.

Be sure to purchase Tickets via Indianapolis, Cincinnati & Lafayette Railroad, thereby avoiding delay, and arriving at CHICAGO IN ADVANCE OF ALL OTHER ROUTES.

Tickets on sale at all Principal Ticket Offices, and in Indianapolis at Union Depot Ticket Office.

WM. POWELL, Passenger Agent, Indianapolis.

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