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THE

NATIONAL

BEE JOURNAL.

SEMI-MONTHLY.

MOON & MITCHELL, Publishers,

Indianapolis, - - - - - Indiana.

Vol. II.

JUNE 15, 1871.

No. 7.

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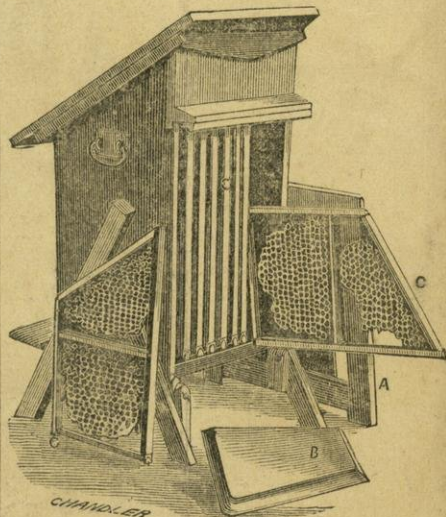
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T H E

National Bee Journal.

DEVOTED TO THE CULTURE OF THE HONEY-BEE.

Vol. II.

JUNE 13, 1871.

No. 7.

Magnitude of the Bee Interest.

From an address delivered by Mr. Quinby before the Northeastern Bee-Keepers' Association, we make the following extracts :

In proof of our progression in bee culture, allow me to compare results of the new principle with that not so far advanced. At the American Bee Keepers' Convention, recently held at Cincinnati, there were present one hundred and twenty bee keepers, who owned 5,051 stocks of bees, and had sold from them 85,065 pounds of honey. (Some of these bee keepers were engaged in rearing queens, which reduced their honey somewhat.) We learn by this comparison that three hundred hives produced over one-quarter as much as the five thousand. A little figuring shows us that the five thousand stocks have produced over four hundred thousand pounds with this management.

Send your man to college and educate him. If he does not care to use his knowledge in this direction, it will benefit him as much as a thousand other things taught him there and

never made available. It is time that our agricultural colleges had a professor of apiarian science. Some one inquires, is there enough of it to pay? What are a few pounds of honey compared with other and greater interests? Did you ever think one moment on this question? I propose to examine a little, to see what we can make of it. I requested the agricultural reporter of the *New York Tribune* to ascertain as near as possible the amount of honey sold by all the dealers in the city this season. He kindly gave me the aggregate—211,000 pounds northern honey, and nearly as much southern or West India. The boats of the firm at Little Falls, carried to New York market 80,000 pounds. Of this amount, my friend furnished 25,000. (This was all surplus; the same colonies exist yet to do the same another year.) It has been estimated from close observation, that this was produced from about thirty square miles. Taking this as a basis, we can see what the State produces. Our State contains forty-seven thousand square miles. Can you tell why every thirty miles throughout this forty-seven

thousand, will not produce the twenty-five thousand pounds of honey? If thirty square miles give us twenty-five thousand, what will forty-seven thousand give? Thirty-nine million one hundred and sixty-six thousand six hundred and sixty-six pounds! We will say nothing about the amount produced by the other States at present. Should you think think this is more than the whole State will average, say you deduct nine million one hundred and sixty-six thousand six hundred and sixty-six pounds for rivers, lakes, etc.

And again, it will be said we have unfavorable seasons—our experience proves it—say one year in three. This will reduce the average one third more, leaving twenty millions as the product of one year. Like the manna in Israel, it is freely given, and if it is not taken in its season, it is gone forever. It has come and gone for centuries. What quantities wasted in the past, because we have not had the sense to perceive our own interest? Go back fifty years, and reckon at the same rate for this State alone. We have a billion pounds wasted, actually refused, when brought to our very doors. This is not the first instance of suffering for our ignorance. Our farmers suffer by paying to other States their hard-earned dollars for sweets that we might have—not for the asking, for it is already bestowed—but for the taking. Our agricultural societies have failed in their duties, in not attending to this immense waste. Instead of educating farmers to perceive and have it, they have made the premium for “best bee hive,” the most prominent, and have encouraged patents on worthless productions, thereby retarding bee culture more than by any action they have ever advanced it. Is the question asked, what shall be done with

this vast amount? I might answer by asking another. What is done with the millions pounds of cheese annually produced? When our market is supplied, a few shiploads might be consumed abroad. When the price is reduced, the demand will increase in proportion. Competition of course will reduce the price, and like other farm products, we must increase the amount to make it up. Already experiments have been made showing that this amount, vast as it is, is to be doubled.

It is proved by careful observation that the bees in elaborating wax and constructing combs to hold the honey as it is collected, reduce the amount one-half. Hives of bees, in like condition, standing side by side, one making combs to hold their honey as gathered; the other having empty combs to hold it provided, showed a difference of two hundred and six pounds. One stored one hundred and fifty-five pounds, the other three hundred and sixty-one pounds. We have a machine to empty the honey without breaking the combs, which may be returned to the bees for refilling. Here is a difference of over two hundred pounds in one hive in one season with it. I will not attempt to show the difference in the aggregate in this instance; but enough to make us look about to find a substitute for the combs constructed by the bees. The machine for throwing out the honey is pretty well introduced, and now when we need it most and can appreciate it more than at any other period since bee keeping has been attempted as a business, we have just made the discovery that artificial combs can be practically made, and made of material indestructible to the moth worm. They are accepted by the bees and used as their own. When the present supply of combs is

used up we can not well afford the honey to elaborate the wax, nor spare the time in a honey harvest, to construct more. Franklin says, "a penny saved is two earned." This case is no exception.

This is not all mere theory. I have a voucher for all the essential facts. I can have no dollar and cent interest to induce others to go into bee keeping. At the end of a few years, when these things are appreciated and practiced, I shall, if I live, have the satisfaction of having contributed a mite to encourage it.

For the National Bee Journal.

Written by a fool
About Queen Cells.

Mr. Editor:—In the NATIONAL BEE JOURNAL for April, 1871, friend Gallup, in his letter, page 44, says that the man who signs himself a "Big Bee" asks him (Gallup) if he ever saw a queen deposit an egg in a queen cell? To which he replies that he never did. Now, why did friend Gallup not stop there? and then every sensible bee man would believe that he told the truth. But he goes on to say that he has come so near to seeing the queen deposit an egg in the royal cell that he did not doubt it in the least. Now, how near did Mr. Gallup come to seeing the queen drop an egg in the royal cell? He did not come as near to it as the boy that saw *five hundred foxes* in the corn-field. After reasoning with the boy, and telling him he would have to discount considerable on that number, he said he did

not doubt but that he saw *four hundred*. Now, because the boy did not doubt that he saw *four hundred foxes* in the field, does not prove anything, and less in the case of Mr. Gallup, for he did not doubt but that the queen did deposit eggs in royal cells. Now, there was this difference: the boy established his faith on what he believed he actually saw, and, notwithstanding his undoubted faith, he reduced the number from five hundred down—from the plural to the singular number *one*, and that one he knew went through the field, because he saw it. He did not say that he saw one fox going towards the field, and then, from analogical reasoning, believe that five hundred followed.

Now, the boy had good proof that one fox went through the field, because he saw it, but Mr. Gallup says he never did see a queen drop an egg in the royal cell, and never saw her abdomen in a royal cell, and yet he does not doubt it, but says that the best German writers never dispute this question; hence, he takes it for granted, and down it goes. If friend Gallup would study Langstroth, Quinby, and a few others, together with his best German writers that never dispute this leading question, I think he will be prepared to teach any kind of bee-ology that the bee keeping fraternity may ask, but, peradventure, they may not want.

Mrs. E. S. Tupper, of Brighton, Iowa, says: "Now, of a certainty, do I know that the worker bee will transfer the egg from the worker cell to the new-made royal cell, and rear a queen," for, in making up an artificial swarm, she put in one frame of dry comb that had not been in any hive for over six months, and, on opening the hive in due time to look after the royal cells, to her surprise, she found a sealed queen cell on the dry comb. Mr. Gallup, will you please tell us how the egg or larvæ got in that queen cell, if the workers did not put it there? Did the queen deposit an egg there? No; that could not be, for there was no queen in the hive. I had a similar occurrence in my apiary last season, in making an artificial swarm, which convinces me of the truth of Mrs. Tupper's statement.

Mr. J. M. Marvin says, on the 45th page, same number of the NATIONAL BEE JOURNAL, as follows: "And I furthermore believe that bees always take a larvæ several days old to rear a queen, if they have such at hand, and never an egg, unless they are compelled to." Now, how is this? Do Mr. Gallup's queens lay larvæ already hatched before being deposited in the royal cell? It would seem from Mr. Marvin's belief that there would be no other alternative. But, peradventure, Mr. Gallup's queens may differ

from Mr. Marvin's, as he (Gallup) says that he has no doubt the queen makes all the deposits, and not the workers; and then, in case of rearing queens from the larvæ, according to Marvin's theory, she would have to lay them in the royal cell, over several days old. And further on, page 45, left-hand column, Mr. Gallup says: "In fact, I believe that in natural swarming the cell is built and the egg deposited in it by the queen in every instance," (that means without an exception.) What will Mr. Gallup ask for one of those queens that will make the royal cradle, deposit the egg in it, or larvæ, as the case may require, nurse her, and bring her up in the way she should go, that when she is old she may not depart from it? It makes no difference how much I talk to my queens, they always have the best of the argument, for the queen has to furnish the eggs for several thousand little receptacles daily, and that is indispensable to the well-being and support of the family, and should she neglect her duty in the way that instinct has taught her, the house would soon become depopulated, and she would cease to live.

Will Gallup please inform us whether the queen ever elaborates wax for drone and worker cells, as he says, in natural swarming? The cell is built by the queen in every instance

and why not drone and worker cells?

He then takes up Mr. Benedict, who says bees always take a larvæ several days old, and never an egg, unless they are compelled to. He is next after "Big Bee," who says that when bees want to raise a queen, they select an egg or grub, and build a cell around it. "Now, certainly," says Mr. Gallup, "what will our German bee keepers say to such stuff?" Now, has Mr. Gallup got his face pinned square on the tail end of a German bee keeper's coat, where he can see through a glass darkly, and know all the internal operations of the bees? and if so, can he tell us when the love of the queen for her infants is converted into hate and revenge, which nothing but murder will satisfy if she remain? Now, if he can see and know all that he affirms to know, I think he will be able to tell the hour, nay, the very *moment*, when a pig ceases to be a pig, and becomes a hog.

Mr. Editor, I have a proposition to make to the readers of the NATIONAL BEE JOURNAL. It is this: that we make up a purse of *two hundred dollars* for the NATIONAL BEE JOURNAL, to be paid in at the next North American Bee Keepers' Association, to be held at Cleveland, Ohio, on the first Wednesday in December, 1871. Now, my dear readers, who will respond to

this call, to be one of forty, and who to be one of fifty? But let me here caution you not to fear and hold back; should it overrun two hundred, three or four, it will do no harm. The editor will publish a list of all names as sent in from time to time, and the class under which they subscribe, whether to be one of forty, fifty or sixty, and so on. And as A always stands at the head, you may put A down for one of forty. Should there be any one who would like to take two of forty, the door is open.

Now, in responding by subscribing to this call, it will show who they are that are anxious for a first-class journal. Those who hold back will be looked upon like the boy that said he did not care whether school kept or not, for his part he was going a fishing.

Yours truly,

T. R. ALLEN.

Syracuse, N. Y.

[For The National Bee Journal.]

Drone Question Again.

Mr. Editor:—On page 78 of the NATIONAL BEE JOURNAL, for May, Mr. Benedict, after stating that the fertilization of the Italian queen affects the purity of both the worker and drone progeny alike, asks the following question: Why is it that there is so much difference in the color of the drones, if impregnation has nothing to do

with them? I would answer his question by asking another one or two. First, why is it that there is scarcely a queen (and probably not one) of the Italian variety who will breed all bright-colored queens, if they are a pure and distinct variety.

If my memory serves me correctly, friend Benedict stated at the National Convention of bee keepers that he did not regard the Italians as being pure. He thought there was a pure bee somewhere, but did not know just where to find it. In presence of these statements I would ask him how we are to expect an impure queen to breed either queens or drones uniform in color; for, according to his own belief, all Italian queens are dashed with blood from some other variety of bee. And he certainly ought not to forget that throughout the entire animal kingdom, where two different varieties of the same species mingle their blood, the offspring will never breed uniform; and no matter how often they are bred to either of the two varieties from which they sprang, there will still be a remainder of the blood of both varieties, and it will occasionally show itself. Perhaps it may not through several generations, and upon a sudden make itself distinctly visible.

Now I hope Mr. Benedict will answer my questions candidly.

I believe he is a candid man, and it is the facts I am looking for; in this case all of us should search diligently for them.

In making the above statements, and in asking questions, I have not resorted to theory as a means of support, but have based all upon observations, not of my own alone, but upon that of all who have had experience in stock breeding of different kinds. But in regard to theory, I have only to say, that we should distinguish between that which is based upon speculation, and that which is supported by scientific demonstration; and I do not propose to support anything but what has the sanction and support of science in this case, and that I shall contend for.

G. BOHRER.

[For The National Bee Journal.

Is the Italian Bee a Hybrid?

Mr. Editor:—I see that Dr. Bohrer and others are bothered in breeding pure Italian bees, and doubting their being a pure and distinct variety of the honey bee. Now, sir, as the new system of bee culture depends largely upon the docility, industry, hardiness and superior qualities of honey gatherers, and as it is likely to lead new beginners astray and lessen their efforts to keep this valuable variety of the honey bee in its purity, in this

country, this error should be promptly corrected.

Virgil speaks of and describes the yellow bee as existing in his time, more than two thousand years ago. It also appears that Spinola accurately describes all the peculiarities of this bee, which he found in Piedmont as early as 1805, and fully identified it as the bee described by Aristotle, and calls it the Ligurian bee, a name now very generally adopted in Europe.

The following letter from Mr. Wagner, will show the importance attached to this species, by some of the most skillful and successful apiarians in Europe: "My Dear Sir, the first account we have of the Italian bees as a distinct race or variety, is that given by Captain Baldenstein, in the *Bienen-Zeitung*, 1848. Being stationed in Italy during part of the Napoleon wars, he noticed that the bees in the Lombard-Venetian district of Valtelin, on the borders of Lake Como, differed in color from the common kind and seemed to be more industrious."

Now sir, I could quote from others of the ablest apiarians of the world, to show that the Italian is a pure and distinct variety, and that they breed a uniformly marked worker, but enough for the present. Now, sir, all this corroborates our experience in breeding the Italian

or Ligurian bee, which we have done with complete success for several years.

What others do,

Why, with patience, can not you.

Now, sir, I am too old a breeder of other stock, not to know that the offspring from a cross, will not show marks of both varieties, extending clear from the extreme of one variety to the other, and every intermediate between said extremes, of make, size and color. Now if the Italian is a mere hybrid obtained from crossing the Egyptian and common black bee, they would be easily detected, even by the novice bee-keeper.

Now, sir, it matters not how the Italian bee came, but that it has been bred in-and-in for, probably, many hundreds of years, where found in Italy, until it has become a pure and distinct variety, will not admit of a doubt. Now, sir, it is equally well established, that a queen reared from the egg of a queen that has mated with a drone of any of the other varieties, would be a hybrid to all intents and purposes, and would produce a hybrid progeny drone worker and queen; and by breeding from such queens, sold by unprincipled venders, is the way our friends have got into so much trouble in breeding pure stock. Let me give a word of advice, without appearing egotistic. Go buy you a

queen from some responsible breeder, one on whose word you can rely, and breed her to none but pure Italian drones, and my word for it, your trouble will be at an end.

WM. W. ROOKER.

Carmel, Hamilton Co., Ind.

For the National Bee Journal.

Summer Management of Bees.

Mr. Editor:—I will give my method of summer management of my bees in the two-story Langstroth hive, and thereby answer several correspondents at once.

I put the honey-board on early in the spring, and as soon as the bees begin to be a little crowded, I take the honey-board off, and put a set of empty combs in the upper story, and thus prevent swarming. When the combs are nearly filled, I take the honey out with the honey machine, handling those combs carefully that have brood in them. When I put the combs back into the hive I change the combs having brood with some of the outside combs in the lower part of the hive, keeping as much of the brood below as possible. Out of fifty-two stocks so treated last summer, only one swarmed, and I think it lost the old queen, or superseded her, and started a number of young queens, the first of which came off with a swarm, and went to the woods. The fifty-two stocks

gave little over thirty-six hundred pounds of honey, three thousand pounds of which I sold at an average of twenty-three and a half cents.

At the end of the great honey season, if I want swarms, I set the hive I wish to make a swarm from off its stand, and put an empty one in its place. Then I take the combs out of the old stock, and brush all the bees and queen off in front of the new hive, then move another strong stock off its stand, and place the one with combs that the bees have been brushed off of in its place. I do this when the bees are working freely. The returning bees of No. 2 will make the stock strong enough to take care of the brood that the bees have been brushed off of. If I have a spare fertile queen, I give her to them; if I have none, then I give them a queen cell. In September, if the bees that are driven out have not gathered stores enough to winter, I feed them pure honey.

For the last four years I have moved my bees on spring-wagons about twenty miles, to a large poplar (*Liriodendron tulipifera*) grove, and let them stay there until the time for poplar blooms is over. Then I take the honey out, and move them to a large linwood grove (*Tilia Americana*), and let them stay there until linwood is done blooming, then take the honey

and move them home for fall pasture, if there is any.

In the spring, when I put the combs in the upper story, if I should have no empty combs, then I raise two or three up from the lower story, and fill the empty space in both stories with empty frames.

P. W. McFATRIDGE.

Carthage, Ind.

[For the National Bee Journal.]

More About Worker Eggs.

Mr. Editor:—Since the publication of the April number of the NATIONAL BEE JOURNAL, I have had two letters of inquiry on Mr. Marvin's article (and, right here, allow me to remark that in the future he need not make any excuses for writing, but rather for not writing *often*) and they request me to reply through the JOURNAL. Those inquiries state that all swarms that come out of themselves, they always supposed, were natural swarms, to all intents and purposes; but I shall have to disagree with that theory. I have had, at different times and in various cases, swarms come out that were, to all intents and purposes, as much forced swarms as they would have been providing I had forced them out myself; and in all such cases there are no queen cells and no previous preparation. I have had a large natural swarm come out, while the young bees were

sporting in front of an adjoining hive that was not full of bees or brood, and out would come the queen and every bee that could fly, and join the natural swarm. In this case they usually take a grub or larvæ several days old, and in all my experience of forty years, these cases have been so oft repeated that I think I can not be mistaken as to the cause.

Again I have had swarms repeatedly forced out with heat (two last season) and in these cases I think I am not mistaken as to the cause. It is said that bees will not desert unsealed brood, but either great heat or destitution will repeatedly cause them to desert their brood. I do not think there is any danger of bees swarming out of an adjoining hive, under the excitement of smelling, hearing or seeing other stocks swarm, only in the middle of the day, or at the time when the young bees are likely to be sporting in large numbers; and this time varies considerably on different days, and I consider this a plain case of desertion, for every bee that can fly (except those out in the fields) leave *en masse*, that is, they usually do. There are exceptions to all rules, as we have abundance of reason to know; therefore, whenever we find a swarm or stock taking a grub or larvæ already hatched to raise a queen from, we invaria-

bly consider it unnatural from some cause. We have stated before, that in case of supercedure, they repeatedly take a larvæ and build a cell over it, and then out comes a swarm, in many cases, accompanied by the old queen; and frequently, when more than one young queen hatches, the first swarm comes out accompanied by a young queen, leaving the old queen and more cells, or a queen just hatched, in the hive. But in this case, I consider it a case of forced swarming. I do not, in the least, doubt that Mr. Benedict's queens, that hatched from eggs were worthless, as he states; but any one would naturally suppose that a person of his experience would know that there was some other cause than the one he attributes his failure too. Mr. Marvin explains, or gives a hint of the true cause of the position Mr. Benedict has taken, to-wit: That unnatural, artificial, or forced queens are better than natural ones *is untenable*, because it is not supported by facts, nor by practical bee-keepers anywhere.

Mr. Marvin says, "I have seen a queen from which the worker bees were all as small as house-flies, etc." When I stated, some time since, in the *American Bee Journal*, that in two cases I had known bees to be bred in-and-in until the entire stocks were dwarfs and

ceased to swarm or be of any profit, several correspondents thought it was some of Gallup's gas and not reliable. Now, I have to thank Mr. Marvin for coming out with what he has seen, because, in the mouth of many witnesses, everything is established, that is, if these witnesses are not giving theory instead of practice.

I acknowledge the receipt of one of Mr. Dadant's Comb Guide Presses, and right here I will say another thing, in the frame I use the bees have always built straight comb, so I shall have no use for any such machine, and will forward it to any one wishing to use it, at their request.

Mr. V. Acker states that he is fifty-nine years old. Any one would think that he ought to have seen a movable-comb hive before this, as they have been in successful use twenty years. I think it would pay him to go and see some practical bee keeper and walk upright like a man. This walking in a thunder storm, through the mud, and on hands and knees, is not man-like.

E. GALLUP.

For The National Bee Journal.

Reply to Mr. Benedict.

Mr. Editor:—In reply to Mr. Benedict, I will say that the egg is deposited in the royal cell in natural swarming in every instance. Whether deposited by

the queen or workers, I can not say positively, yet I firmly believe that they are so deposited by the queen. In natural swarming the queen is started from the egg in every instance, and you will always find that if the cell is built over a larvæ, it is just as much a forced queen, although the old queen may be there, as it would be to deprive a swarm of its queen, and compel to raise one; and, furthermore, every man, woman and child can see this for themselves by simply looking into the hive.

To the reader, I will say this much: if you find queen cells started over the larvæ, something is wrong; it is either a case of supersedure, the loss of the queen, a swarm forced out by the heat, or by the excitement of adjoining swarms, or something unnatural about it; because natural queens are raised from the egg, as a general rule, in every case. I know this by actual experience, and when Mr. Benedict, or "Big Bee," or any one else, says to the contrary, they say what every bee keeper in the land can prove to the contrary by simply looking for themselves. Why Mr. Benedict should take the stand he has, (that is, that his forced or artificial queens are larger than natural ones,) is beyond my comprehension, for, mind you, *natural queens are raised from the egg*, and they are as large as

Mr. Benedict's, raised from the grub or larvæ. What are the conditions for natural queen-raising or natural swarming? Abundance of forage, abundance of bees, consequently great heat, etc. Mr. B.'s raising queens in nucleus is unnatural.
E. GALLUP.

[From the Live Stock Journal.

Plain Words to an Amateur on Profitable Bee Culture.

Are bees profitable? is a question both frequent and reasonable. We can reply no, and yes. If you insist on managing bees as did your ancestors, you will find it a discouraging task, but if you will manage them as our present knowledge of their habits and requirements tell us they ought to be managed, the whole result must be one of profit and pleasure. The management of bees, such a fancied "stumbling" block to many, resolves itself to a mere question of accommodation to circumstances. To raise a crop of wheat, there is need of a certain method of culture. That method is the law of its growth. You obey that law in the selection of proper soil, sowing at proper seasons, and the application of suitable fertilizers. You may brave that law; but your crop will be a failure. Keep it, and with the ordinary blessings of Providence your wheat raising will be a success. You can not raise wheat suc-

cessfully without knowing its habits, and governing yourself accordingly. The very first element in successful culture is the intimate knowledge of the bee, and all that it requires. It can not be acquired on the instant by the amateur from books. Every step that you take through the labyrinth mysteries of the bee hive must be taken by yourself. Your own hands must divide the clouds that obstruct your vision, your own feet feel and stumble over everything that impedes your progress. The theory of your books is only the shell, the outside husk, through which you must grow into an experimental practical life.

I would not therefore advise, even if you were ever so *theoretically* wise, if profit is your object, to begin bee culture with more than two hives. The hive I should use, should, in its general character, have these strong points to recommend it: It should give the bee-keeper the greatest possible control of the combs, the best facilities for artificial swarming, the greatest room for the application, with the least expense of animal heat, and present the greatest provision for comfortable and economical outside wintering. I recommend outside wintering because I believe it can be made, under the most favorable conditions, the very cheapest

system. I have a neighbor whose hives under what I conceive to be these conditions, will be brought through a season of six months, at an average expense of fifteen pounds of honey per hive, which amount I think can still be lessened in some slight degree. This for outside wintering is better than carefully constructed winter quarters, at least for this latitude. (42°)

But to make bee-keeping profitable, assuming that your stocks are strong in the beginning of March, although your hives may have honey in excess, being a system of judicious feeding within the hive. Ordinarily it has been the habit, not to feed, if there was honey enough to carry through to the flower season. I know many good apiarians will not call my advice orthodox, and yet "I know whereof I speak." Bees wait for the first flowers before they are stimulated to breeding to any great extent, they therefore do not enter their first harvest with a very heavy force of workers. But might they not? There are qualities of honey which they can gather all about them and is lost to the bee-keeper through the minority of the workers. Is it not the wisest then for you to feed in such a measure, as shall seem to your bees most like gathering from natural sources, that your stocks may enter their first honey harv-

est with a *strong* force? Surely such is a reasonable theory, and experience adds her strongest testimony to its practical wisdom. The time in the spring *when* to feed will of course vary with the latitude. The tenth of March with me the weather is generally warm enough for the bees to come up and accept the food, which I give daily in small quantities in connection with a liberal offering of unbolted rye flour, which they gladly accept as their first pollen, in lieu of a better.

You have now arrived at that point, where you ought to elect in what special product of your hives you will receive your profit. Bees or honey? One is generally at the expense of the other, when we come to the question of the *largest* profit, although it is common to have a fair and satisfactory income from both. What you want out of your bees, is *all* they can bring you in dollars and cents; not a *fair* income only. So your question is bees or honey? If bees, then at the expense of all your surplus honey, by artificial swarming multiply your stocks to the very utmost, they will stand and keep your stocks strong in numbers, and heavy in stores. If honey, you must proceed in a different way. You want all the bees your hive produces kept at home, and at work in the boxes. Your hive

must therefore provide room for a strong and constantly increasing force of workers, without compelling any to hang idly outside because they have no accommodations within. The greatest number of bees that you can keep at work in the greatest number of boxes, will give you the greatest amount of box honey. Keep down the non-producing population by a judicious excision of the drone comb, and while you thus control the number of consumers, see that the producers are not weakened in force by swarming. Prevent swarming entirely if you can; your knowledge of the economy of the hive will tell you best how to do that. A perfect non-swarming hive I do not believe to be in existence, and yet there are many ways in which a swarm about to depart may be kept at home. While you need for this purpose the exercise of the greatest watchfulness and care, you will nevertheless be paid for all your extra attention. A hive thus managed ought to afford you one hundred, to one hundred and twenty-five pounds of box honey. I can point to an instance in which three hundred pounds were obtained, while two hundred is very common. To produce such results you will of course need to study the best way of applying boxes, that the bees may have the facility for labor; while the prices

for your honey will depend much on the size of the boxes, the neatness in which they are finished, and the freedom with which they show their contents. Small boxes weighing when full from four to four and one-half pounds, are much the most desirable in New York market.

[For the National Bee Journal.]

Best Mode of Securing Surplus Honey.

Good
Mr. Editor:—Being selected by the business committee of the North American Bee-Keepers' Association, in convention assembled at Indianapolis, on December 21 and 22, 1870, for speaker on the best mode of securing surplus honey, and of marketing the same, I got excused by stating my inability to speak the English language before an audience, and under the promise to communicate what I had to say, to the columns of the NATIONAL BEE JOURNAL.

If I undertake to communicate my way of doing things, I must ask the readers of the JOURNAL for kindness enough to overlook the many blunders I will necessarily make when I undertake to write in a foreign language. For this very reason I hope I will be excused if I only mention what I consider new, or at least not practiced, by many, or the most of bee keepers.

(The question with me is, how

) shall I get the largest amount of surplus honey without running down the number of my stocks, or lessening their productiveness for another season? The most apiarians agree that preventing a stock from swarming, will, in most instances, cause it to lay up larger stores of surplus honey for a season or two; but it will subject such a stock to the danger of saving an old, worthless queen, that will, in the third or fourth year, cause its decline and, perhaps, its loss. If this is the case we should strive to avoid this danger. My aim is at present to let a vigorous colony swarm only once in a season, but manage the swarm and old stock so that both can be united when swarming is over, or at a time when the production of brood would be a damage to the amount of honey that is gathered by both stocks.

In my location the honey harvest is fully over about the 10th of September. All worker bees, hatched from eggs, laid August first, are worthless, as far as gathering honey is concerned, but these workers will, in the earlier period of their life, help secrete wax, build comb and nurse brood. The right time would, therefore, be about the end of the honey harvest, between August 10th and 15th; and [at that time I unite all my surplus colonies. But how can you do this, some-

body would be ready to ask. This is very easy indeed, if you have prepared your stocks for it. I manage in this way: Before swarming commences I examine every stock, select its queen, and clip her wings. When the first swarm issues, the queen can not follow; it is picked up by the person in attendance and put in a queen cage and laid aside. Then the hive, from which the swarms issued, is moved off a few yards, and an empty hive placed on its stand, the caged queen laid before the entrance, and the return of the swarm waited for. When quite a number of the workers have gathered around the entrance, the queen is liberated, and will, with her swarm, hive itself into the empty hive. When all is quiet, the old hive is set on top of the young swarm. Deprived of nearly all its workers it will not swarm again, at least not more than one out of twenty-five swarmed a second time last season. If boxes are necessary on the young swarm, the over-hive is simply lifted up enough to let the boxes come under. There is no danger, at least in my location, that a second tier of boxes will be necessary. If this is not done before, about August 8th both hives are examined. If both queens are vigorous and prolific, one of them is taken away and used for other purposes; if one is

found too old or imperfect, she is killed and then I wait twenty-four hours. I then remove one of the honey-boards, put on a super-hive, without bottom, and put into it all the comb, with bees, brood and honey of the hive that is to be united. In a yield of honey there is not the slightest danger of a fight, at least I had not a dozen bees killed in one hundred hives so united last August. In three instances I was unable to find one of the queens, and I immediately united both colonies the same way without causing a fight. What became of the second queen I never found out. I found only one swarm in the hive in September. If there is a good prospect for gathering honey, all the honey, or nearly all, found in both colonies can be taken with the mell-extractor and, perhaps, can be repeatedly taken, and the two united colonies will gather sufficient winter stores if any honey can be found in the fields. If both hives contained boxes, they are taken away if filled; if partially filled they can be put on top of the united colonies, and will more likely be filled if the honey yield is favorable. In this case I could not recommend the emptying of the main hive with the mell-extractor.

Another way to get a large amount of surplus honey without decreasing the number of

stocks, is the following: Wait until your stocks commence swarming. When a stock swarms set it aside a few yards and wait until you have secured the swarm, then shake off all the bees you find in the old stock in front of the entrance of the young swarm, and put all the comb, with brood and honey, upon another hive as a super-hive. The bees from the lower hive will immediately cover up the brood in the super-hive, and by the hatching of it the stock will become very strong, and able to store up large quantities of box-honey, or honey taken by the mell-extractor. The comb from the created super-hive will be found to be more hardy if emptied by the mell-extractor, than that from the main hive.

X
X
Another way is to let two stocks swarm, remove them both from their stands and put the swarms there. The two old stocks are then united and put on a new stand; if this uniting is done the day when both stocks have swarmed, there is no danger of their fighting. In this way we get an increase of one stock from two, and get a very handy hive with a super-hive that comes very handy for the mell-extractor. I tried it with a dozen hives last summer and like it very much. I recommend it to such bee keepers that want to increase their stocks.

To prevent very strong stocks from swarming, it is, in most cases, sufficient to give them a super-hive, full of comb and sufficient ventilation. The latter I give by either moving the honey-board towards the front half an inch, and lifting up the cover-box, at the rear end of the hive, one inch, to give the hot air, escaping from the hive, a chance to get away, and exact a draft from the entrance to the rear of the hive; or I take away the honey-board altogether and then lift up the cover-box. This is the most effectual in very hot weather; and if the honey stored is taken away often enough to give the bees a chance to work, and the queen empty cells enough to deposit her eggs, there is but very little danger that a swarm will issue.

Hoping that these few hints will be of some use to such bee keepers as, like myself, do not want to increase their stock any more, I will add a few remarks about selling honey. If you have white honey in boxes not weighing over five or ten pounds gross, you will not find much trouble in selling it, and it should, therefore, be your aim to get such honey into such shape. If these boxes are packed into larger ones, (about one hundred pounds in one box,) with handles on it for two men to take hold of, they can be sent in warm weather with-

out much danger of having them broken up. In cold weather honey, in new, tender comb, is very liable to break. White extracted honey, in large barrels, sold for one-fourth less than honey in comb, and I found it slower sale than honey in comb. Honey in glass jars did not sell quick enough to suit me. Dark honey is almost unsalable in any shape. I advise bee keepers to let their bees keep it, and if they have taken it from them, to feed it to them again in the spring, to induce them to rapid breeding.

I think it would be a good thing for bee keepers all over the country if a number of parties would go to dealing in honey exclusively. I sold, this season, the largest part of my honey crop to such a dealer—C. A. Perrine, in Chicago—and, although I did not get fully as high a price for all qualities of honey I sold that I might have gotten by selling through commission merchants, I got a price that was satisfactory to me, and got my money in large payments, in a comparatively short time. Three years ago it took me a long time to get through selling honey, although I did not have one-third as much to sell as I did last season.

AD. GRIMM.

ROOT CROPS, not grain, are best for orchards; they do not steal so much tree food.

For the National Bee Journal.

Among the Bees and Bee Talk.

Mr. Editor:—The above is my "text." I took a broad one, so there would be no danger of getting off the track. And if I should happen to step on somebody's toes, don't get out of "sorts."

The first part of my text will be the compression theory (nice word.) Not long since, I was exploring the inside of one of my hives that contained a fine last year's swarm. In looking over the comb, I saw a good many incipient worker cells, containing larvæ and eggs—"lots" of eggs in cells less than one-sixteenth of an inch in depth. Now, I would like to ask some of the champions of the compression theory how those cells *compressed* the abdomen of the queen, so that the egg was fertilized as it passed the mouth of the duct leading from the spermatheca? Brothers of the compression theory, you can not build a lasting superstructure upon such a rotten foundation. I know many "labor" under false theories. It has been weighed in the balance, and is found wanting. Like many other theories, it will not stand a *careful* investigation.

I never had very much faith in compression. So far as my own "personal" experience goes, I have no reason to doubt whatever, but that a queen

"knows" a worker cell from a drone cell, and understands pretty well what kind of an egg to deposit *therein*, without any compression about it. Now, Bro. Moon, give us your "opinions" on this subject. Although I am satisfied, in my own mind, that it is a fallacious theory, I would like to hear from others on this *knotty* question. Perhaps my bees are not the compression "breed," but I presume all colonies are controlled by the same laws of nature and instinct. I have examined my bees time after time, and have frequently found eggs and larvæ in incipient cells, and know whereof I speak.

I have never seen as splendid a season for bees as the present. I have noticed bees working on about twenty varieties of trees, shrubs and plants. The first blossoms were apple, cherry, plum, gooseberry, currant, etc. We have two varieties of shrubs or trees: the wild crab apple and white thorn. These two grow in large quantities in this State (Iowa.) They yield an abundance of honey, number one in quality; in color, it equals that made from white clover. But white clover is our standby; it came in blossom about the 20th of May. My first swarm came off the 4th of this month—a very large one.

The present month is one of great interest to the bee keeper, his colonies increasing, and

soon he shall reap his harvest of surplus honey. Although I don't use the extractor, I have reasons to believe that it will greatly increase the profits of the apiarian.

I had some empty comb in one of my hives—at one side; the queen would not deposit eggs in it, and the bees would not store honey in it. I thought I would try an experiment. I took out the empty comb, and placed the frames containing brood and honey on the outside. I then placed the empty comb in the center of the hive. It was astonishing how fast they filled it with honey and pollen.

Brethren of the bee keeping fraternity, let us have a weekly bee journal. Let each subscriber induce some of his friends or neighbors to take the NATIONAL BEE JOURNAL, and by so doing double its circulation, and I know the gentlemanly proprietors will give us a weekly bee journal. Success to the NATIONAL and its proprietors.

Yours in bee-ology,

G. W. BARCLAY.

Tipton, Iowa, June 5, 1871.

For the National Bee Journal.

Fertilization of Queen Bees in Confinement.

—
Mr. Editor:—In the May number of the NATIONAL BEE JOURNAL, in the winding up of "Notes to Subscribers," I notice a call for information in reference to the fertilization of the

queen bee in confinement. I have a word to say to any one interested. But, first, permit me to say that I believe in paying for all that I get, and get all that I pay for. So I have an ax to grind, and every one that lends a helping hand may grind his own at the same turn.

Fertilization of the queen, in ninety-nine cases out of one hundred, is no longer a mystery, but it is done outside of the hive successfully—no danger of losing one queen—and it impossible for the queen to meet the native drone. Every bee keeper procuring a pure, fertilized queen, with a little knowledge and attention, need never after have any occasion to suspect Bro. Mitchell, or any other queen raiser, of having palmed off an impure queen on them.

Send me fifteen dollars for a full-size Eureka Italian Queen Nursery—outside cage fertilizer and worker bee hive combined—and I'll send you the whole, with farm right and full explanation how to operate with it. It is plain and easy to comprehend after you have seen the hive, but without, it would take eight pages of the JOURNAL to explain it. It is no humbug, and any one investing not satisfied at the end of a twelve-month, return the hive and stock, I will pay them their money back. Address, by registered letter, J. L. SMITH, Patentee Eureka Bee Hive, Alpha, Grundy county, Mo.

For the National Bee Journal.

Bees in Southern Iowa.

Mr. Editor:—I thought perhaps an article from this part of the country would not be out of place, though it might not be of much importance.

A few years since we embarked in the business, totally inexperienced; therefore, you will not expect to hear anything great or of much importance. The season opened very favorably for bees, and so continued until the great drought came, which ruined everything, shortening the clover crop, etc.; in fact, there was scarcely any other honey-producing plants while the clover was in bloom, consequently we got a pure article of clover honey. The bees certainly did improve their time to advantage.

We have six colonies of bees from which we took brood, but put all their force in honey-gathering, and we worked our honey machine on them, and made them average one hundred a piece in the honey-gathering time. We emptied them every other day, and got twenty pounds every time, which was averaging ten pounds per day. We see that some of your correspondents report a larger yield. We think every person can make colonies of bees yield one hundred pounds a piece if they are so inclined. We have over forty-two colonies of bees

which, we feel assured, if we work our honey machine on them, will yield us plenty of honey for our own use, and a little to spare.

J. V. WALTER.

Winchester, Iowa.

[For the National Bee Journal.]

Experience with the Black, Italian, and Hybrid Bees

Mr. Editor:—In answer to L. L. Young, I will endeavor to give my experience with the Italian, black and hybrid bees. As to your stand of hybrids, that are only separated by four feet from your Italian stand (that was Italianized on the 6th of July last), I believe you to be correct in supposing your queen to be superseded. The young queen has mated with an Italian drone.

I find that the most skillful judges in hybrids may be mistaken. I have one stand of the same kind of hybrids as those described in your article, viz: one-half of the bees show the three bands, and are a bright color; others of the marked ones being a dingy, dirty yellow, while the remaining few will be of the pure black color. I have hybrids of every species between the Italian and black bee, and hope soon to have the same of the Egyptian. And to those that are afraid of being stung by bees, I would say, by all means keep the Italian bees and keep them pure.

I consider the hybrid a very good worker, as also to protect their stores. If any doubt it, try them. I am trying them, and propose to test every variety of the honey bee to my own satisfaction.

On one point I am satisfied, and that is, that the hybrid is just as good to produce honey as the pure Italian, but a great deal worse to handle.

Yours truly,

J. S. MERRILL.

Fortville, Ind., June 4, '71.

WE have received FIRST LESSONS IN BEE CULTURE, a bee keepers' guide, by N. C. Mitchell, of Indianapolis. It is an index book and calendar on all subjects connected with bee-keeping. It is written in an easy, conversational style, and is admirably adapted for beginners in bee-keeping. We do not agree with friend Mitchell in all his theory of bee-keeping, but his practical directions are excellent, and many will find his book the guide they need. Sent for 50 cents to any address.—*Iowa Homestead.*

COVINGTON, OHIO, Feb. 7, 1871.

J. L. PEABODY.

Dear Sir:—The Honey Extractor you sent us, surpassed our expectation. We are highly pleased with it, and it gives perfect satisfaction. It does all that you represented it to do.

Yours, &c.,

J. & S. MOHLER.

WE believe in large crops, which leaves the soil better than they found it, making both the farm and the farmer rich at once.

EDITOR'S TABLE.

Salutatory.

To the Friends and Patrons of the National Bee Journal:

Having purchased of the former owner a one-half interest in the BEE JOURNAL, we would state that we intend to publish a paper devoted to the interest of every bee keeper in America. We shall endeavor at all times to fill its pages with the best and most reliable reading matter connected with apiculture. It shall be our aim to please all, and offend none. The pages of the JOURNAL will, as in the past, be open and free to any and all that may have anything upon apiculture to communicate. We hope to have a continuance of your patronage, and also your communications. Let it be said that the American bee keepers stand second to none in the world in practical knowledge. It shall be our aim and object to impress upon apiarians the necessity of more attention to the apiary. We shall at all times feel it a privilege to give any information in regard to the cultivation of the honey-bee that may be in our power so to do.

We earnestly solicit the aid

of every bee keeper in the land to help in this enterprise. As soon as the subscription will warrant it, we will publish it weekly. We are satisfied that the people need a weekly paper devoted to apiculture. Friends, will you take hold with us in placing before the American people a weekly paper devoted to the interest of every bee keeper in the country? Such a paper, to-day, is greatly needed. The people are anxious for more light, and many have signified their great desire to have a weekly paper, and are willing to work for its accomplishment. We could publish the JOURNAL weekly, in newspaper form, at nearly the same rate as it now costs to publish it monthly, but many prefer it in magazine form for binding. Let us have your efforts to circulate the paper until it shall be made a welcome visitor to every bee keeper in our land. We will guarantee that it shall contain as much practical information in regard to bee keeping as any paper in the country. With your aid and assistance, we will assure you that the NATIONAL BEE JOURNAL shall stand second to none in this country.

We shall always be pleased to receive communications from any and all; they will find a welcome place in the JOURNAL. Don't let any one excuse himself by saying that he can not write; send in your communications, they will come out all right, only get the facts and meaning. We have a great many bee keepers, and, perhaps, not one but what is in possession of some facts that would be of interest to the readers of the JOURNAL. One request we make: please give name and post office address to your articles; don't be afraid to let the world know who you are. Come one, come all.

A. F. MOON.

A Word to Advertisers.

After this month we will charge for space as per our advertised rates. We will make no deduction except it be to parties who advertise bees, queens or hives; for them alone twenty-five per cent. deduction will be made. We will be glad to take Italian queens for advertising; but our friends are requested to send us no queens but those which have been tested. If your queens are reliable we will not grumble at your price. Should any of you have pure queens to spare send them to us, and if they prove to be genuine we will notice it in THE JOURNAL.

Premium Queens.

Doubtless many of our friends think their queens are a long time coming, and some of them are asking us why they are not sent to them. Now, friends, let us once more state that we will send queens to every one who are entitled to them just as soon as we can possibly do so. Every queen that we ship this season will be fertilized by our new process in confinement. There is another point we have determined upon, and that is we will breed only from queens that are capable of duplicating themselves every time. This is one thing that has caused the delay. Two of our fine queens that we had kept over for breeding went back on us. We have had to destroy nearly one hundred of their young queens within the last two weeks, as neither of the old queens would do to breed from; but their workers are the most beautiful bees we have ever seen.

The queens were sent to us by eminent queen breeders the latter part of last season, and were warranted to be pure, but upon trial we have found them wanting.

At the close of the last queen-breeding season, we sent nearly every queen we had to our friends to keep them quiet; and, the result is, we had to

buy some of them back at ruinous prices, or quit breeding.

We have now over one hundred queen cells in our queen nursery, and some of the queens are hatching, but the nights being cold the process is slow enough. All things must have an end, and so will your waiting. Before long you will get your queens, and when you do get them you will think you have done well by waiting. And we hope that when you receive them you will, one and all, try to introduce them so as not to lose them.

Had we been so disposed we could have sent to every one, before this, a fair Italian queen, and, we have no doubt, you would have been well pleased with them, better, perhaps, than having to wait. But we have determined to deal, hereafter, in nothing but pure queens, and urge all queen-breeders to do the same. If you can't raise pure queens for the price now paid for them put the price up to ten dollars each, and if you can't raise them at that put them still higher. It is our desire to see a stop put to the selling of Hybrids, and then we will deceive no one; and if any persist in selling them let them be called by their right name—Hybrids. When around among bee-keepers we are often shown Italian bees—pure; their owner will tell you so for a fact,

when in truth there is not one stock in ten that is pure.

Fertilizer.

In answer to many who have asked us at what price we sell our new Fertilizer, we would state that we sell the whole thing complete at ten dollars.

WE again go to press before the arrival of A. F. Moon. Sickness in his family has detained him at home. We hope to see him soon at the head of the NATIONAL BEE JOURNAL; and are glad to see those who are interested in the success of the JOURNAL, pleased with the new arrangement. They almost uniformly are glad it is to be a semi-monthly, and urge us to make it a weekly. Friends, our reply is still the same: Give us a helping hand and we will endeavor soon to give you the JOURNAL just as you wish it.

REV. H. A. KING, of the *Bee Keepers' Journal*, has gone to Europe, and will visit some of the noted bee-keepers of the Old World, and we may look for some able communications from his pen that will be of much benefit to bee-keepers. On his return he will bring with him some of the best queens that can be procured in Europe.

HOME AND HEALTH.—The April number of this new Health Magazine comes to us with a great variety of interesting articles. The principal ones are on "The Teeth—Causes and Prevention of Decay," "Health at Home," "Bathing and Baths (illustrated)," "Rearing Babies," "Tight Lacing (illustrated)," "Bright's Disease Untechnically Considered," "What shall we do in the Sick-room?" etc. There are more than forty smaller articles, containing valuable hints on health and for the home. Published at \$1.50 per year, by W. R. De Puy & Brother, No. 805 Broadway, New York.

SUBSCRIPTIONS TO THE NATIONAL BEE JOURNAL may begin at any time. After the first of June the JOURNAL will be published semi-monthly, at the rate of two dollars per annum, in advance.

THOSE who have anything to sell to the farmer or mechanic, would do well to advertise in the NATIONAL BEE JOURNAL, as it is read by at least ten thousand persons semi-monthly.

PUBLISHER'S DEPARTMENT.

Advertising Rates.

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	1 Month.	2 Months.	3 Months.	6 Months.	1 Year.
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1/4 Column..	10	18	40	75	
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We adhere strictly to our printed rates.

Address all business communications to MOON & MITCHELL, Publishers.

“BEE LINE.”

Cleveland, Columbus, Cincinnati and Indianapolis Railway.

BY WAY OF CRESTLINE

ON and AFTER MONDAY MAY 15th, 1871,

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

STATIONS.	No. 4.	No. 6.
Indianapolis.....	10:55 a m	*7:45 p m
Muncie.....	1:25 p m	10:12 p m
Fort Wayne.....	5:35 p m
Union.....	*2:08 p m	11:25 p m
Dayton.....	4:30 p m
Bellefontaine.....	4:20 p m	1:45 a m
Crestline.....	*6:30 p m	4:20 a m
Cleveland.....	8:45 p m	*7:50 a m
Buffalo.....	4:10 a m	2:00 p m
Niagara Falls.....	10:10 a m	4:30 p m
Rochester.....	*7:15 p m	5:30 p m
Albany.....	4:10 p m	1:30 a m
Boston.....	5:50 a m	11:00 a m
New York City.....	7:00 p m	6:40 a m

Indianapolis.....	10:55 a m	*7:45 p m
Sidney.....	3:32 p m	12:52 a m
Toledo.....	5:40 a m
Detroit.....	9:10 a m
Crestline.....	*6:30 p m	4:20 a m
Pittsburg.....	1:25 a m	*12:10 p 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	6:40 a m

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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.

C. C. Cobb, Gen'l Passenger Agent Cleveland.

ITALIAN QUEEN BEES.

PURITY AND SAFE ARRIVAL GUARANTEED AT THE FOLLOWING PRICES:

Single queen, \$5; three for \$12; six for \$20; ten for \$30. Larger numbers on special terms.

Single queen in nucleus hive, with small colony of bees, (which, by proper management, can be built up into a good colony; or, if the queen be taken out to be put into another colony, will rear another queen,) with fertilizing arrangement attached, including my Triangular Nursery Cage, and also Drone and Queen Trap or Swarm Arrestor, making a complete outfit for queen rearing, with a sufficient quantity of drones, \$12.00.

Circulars and price list of apicultural articles sent free.

D. L. ADAIR,
HAWESVILLE, KY.

ITALIAN QUEEN BEES.

I am prepared to furnish a limited number of imported and home reared queens, reared from imported mothers, at reasonable prices. Send for circular of prices, etc.

H. NESBIT,
CYNTHIANA, KY.

June 1, 1871-tf.

FOR OHIO!

THE

QUEEN BEE HIVE

IS THE

BEST NOW IN USE!

Combining all the advantages of other hives, with no disadvantages.

SEPARATE HONEY BOXES

AND MOVABLE FRAMES.

Each Frame is taken out from the REAR of the Hive, without disturbing any other portion of the colony or the worker bees.

Large Brood and Honey Apartments.

Moth-Trap Perfect!

AGENTS WANETD in Ohio. Farm Rights, with Hive, \$10; Township and Counties VERY LOW.

See Cut on 2d page of Cover.

Send for Circulars and information

PARKER & BARKLEY,

ODD FELLOWS' HALL,

6m-2.

Indianapolis, Ind.

QUEEN NURSERY.

I am the inventor of a Queen Nursery, for hatching queen cells and keeping the young queens till needed. It can be so arranged that the young queens can pass from the nursery to the open air to meet the drones, or pass into a box for fertilizing in confinement with selected drones. It is just the thing to fertilize queens by the Kohler or Kruger plan. I do not sell nurseries, but instructions for making and operating, with one sample cage by mail for one dollar and twenty-five cents (\$1.25).

The cost of a nursery is about one dollar. A boy twelve years old can make them. Any person trying them and are not satisfied, the money will be returned.

Italian Queen Bees for sale at low rates.
(Lock Box 64). T. G. MCGAW,
MONMOUTH, WARREN COUNTY, ILL.

QUEENS!! QUEENS!!!

The fact that the spring of 1871 has been such as to enable me to rear, fertilize, and test queens as early as April. I can furnish queens to all who apply in due time, much earlier than I expected.

My prices, to-wit: \$4 apiece, or \$36 per dozen, are therefore for the months of May and June.

These queens are all properly tested, and sent at my risk.

JNO. L. MCLEAN,
RICHMOND, JEFFERSON CO., OHIO.

SLOW HORSES MADE FAST and Fast Horses Made Faster.—Including all successful secrets of professional horsemen, exposures of fallacious theories and faulty appliances, tricks of jockeys and frauds of the turf. A guide to breeding, raising and training trotters, as well as developing and improving speed of all horses. The system laid down in this book is the one to which DEXTER owes his supremacy. ROBERT BONNER (editorial in *N. Y. Ledger*) says: "A series of very interesting and instructive articles." Only 50 cts. of booksellers or by mail on receipt of price. JESSE HANEY & CO., 119 Nassau St., New York.

PAINTER'S Manual, a complete and practical guide, giving best methods and latest improvements in house and sign painting, graining, varnishing, polishing, staining, gilding, glazing, silvering, Grecian oil-painting, Chinese and Oriental painting, principles of glass staining, analysis of colors, harmony and contrast, philosophy, theories and practices of color, &c. Also Practical Paper Hanging. 50 cts. of booksellers or JESSE HANEY & CO., 119 Nassau St., New York.

HUMBUG SQUELCHER, exposing all swindles and humbugs by mail or otherwise, by the author of the famous book, "Rogues and Rogueries of New York." Samples free by mail on receipt of only ten cents by JESSE HANEY & CO., 119 Nassau St., New York.

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PRICE OF BEES AND QUEENS.

FOR THE YEAR 1871.

Full Colonies of Italian Bees, with tested pure Queens of last summer's raising, in a Langstroth movable comb, full of comb, and honey enough to last until May 20th, I will deliver at the express office at Jefferson station, for \$15 each.

6 colonies for \$14 each; 10 colonies for \$135; 20 colonies for \$250; above 20 at \$12 each; any number over 50 \$11 each.

I will sell 100 colonies for \$1000.

Parties that wanted such a large number of stocks, would have to order them at their own risk, and would do well to oversee transportation.

Italian Queen Bees, whose worker progeny has hatched in my Apiary, and shows by its marking that they have met with an Italian drone, I will sell at the following prices:

If sent from April 20th to May 5th, \$8; May 5th to June 1st, \$7; during the month of June, \$6; during the months of July, August and September, for \$4. If from 10 to 20 queens are ordered, a reduction of ten per cent will be made; if above 20, a reduction of twenty per cent.

All queens will be sent by mail post-paid. The box or boxes in which the queens are sent must be opened in presence of the Postmaster or another witness, and a certificate from one of them must be sent by return mail. If one or more of the queens should have died during shipment, on receipt of this certificate from the Postmaster or other witness, another queen will be sent or the money refunded.

Young Swarms of Italian Bees, medium sized with a tested pure Queen of last summer's raising, sent in a common shipping box, with feed enough to stand the journey, if sent before June 25th, will be sent for \$9; between June 25th and July 10th, for \$8; from July 10th to August 1st, for \$7; and after that time for \$6. If a colony with a queen reared from an imported one, or queens of that kind are ordered, one dollar extra will be charged. Express charges to be paid by purchaser.

In some cases, where claims are made on account of losses incurred during shipment, I will demand an affidavit setting forth the facts in the case before will satisfy the claims.

Safe arrival and purity guaranteed in every shipment. The Cash must accompany every order or it will not be noticed.

ADAM GRIMM.

JEFFERSON, WIS., February 1, 1871.

EARLY ITALIAN QUEEN BEES.

The advantage of climate enables me to furnish *Italian Queen Bees* much earlier in the season than parties further north can do. My early raised queens will supply any deficiency in drone brood, and if introduced in colonies of black bees before preparations are made for swarming, will, without doubt, supply drone brood forthat purpose in proper season.

PRICE. Queens from first of May to first of July, \$5 each.

Purity and Safe Arrival Guaranteed.

DR. W. MCK. DOUGAN,

SAWYERSVILLE, RANDOLPH CO., N. C.

ADAIR'S SECTION BEE-HIVE.

PATENTED AUGUST 27, 1867.

Frames close fitting and forming a hive of themselves, that can be handled like a solid box, and shipped any distance. No unnecessary draft of air through the hive, as in open side frames. No surplus room around the frames to be occupied by idle bees. Can be enlarged or contracted at will in a few minutes. Is the most perfect queen nursery; as the brood chamber can be broken up into NUCLEI of any size, and reformed when desired. It can be arranged so that queens can be fertilized without leaving the hive. Several queens can be kept in the same hive during the winter, and it is believed it can be done all the year, so that each hive may have the services of one or more queens. It needs no winter protection; but if housing is preferred, four times as many can be stowed away in the same space that other hives occupy. Box room unlimited. Supers or laterals, or both, can be used. It is a perfect observing hive. Bees can be fed in it, in the center of the cluster, in any weather, without disturbing them, with both meal and honey; and brooding kept up all the year. It can be built of wood, stone, brick, adobe, concrete, lath and plaster, paper, straw, iron, and other materials.

THE "OUTLINES OF BEE-CULTURE."

Which gives full description, with illustrations, and much other valuable information, sent for ten cents.

Rights and Territory for Sale.

Competent Agents Wanted on Liberal Terms.

Send for circulars and terms to agents. Rights free to ministers of the gospel who buy a sample hive.

D. L. ADAIR,

Hawesville, Kentucky.

Pure Italian Queen Bees!

AARON BENEDICT,

Importer and Breeder of

PURE ITALIAN QUEEN BEES.

Queens and Full Stocks constantly for sale.

Bennington, Morrow Co., Ohio.

☞ All orders promptly filled. Satisfaction guaranteed. Send for Circular Price List of Queens and Bees.

ITALIAN QUEENS AND BEES.

Pure Italian Queens for sale during summer. Price \$5, sent by mail, when I think it safe to do so; if not, will send by express. Full Colonies of pure Italian Bees for sale in the fall, winter and spring. Price \$20, delivered at the Express Office in Anderson. Money to accompany all orders, which may be sent at my risk, either by Express and directed to me at Anderson, or by Post Office Money Order on Anderson, Madison County, Indiana, and directed to Alexandria, Madison County, Indiana. Purity and safe arrival of Queens and Colonies guaranteed to nearest Express Office to purchaser.

Address,

G. BOHRER,

Alexandria, Madison Co., Ind.

1871.

A. GRAY, Formerly of Riley, O. J. W. WINDER, Of Cincinnati, O.

**GRAY & WINDER,
IMPORTERS AND BREEDERS
OF
ITALIAN QUEEN BEES.**

We would respectfully announce to our bee keeping friends of America that we have our arrangements completed to breed our Queens in Ludlow, Ky., opposite Cincinnati, isolate from all impure stock, which is a great advantage to our patrons, as well as to ourselves. Our Queens will be bred from imported stock from the celebrated apiaries of Dr. Blomhoff, Prof. Mona and Edward Uille, of the highlands of Italy. All our Queens sent from the apiary are warranted pure, and satisfaction guaranteed. Prices to suit the times.

Variation in Feed
WILL NOT IMPEDE ITS
Natural Action

Italian Queens
AND COLONIES,
LIVES, HONEY BOXES, BOOKS,
EXTRACTORS, &c.

E. J. PECK,
Lith. N.Y.

Patent applied for.

For sale by
E. J. Peck,
No. 100 N. 3rd St.,
Philadelphia, Pa.

ITALIAN QUEENS for 1871.

I WOULD respectfully inform my former patrons and all others who wish to procure highly colored prolific Queens, that I am prepared to fill all orders for

TESTED OR WARRANTED QUEENS, without delay. Queens raised in full colonies. Satisfaction guaranteed. Circular for 1871 sent free. Address,

GORDON H. BOUGHTON,
P. O. Box 74, Illiopolis, Illinois.

**R. R. MURPHY'S
Honey Extractor.**

THE best, most durable, and cheapest geared machine in the market. It will empty the most honey with the least injury to the comb of any machine in use. Send stamp for circular. Address

R. R. MURPHY,
Fulton, Illinois.

4-2m

PARLOR ALBUM **M**
In Five Quarto Volumes.
Price \$9 00 per volume.
\$40 PER SET COMPLETE.

Description of the Work.

THE PARLOR ALBUM is doubtless the most extensive **Art Gallery** ever published and, by those who have examined the several portions of the work, it has been pronounced the "**Climax of Beauty.**" Each volume contains 20 full page Chromo Lithographs, in Oil Colors, 40 full page Steel Engravings, 40 full page engravings on wood and 200 pages of reading matter, descriptive of the illustrations, the whole making each volume about one half as thick, and same sized pages of Webster's largest Dictionary. Each volume is complete in itself, and will be sold separately, if desired.

SOLD BY SUBSCRIPTION ONLY.

- Vol. I is devoted to Wild American Birds.
- Vol. II contains Wild American Animals.
- Vol. III, American Domesticated Birds and Animals.
- Vol. IV, Foreign Birds and Animals.
- Vol. V, Fishes, Reptiles and Insects.

This work will at once commend itself to the cultivated American people, and no library will hereafter, be complete without this addition to its treasures; while as a parlor amusement it is unequalled by American publications.

Agents Wanted.

While we give agents very liberal terms for selling the above described publications, and wish to appoint an agent in every town in the United States and British Provinces. Experienced book agents and all other persons of respectability should apply at once. Any young man or young lady, can, by devoting a short time during the day or evening, secure a complete set, free of expense, or, if preferred, we will allow large commissions in cash.

We have prepared a most beautiful **Specimen Book for Agents,**

Containing 5 of the Oil Chromos, 10 Wood Engravings and 50 pages of descriptive reading, being selections from each volume, together with blank paper, specimens of binding, &c., &c.

Our specimen book has cost us quite largely, and we do not wish to send it to persons who do not intend to act as agents, but to any one who will make an effort to procure subscribers to the work, we will send the specimen book, prepaid, on receipt of forty cents to cover postage.

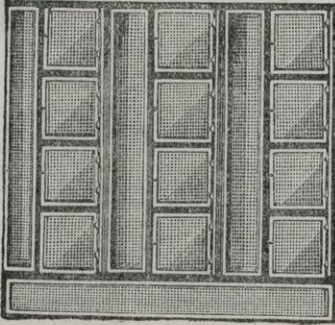
Enclose stamp for reply, and address
AMERICAN PUBLISHING CO.,
Rutland, Vt.

QUEENS AND ITALIAN BEES.

Queens reared from queens imported from Italy. Also stocks of Italian Bees for sale. All orders promptly filled.

PURITY OF STOCK GUARANTEED.
Send for Price List. Address,
J. WHEELDON, GREENSBURG, IND.

QUEEN NURSERY.



This important invention is now ready for sale and is furnished to order to suit any Movable-Comb Bee-Hive, at short notice. Individual, Township, County, and State Rights are for sale. Those wishing Rights and Models should address,

DR. JEWELL DAVIS,
CHARLESTON, ILL.

\$4 ITALIAN QUEEN BEES \$4

I will furnish a limited number of Italian Queen Bees, bred in full colonies, at the following price: One Queen, and the ILLUSTRATED BEE JOURNAL for one year, for *four dollars*. Purity, fertility, and safe arrival guaranteed.

Address for circular, etc.,
T. G. MCGAW,
Lock Box 64, Monmouth, Warren Co., Ill.

COMB GUIDE PRESS.

WITH this instrument a ten year old child can put wax comb guides on 12 frames in five minutes.
Send stamp for a sample.

Price of the Instrument Delivered at the Express Office, \$1,25.

Comb Fastening Press.

This instrument fastens quickly and substantially. Dry combs or comb foundations in the frames.

Price; \$2.00.

Comb Guide Press and Comb Fastening Press together \$3.00.

When ordering remember to send the inside length of your frames.
Patent applied for.

C. DADANT,
Hamilton, Illinois.

Buckeye Bee-Hives For Sale in Ohio.

John Miller, of Pierce, Stark County, Ohio, has purchased the Counties of Cuyhoga, Medina, Portage, Stark, Summit and Tuscarawas. Bee keepers in these counties would do well to address as above, or address,

REV. ELI MILLER,
CANTON, STARK COUNTY, OHIO.

BEE KEEPERS,

And all persons interested in Bee Culture, should send for our illustrated circular of

HONEY EXTRACTOR,

containing testimonials from most of the prominent bee keepers of the country.

We offer, this season, a new and superior

Knife for Uncapping Combs.

It is made of the finest English cutlery steel; is tempered and warranted.

PRICE.

Single Machine, including two Knives \$15.00
Single Knife, by express 1.00
“ “ by mail, prepaid . . . 1.25

Machines will be kept for sale at the retail price at the following places:

- A. I. Root & Co., Medina, Ohio;
- B. H. Starr & Co., 115 Ontario St., Cleveland, Ohio;
- J. L. Peabody & Co., New Brunswick, N. J.;
- H. Alley, Wenham, Mass.;
- Lynde & Hough, San Francisco, Cal.

All letters of inquiry, requests for circulars, etc., should be addressed to

J. L. PEABODY & CO.,
Virden, Macoupin Co., Ills.,

Who will attend to the wholesale and retail trade as heretofore.

After August 1st, we expect to make *Bloomington, Ills.*, our principal shipping point for the North-West.

HONEY WANTED.

A few tons of old crop, at once—boxed, broken or extracted. Also, any quantity of new crop—as soon as can be shipped.

C. O. PERRINE,
Chicago, Ills., or Philadelphia, Pa.

Speciality of Importing Queen Bees Exclusively from Upper Italy.

For one Queen in May, \$14; in June, \$13; in July, \$12; in August, \$11; in September, \$8 to \$10. The money to be remitted in the month previous to the date fixed for the reception. The Queen will be sent from here *genuine*, and safe arrival guaranteed.

CHARLES DADANT,
Hamilton, Illinois.

LADIES.

The Victoria, or Ladies' Gem, is the great invention long and earnestly wished for by your sex. We desire smart and energetic lady agents to introduce our popular and justly celebrated article in every Village, Town and City in the World. It is highly approved of, adopted and endorsed by all Ladies of taste and refinement, and is now A GREAT FAVORITE WITH THEM. It is what every Lady has wished for, gives perfect

FREEDOM OF ACTION,
AND PREVENTS CATCHING
COLD AT A CRITICAL PERIOD.

Endorsed and recommended by all eminent

**PHYSICIANS and
DIVINES**

Every Lady **ABSOLUTELY**
REQUIRES
and will purchase **ONE**
at sight, its merits are apparent at a
GLANCE.

Druggists, milliners, dressmakers and those who keep fancy stores will find our excellent invention gives perfect satisfaction, and sells very rapidly, and netting enormous profits to agents and dealers. Town and county rights given free to all who desire engaging in an honorable, respectable and profitable business, and at the same time doing good to those suffering companions in life. Samples \$2, sent free by mail, on receipt of price. Send for wholesale circulars. Address

VICTORIA MANUFACTURING Co.,
Jan-6m. 17 Park Place, New York.

ITALIAN QUEEN BEES.

From Mothers, directly from the highlands of Italy, and purely fertilized. Safe arrival guaranteed. Also, small swarms to build up or raise queens.

Address, A. SALISBURY,
Camargo, Illinois.

ITALIAN QUEEN BEES.

FULL COLONIES.

About twenty-five or thirty colonies—Queens pure—delivered at the express office in this place for twenty dollars each. Safe arrival guaranteed to any express office in the country.

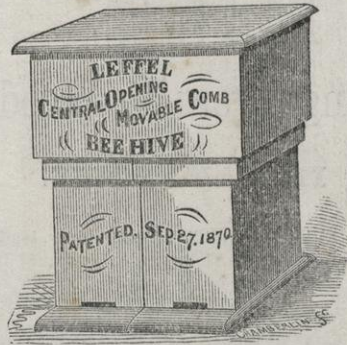
Also, Queens by mail or express, at prices as low as the best breeders in the country. Purity and safe arrival guaranteed. Send for circular to

R. M. ARGO,
Lowell, Garrard Co., Ky.

THE LEFFEL BEE HIVE,

General-Opening Movable-Comb

Patented September 27, 1870,



Is exceedingly simple and convenient and perfectly adapted to the wants of the Honey Bee.

SEND FOR CIRCULAR.

I Take Subscriptions for

BEE JOURNALS,

AS FOLLOWS:

The American Bee Journal..... \$2 a year.
Bee Keeper's Journal and National
Agriculturist..... \$1 a year.
National Bee Journal..... \$1 a year.
The above papers are published monthly.

Address, **Col. Joseph Leffel,**
THE LITTLE BEE MAN,
SPRINGFIELD, OHIO.

COL. JOSEPH LEFFEL

I am the smallest
business man in the
world—46 inches
high, in my boots,
37 years old, and
weigh 55 pounds.
Send 25 cents for my
Photograph.

Write your
name and post office
address plain, and
do not fail to give
county.



H. C. CHANDLER & CO.**DESIGNERS**

AND

Engravers on Wood.**INDIANAPOLIS.**

Views of buildings, machinery, landscapes, portraits, labels, etc., engraved in the highest style of the art.

STEREOSCOPES,

VIEWS,

ALBUMS,

CHROMOS,

FRAMES.

E. & H. T. ANTHONY & CO.,

591 Broadway, New York,

Invite the attention of the trade to their extensive assortment of the above goods of their own publication, manufacture and importation. Also,

PHOTO LANTERN SLIDES,

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GRAPHOSCOPES.**New Views of Yosemite.****E. & H. T. ANTHONY & CO.,**

591 Broadway, New York,

Opposite Metropolitan Hotel,

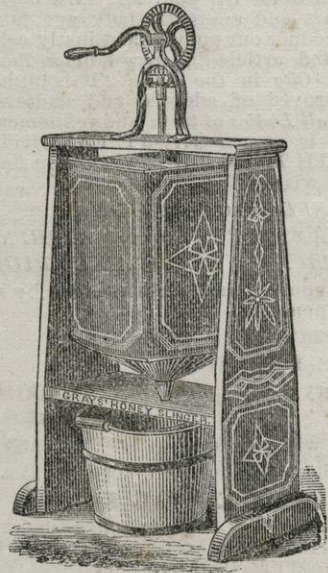
Importers and Manufacturers of

Photographic Materials.**FOR SALE.**

The genuine Alsike Clover Seed—80 cents per pound by Mail, or 65 cents by Express, where ten pounds or more are ordered at one time.

Address, **COL. JOSEPH LEFFEL,**
SPRINGFIELD, OHIO.

P. S.—Send for my Poultry Circulars of all kinds of Pure Breeds of poultry.

COL. JOSEPH LEFFEL.**GET THE LATEST!****GET THE BEST!****GRAY'S HONEY SLINGER**

PATENT APPLIED FOR.

This mel-extractor is now perfected and offered to the bee keepers of America for the first time. This machine is made of heavy tin, and is well painted or japanned, (except the wood work, very light, and can be sent by express without packing; was exhibited at the Cincinnati Convention of bee keepers for the first time, and was very highly recommended by all the bee keepers present.

WAX EXTRACTOR.

We also manufacture this new apparatus for extracting wax from old and worthless combs. It has now been fully tested. Mr. A. Grimm writes that he has extracted two hundred and six pounds of the nicest wax he ever saw, although the comb was from ten to twelve years old, and he says that the bee keepers of America owe me many thanks for importing and introducing so useful an invention. Every apiarian should have one of these Wax Extractors.

For further information of the above machines, send for descriptive circular—"free."

GRAY & WINDER,

132 West Fourth St.,

Cincinnati, Ohio.

6m-4.

ADAIR'S MELL-EXTRACTOR. PATENT PENDING.

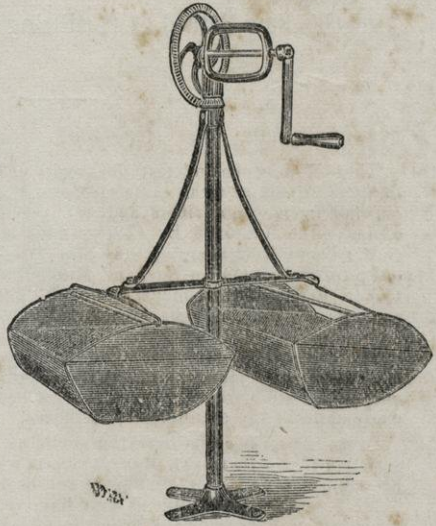
This machine is all iron, except two buckets in which the honey is collected, which are of tin, and are just large enough for the frame of honey to lay on. No wood about it to get sour or dirty. The black grease from the gearing can not fall into the honey. It only weighs about twenty-eight pounds and can be packed in a small box and be sent for less freight than any other. It will empty small pieces of comb; as many as can be laid on it at one time. It will strain liquid honey or extract the juices from fruits for making jelly. It will separate sugar from sorghum after it grains, and make a nice article of sugar. The frames of comb are laid on it horizontally, and assume a verticle position as soon as set in motion, thus making it a filter for liquids, as well as the best mel-extractor.

PRICE, \$14.00.

Three Machines for \$35.00,

with a liberal discount to those who buy to sell again.

D. L. ADAIR,
Hawesville, Ky.



THE EXCELSIOR BEE HIVE.

Patented by A. H. Hart. August 13 1867, and caveated 1870 and 1871.



This hive is double and treble walled, and sides opening. With it you can divide and make artificial swarms; use it for an observatory hive; breed and fertilize from twenty-five to fifty queens per month; trap drones, robbers and moths; winter two large or four small colonies on the summer stand successfully; give sufficient upward ventilation at any time; may have any amount of surplus room, and store honey in large or small frames, or large or small boxes; and use the hive singly, or with any or all the appendages.

PRICES.

Retail, single hive	\$3 50
With fixtures complete	7 00
Single hive, packing	1 80
" " with fixtures	2 15
Individual rights	5 00

TERRITORY AT FAIR FIGURES.

Address,
JANUARY 13, 1871.

A. H. HART, Appleton, Wisconsin.

ROUGH AND READY BEE HIVE

AND

Mitchell's New Method of Fertilizing Queen Bees in Confinement.

That all may see and test the merits of both, we have concluded to offer them as premiums to all subscribers of the NATIONAL BEE JOURNAL. For a club of twelve subscribers and twenty-four dollars, we will send twelve copies of the NATIONAL BEE JOURNAL for one year, nine First Lessons in Bee Culture, one Rough and Ready Bee Hive, with right to make and use it, one pure Italian Queen Bee, and Mitchell's New Process of Fertilizing the Queen Bee in Confinement, and to the getter-up of the club we will send any one of the premiums named. For twenty-four subscribers and forty-eight dollars, we will send the same to each subscriber, and choice of two premiums. For thirty-six subscribers and seventy-two dollars, we will send the same to each subscriber, and one Rough and Ready Bee Hive, Fertilizer, and one pure Italian Queen Bee to the getter-up of the club. Clubs may be made up from any number of post offices.

Every subscriber that hereafter sends us two dollars for one year's subscription to the NATIONAL BEE JOURNAL, will secure one of the above named premiums. The Hives, Fertilizers and books will be sent promptly. Parties holding certificates for queens may have to wait until we can reach them, as we will fill orders upon the principle of "first come, first served." We will send out no queens but the very finest, and purely fertilized by our new process.

We would be glad if agents sending us clubs would decide, either by lot or otherwise, who is to have such and such premiums; if they do not, we shall enter their names upon our books in the order received, and the club will commence to number from one up to twelve. You will notice that we have it so arranged that every club of twelve subscribers will receive one of the premiums as named above. We have distributed the premiums among the different numbers as follows:

- No. 1, Rough and Ready Bee Hive.
- No. 2, Mitchell's First Lessons in Bee Culture.
- No. 3, Mitchell's First Lessons in Bee Culture.
- No. 4, Mitchell's First Lessons in Bee Culture.
- No. 5, Mitchell's First Lessons in Bee Culture.
- No. 6, Pure Italian Queen.
- No. 7, Mitchell's First Lessons in Bee Culture.
- No. 8, Mitchell's First Lessons in Bee Culture.
- No. 9, Mitchell's First Lessons in Bee Culture.
- No. 10, Queen Fertilizer.
- No. 11, Mitchell's First Lessons in Bee Culture.
- No. 12, Mitchell's First Lessons in Bee Culture.

Hereafter to every subscriber that sends us two dollars we will at once send him a certificate designating what premium he is entitled to. To clubs we will send the certificate to the getter-up of the club, and the premiums will be boxed and sent to him by express.

Here is a fine chance to secure an agency at little or no cost, and have the Hive Fertilizer and Queen Bee to show to the bee keepers in the surrounding country. Any man that will raise us twelve subscribers and twenty-four dollars, we will appoint our agent to sell Rough and Ready Fertilizers and Queen Bees. Send along your orders, and secure an agency at once.

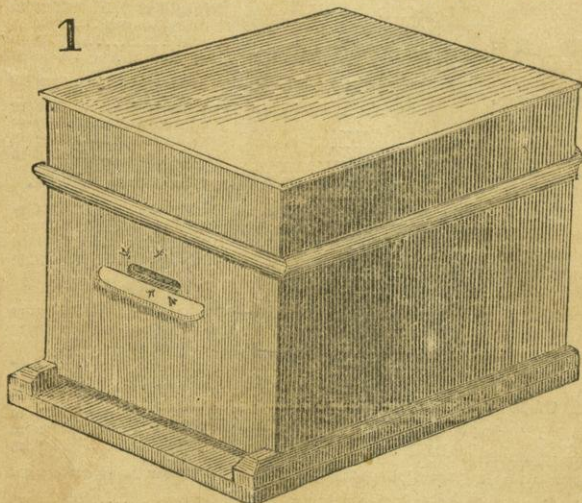
Send all orders to

N. C. MITCHELL, Indianapolis, Ind.

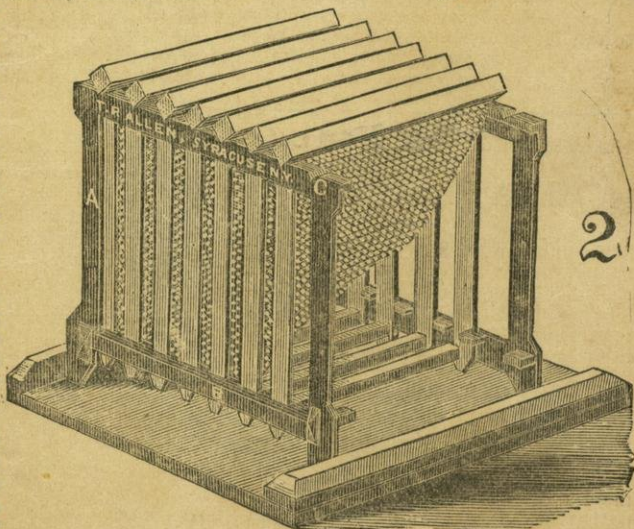
T. R. Allen's Patent Bee Hive.

Having accepted a general and local Agency for the United States of T. R. Allen, for the celebrated Movable Comb Bee Hive, known as the "Home of the Honey Bee," I take

pleasure in announcing to the bee-keeping public that I am prepared to sell Territory at such figures as will make it highly profitable to purchasers. Individual rights will be sold at five dollars per right. Parties desiring to purchase Territory are solicited to send in bids, as no traveling agencies have as yet been constituted. Quite recently improvements have been added to this hive, which render it, for cheapness and simplicity of construction, as well as durability, the most desirable hive in use. It is also a hive of unsurpassed qualities for wintering in the open air or in special repositories, as in either mode of wintering it affords free upward ventilation. For convenience in handling the combs, it has certainly surpassed, with me, all other hives.



As the accompanying cuts show, the case or outer shell can at any and all times be easily lifted off, whereby the frames are left entirely uncovered, and can be handled at will in opening and closing it. I have found it to kill less bees than any hive I have yet seen. It can be used either as a one-story hive, with boxes for surplus honey, or it can be so constructed as to be used as a two-story hive, with two sets of frames of equal size, one above the other. In this shape it is well adapted to the use of the honey-emptying machine, more so than any one-story hive, as there is no brood in the upper set of frames, which, if unsealed, is almost invariably thrown out by the machine and lost. As a two-story hive it will afford a larger yield of honey than any one-story hive, for in many instances bees will not work in boxes, whilst with the "Home" we can, by lifting one or two frames into the upper chamber, brood adhering bees and honey; compel them to work above, which they will readily do, as they will not desert their brood to go below, but seek to protect it by building a comb on each side of it, and storing it with honey; besides, when combs are emptied and returned to the bees uninjured for the reception of a new cargo of honey, the bees are saved the time and expense of constructing a new comb at a time when they should, by all means, be engaged in gathering and storing honey.



Parties, in writing, are specially requested to give their State, county and post office, together with their name, plainly written, as it is quite difficult to make them out in many instances. Address,

G. BOHRER,
Alexandria, Madison Co., Indiana.

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From and after May 15, the Indianapolis, Cincinnati & Lafayette Railroad will run three trains daily to Lafayette and Chicago, leaving the Union Depot at 3:15 A. M., 12:05 P. M., and 7:50 P. M. These trains will arrive in Chicago at 6 A. M., 11 A. M., and 8 P. M. For Cincinnati, four trains will be run daily, leaving the Union Depot at 3:50 A. M., 11 A. M., 5:50 P. M., and 7:35 P. M. The 3:50 A. M. and 5:50 P. M. trains make immediate connections in the same depot at Cincinnati, with the mail and fast line trains for Baltimore and Washington, through from Cincinnati without change or transfer, with time and distance as short as any other route.

Connecting at Chicago with Trains for all points West and Northwest.

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O. F. MOORE, Superintendent.
W. H. L. NOBLE, Gen. Ticket Agent.

TAKES EFFECT MAY 15, 1871.

TRAINS DEPART. TRAINS ARRIVE.

C. C. C. and I. R. R. (Bee Line.)

Local.....7.00 a m	Night Ex.....6.30 a m
Union Accom.....3.35 p m	Union Accom.....9.30 a m
N. Orleans Ex.....10.55 a m	Local.....3.03 p m
Night Ex.....7.45 p m	Day Ex.....4.35 p m

P. C. & St. L. R. R., (Indiana Central.)

Day Ex.....3.15 a m	Southern Ex.....2.45 a m
Mail Ex.....9.00 a m	Richmond Ac.....10.45 a m
Night Ex.....7.40 p m	Day Ex.....5.25 p m
Sunday Ex.....7.40 p m	Sunday Ex.....2.45 a m

Terre Haute, Vandalia & St. Louis.

St. L. F. Line...3.15 a m	East F. L.....3.00 a m
T. Haute Ac.....7.00 a m	Mail.....10.15 a m
St. L. & Ev. Ex...1.00 p m	T. Haute Ac.....4.45 p m
St. L. N't Ex....7.30 p m	N. Y. Express...6.30 p m

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Fast Express...3.15 a m	Light'g Ex.....3.00 a m
St. Louis Ex....7.50 a m	Night Express.9.35 a m
Mattoon Ac....1.00 p m	Mattoon Ac....6.35 p m
Night Ex.....7.30 p m	Day Express...7.10 p m

Lafayette Railroad.

Toledo & Q. Ac.3.10 a m	Chicago Ex....3.10 a m
Chicago Mail..12.05 m	Tol'do & Q. Ex.10.50 a m
Chi. & Qu. Ex..8.00 p m	Chicago Mail...4.40 p m

Indianapolis, Bloomington & Western.

Mail & Pac Ex.4.05 a m	Express.....10.50 a m
Urbanna Ac....12.25 noon	Atlantic Ex....5.48 p m
Express.....7.20 p m	

Cincinnati Railroad.

Baltimore Ex..3.35 a m	Baltimore Ex..2.50 a m
Mail.....11.00 a m	Morgant'n Ac..10.05 a m
Morgant'n Ac.2.40 p m	Mail.....11.50 noon
Baltimore Ex..5.50 p m	Chicago Ex....7.05 p m
Night Ex.....7.35 p m	Baltimore Ex.11.20 night

Cincinnati Junction Railroad.

Morning Ex...10.55 a m	Mail.....1.55 p m
Mail.....3.35 p m	Express.....6.30 p m

Vincennes Railroad.

Vin. Accom....6.30 a m	Spencer Ac...10.00 a m
Mail and Ex...1.00 p m	Vin. Accom....6.10 p m
Spencer Ac....3.45 p m	Mail and Ex...7.20 p m

Peru and Chicago Railroad.

Toledo Ex....7.00 a m	Chicago Ex....8.10 a m
Mail & Chi. Ex.1.35 p m	Mail & Tol. Ex.10.20 a m
K'mo & Chi. Ex.8.00 p m	Chicago Ex....8.50 p m

Jeffersonville and Madison Railroad.

Jeff. & Mad. Ex.3.20 a m	Night Ex.....3.15 a m
Jeff. & Mad. M'l.6.50 a m	Seymour Ac....9.30 a m
Seymour Ac....4.00 p m	Jeff. & Mad. M'l.10.45 a m
Express.....4.50 p m	Jeff. & Mad. Ex.7.20 p m
Sunday Train..6.50 a m	Sunday Train..7.20 p m



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