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# THE National Bee Journal.

DEVOTED TO THE CULTURE OF THE HONEY-BEE.

Vol. III.

JUNE 1, 1872.

No. 10.

[For the National Bee Journal.]

## Chat with Bee Keepers.

*Messrs. Editors:*—I will, with your permission, give you a short sketch of my ramblings among bee keepers, and what I saw. Before I take up my subject, let me thank my old friends for the interest they take in my welfare. Many of you have written me letters asking me many questions, and why I did not write for the JOURNAL. Doubtless many of you had come to the conclusion that I had given up bee culture. Not so, my friends. My whole life has been identified with bee culture, and for years I have been talking, writing, and lecturing upon this subject.

When I enlisted in this good cause, I entered it for life, or until the great mass of bee keepers fully understand how to handle bees to the best ad-

vantage, or in other words, until every bee keeper learns how to take from 300 to 1,000 pounds of honey, annually, from each good colony of bees.

I hear the doubting Thomases all along the line saying, you have a long job of it. Not so long my friends, as you imagine. Six years ago I published to the world that the day was not far distant, when from every good colony 300 to 1,000 pounds of surplus honey would be taken. At that time bee keepers were not prepared for such statements, and some of our old "standbys" lifted me clean out of my boots. Pick up almost any agricultural paper, and I was sure to find a thrust at me, and the knocks and kicks I got at the time were not a few. At that time 50 pounds was thought to be a good yield of honey to the colony. But how is it to-day? 50

pounds is nowhere. Reports come in from 200 to 750 pounds. Does any one doubt now what I then wrote? Certainly there are a few doubting Thomases, but all those that kicked and cuffed me at that time for my assertion, now yield the point. The past year E. Gallup led, and reports the largest yield of honey from one colony of bees, 750 pounds. That is certainly enough for any reasonable man. But look out, Gallup, others are after you, and unless you can reach another round or two in the ladder you will be beaten this season. But the man that beats the old veteran in apiculture, will have to rise early and work late. But away to the North-West, beyond where Gallup lives, is a man called Hosmer, that proposed to take from ten colonies of bees ten thousand pounds of surplus honey the present year. Many and severe has been the kicks Hosmer has received for the assertions he has made, *but there are none who dare accept his proposition.* No, not one in all America. Many, yes, very many persons have written to me, asking me many questions about Hosmer getting so much honey. They ask me to tell how it is done. Let me say right here, that I believe every word of it, and should Hosmer add 500 pounds more to each colony, I would, if I was a betting character, bet on his side

two to one. But before I tell you how it is done, I want to say to you that Hosmer lives away North, where the honey harvest lasts much longer than in our latitude, and of course has a decided advantage over us. But to the point. How can 500 to 1,000 pounds of surplus honey be taken from one colony of bees in one season? To do this you must have a strong colony of bees, one that is boiling over. Now, by the middle of April be ready to gather honey from the first blossoms that open. The next point in the programme, is a good honey extractor. All is now ready, the April flowers burst forth in all their loveliness, the fruit trees have put on their richest and gayest dress, and from each and every flower the little bee is gathering honey daily, carrying it and storing it away in their little cells. True, now comes a Gallup, a Hosmer, or some other inquisitive fellow, he opens the hive to see what the bees are doing; he finds the hive full of the choicest honey, and nowhere to deposit any more. They say well done, my little pets, you like work, and that your taste may be gratified, we will put your combs in the extractor, and throw the honey out and return you the combs. Three or four days from that time around they come again, they find the hive full, and again the honey



is thrown out. That is pretty quick work, says the veteran bee keeper. If you can fill a hive full of honey in four days, how full will it be in three days? And just for curiosity, the hive is opened and found to be chuck full of honey. They now begin to smell a good sized mice, and for curiosity they open the hive on the second day. Full again, says the bee keeper. That is doing well, and now my little pets, we will call on you tomorrow evening and see what you may have. The hive is opened to find it full of honey. Here is the great and grand secret, and all there is in it. A good strong colony of bees, during a good honey season, will fill their combs daily, and as regularly every evening as the good wife goes to milk the cows. you too must go and take the honey from your bees. We find that a good colony of bees will gather daily from twenty to fifty pounds of honey. Now, get your slate and let us figure a little. Suppose we have but 30 days of good honey weather. Now multiply 30 days by the lowest number of pounds per day, and we have six hundred pounds of honey from one colony of bees. But, says the fault-finder, the honey is too thin, when thrown out daily, to keep. So it is, my dear fellow, but there is a way of getting over that difficulty. The honey may be put into a brass or copper

kettle and just bring to a boil, that will evaporate all the water; skim, and put away your honey for market.

You now have the long and short of it. If you doubt it, try it on. We say, try it on, and see what can be done.

We started out with the intention of giving your readers a sketch of our visit among bee keepers, and what we saw while among them. We have spun this article out to such great length that we have but little or no space left to tell what we saw in the last two months. We have traveled over one thousand miles, visited many of our bee keepers, saw their bees, what was left of them, a sorry sight, indeed. In all my travels I saw but one apiary in good condition, and that one was Dr. Collins' of Marion, Indiana. His colonies went through the winter all right, and to-day they are gathering a large amount of surplus honey from the apple and peach blossoms. His bees are in condition to return from 100 to 200 pounds of surplus honey to the colony, from fruit blossoms alone, if the extractor is used freely. The Dr. has been in the business but two years, but his head is level on wintering bees.

At an early day we propose to arraign our upward ventilating bee keepers, and call them to account. We have got you, gentlemen, just where you live.



We, too, have got the proof, and unless you come down and own up, we will be compelled to arraign you for trial. We are glad to see that some are already on this crisis, and are crying for quarters. Come out, gentlemen, tell us all you have learned, through the BEE JOURNAL; give us a true statement. This thing of upward ventilation we have always fought to the bitter end, and we would have had to fight it for years to come, had not providence took a hand in it, and it is well for the bees He did, they would have all been wiped out some cold winter.

For a year or two past, every few days out would come some new patent hive, and each one was advertised to be the best ventilated hive in the world. Every imaginable devise was invented and so arranged that the bee keeper could not get to the ventilator to stop it up.

Will you, my dear sir, get into my buggy and go with me, and see your ventilated hives, the poor bees all dead, or nearly so, and what few are living it will take all summer to recuperate. This is not by any means an attack upon any hive, but upon your ventilation. Your hives are all well enough, but your ventilations are all wrong. They may do for a dog house, but are out of place in a bee hive. Upward ventilation is so good that I find nearly all hives

still have them. All upward ventilation should now be stopped. See to it at once, or your bees will remain weak all summer.

Hereafter we intend to appear in every number of the JOURNAL, and during the remainder of the year we shall continue to visit bee keepers, to talk, to teach, and if needs be, to lecture upon bee culture. We shall not be satisfied until we see every man keeping a few bees, until every man is able to take the greatest amount of surplus honey.

A word or two more and we have done. To the contributors that have stood by the NATIONAL BEE JOURNAL in days that are past. I see some of you have no articles in the JOURNAL of late. Come up, my old friends, to the work. There is much good to be done—let your light shine—let us together work as one man for the good of the cause. And to all bee keepers let me say, don't forget the poor editors, they need help, they need encouragement, they need money to pay the printer. Let each of us work for the interest of the JOURNAL, and the good cause. Let no one hang back, there is no danger of doing too much. We hope in the next number to report that we have seen other apiaries in a flourishing condition.

N. C. MITCHELL.

*Indianapolis, Ind.*

[For the National Bee Journal.

### Non-Flying Fertilization.

*Messrs. Editors:*—In the NATIONAL BEE JOURNAL for the 15th of March, is a long article from Wm. R. King, entitled as above. The plan, so minutely described by Mr. King, may do, but it is not likely that many will go to so much trouble and expense to accomplish it. Never having tried it, I am not prepared to condemn it, nor do I wish to indulge in the offensive language so common in discussing this question. I merely wish to call your attention to the following language used Mr. K.:

“When any man tells you he has had queens fertilized in the hive, and four at a time, just tell him for me that he says—what’s not true,” etc.

To say the least of such language, it is not courteous; but it is singular that Mr. K. would admit that he has “said—what’s not true.”

On the 15th day of September, 1870, Mr. King was at the Ohio State Fair, and attended a meeting of bee-keepers at the Opera House, in Springfield, at night. The proceedings were reported in the *Springfield Republican* next morning. I copy from that paper as follows:

“Mr. King, of Illinois, was called upon for his experience in artificial impregnation. He

said he believed it was practicable. He used a plan similar to the Hungarian method, as reported in the *American Bee Journal*. He took a frame, such as was used in Adair’s Section Honey Box, with a glass in each side, and a small piece of honey placed in it. A nearly matured queen cell was transferred to it, with 200 or 300 worker bees. This was kept in a warm place until the queen emerged. On the fifth day thereafter a single drone was introduced, and fertilization took place.”

Compare this with his present method, and you will see that all the conditions that he now says are necessary, were wanting, and all that he says will cause failure, were present. 1st. The queen was confined to a very small hive, and he says any man who says he “has had queens fertilized in the hive, says what’s not true.” 2d. He placed with the queen 200 or 300 workers, confining them all together, and introduces “a single drone.” He now says that “in the presence of the fiery workers” the drones are intimidated, and it will fail. 3d. He then said one lone drone would brave the intimidations of 200 or 300 “fiery workers.” Now he says it requires twenty or more, and they have to sneak out of the presence of a few in-



fant bees "too young to leave the comb, even in play."

It is to be hoped that Mr. King did not intend to accuse Mrs. Tupper, Mr. Waite, Mr. Mitchell, Rev. W. F. Clarke, Mr. Hicks, and a host of worthy bee-keepers of falsehood, but only intended it as a self-accusation. If so, the liberty was pardonable. D. L. ADAIR.

*Hawesville, Ky.*

[For the National Bee Journal.]

### Fertilization and Confinement.

*Messrs. Editors:*—Mr. Benedict, in closing an article in the last number of the JOURNAL, (page 241,) says "he believes the instinct of the queen and drone leads them to pair on the wing and nowhere else," which, in my opinion, is very true. And this is the very reason why so many fail in having young queens fertilized in confinement. Some beekeepers do not think it is necessary that the queens should fly and cut their wings. Consequently they make a fizzle of it, and swear that it can not be done. Others will take a queen when too young and keep her confined until she worries herself so much that she would not mate with the *d*—*l*. Then again, the drones get played out when kept in the cage too long and die, long before the

queen wishes to make their acquaintance.

Some people put a half dozen drones in the cage with a queen, thereby ruining all prospects for success, and then go prating around that the thing can't be did.

A big chunk of honey is often put in the cage, and in a minute afterwards, the queen and drones become daubed up, and of course, another failure is made, which proves, you know, beyond all doubt, that it is impossible for young queens to mate, except it be in the open air, on the wing.

In handling young queens, they are often injured to such an extent that it would be impossible for them to become fertilized in confinement, or any where else.

Parties have written me, saying that they had tried the process, as described by me, with the exception that they put the "anamiles" in the dark.

One chap took a rat trap covered with black crape for a cage. Another used a pair of his wife's old hoops covered with mosquito bar, and "damfino," what else.

Is it any wonder that so many fail? The true reason why so many fail, is because they do not comply with the instructions given.

*The queen and drone must be on the wing, or they will never mate. That's just what's the matter.*

If Mr. Aaron Benedict, or any other man, will construct a wire cloth cage, a foot in diameter, and oval in shape, and put a young queen at the right age into it, with three drones, leaving it in the sun for an hour or two, he will be very apt to see the queen fertilized, *while on the wing, in the cage*, as I have done repeatedly. If he should fail the first time, suppose he puts the queen back into the hive, shutting it up, and try it on the next day, before saying it can not be done.

I have made nuclee bee hives by putting two frames of brood honey, and enough bees to cover them, against the stationary side of an American hive—inserted a queen cell—when hatched, the date was put down. Two days afterwards, all poor marked drones were taken out, and at least a dozen A No. 1 drones left. The hive is then shut up so that a bee can not escape, the cap having a hole cut in it about six inches square, covered with glass, to admit light and the thing is left until the queen lays. This I have done often, and can and will do again. Why can not others do the

same thing? Is it not because they do not want to? After declaring that a bull-frog can not jump a certain distance, would it be like them to experiment to prove that it could? I guess not. Having sworn that queens can not be fertilized in confinement, it would not be human nature to investigate the case to prove that a mistake had been made.

One man, the initials of whose name are W. H. Furman, says in his circular, that Mrs. Tupper agreed to go to his apiary and take charge of the fertilization in confinement of fifty queens, which he knew to be unqualifiedly false, when he wrote it. The idea of an old lady like Mrs. Tupper, leaving her family and three hundred stands of bees, to try and convince a man who would not be convinced, is perfectly absurd.

Mrs. T. or anybody else would be very green to go to his apiary for any such purpose, as a man who would publish such trash, would not own up and acknowledge the corn, even though he had seen queens mated before his own eyes.

Mrs. Tupper, like myself and others, does not believe that the Langstroth hive is the only one in the world, which accounts for the milk in the cocoanut.

L. C. WAITE.

St. Louis, Mo., April 28, 1872.



[For the National Bee Journal.

**About Bee Hives.**

*Messrs. Editors:*—I see on first page, of April 15th, in the NATIONAL BEE JOURNAL, the wholesale condemnation of the movable frame bee hive, by a Mr. George W. Barclay, of Tipton, Iowa. He compares them to sausage machines and humbugs; and declares it a disgrace to put bees into them. But reserves the right to pay his compliments to Mr. William King and the Triumph hive. Mr. King, is, in his estimation, a gentleman in every sense of the word. And the Triumph bee hive, he says, is A, No. 1, and no humbug.

It appears to me, there is a very small amount of inconsistency manifested in his article; but, perhaps I am in error, not knowing how deeply our friend Barclay has been bled by patent bee hive venders. If he knows as much about the merits and demerits of the numberless hives in use in this country, as his article would lead one to suppose he did, he has a perfect right to "squeal;" and no one should say aught to the contrary. But, Messrs. Editors, as I am what he calls a patent hive vender, and have an ax to grind, I must object to this low unprincipled system of advertising this famous Triumph bee

hive by a certain class of men who have never had time or an opportunity to test its merits. The hive so far as I know, may be the best in the world; and if so, the people will find it out without its friends taking up quite so much space in the JOURNAL to bring it before the people.

I had supposed that advertising costs money. But if the NATIONAL BEE JOURNAL will lend its columns to this system of advertising, it may count me in as one of its most faithful contributors.

E. H. BARBER.

Wood Bank, Marion Co., Ind.

[For the National Bee Journal.

**Artificial Swarming.**

*Messrs. Editors:*—I have tried successfully two methods of making artificial divisions of stock. Both are very simple and easily performed, and, in my judgment, are much preferable to natural swarming.

The first is as follows: Take a close empty hive, as near as possible like the one containing the stock to be divided, and set it close by the side of the latter, the entrance to both hives facing the same way. Lift out of the full hive one-half of the cards, with the adhering bees, and place them in the empty hive, being particu-

lar to notice to which the queen is given. Now close the tops of both hives, and remove the old one first, about its width from the new one, having vacant space between the two, the space from which the old hive has been removed. As the bees come in from the fields, they will gather in this vacant space, where they have been accustomed to find their home; but, after a little reconsidering, they will gradually select one or the other of those two hives for their new abode, some going to one, and some to the other. If an undue proportion of the bees enter one hive, transpose the hives, putting the weak stock in the place of the strong one. It may be necessary to repeat the operation several times, before the stocks will be permanently equalized.

In about two days after this division is made, examine the hive that has no queen, and cut out all the queen cells; then give a sealed cell, or what is better, a fertile queen. Each hive may then be filled with empty frames, altering the empty and full frames, for the purpose of securing straight combs. But this plan is practicable only when very strong stocks are to be divided. When the stocks are not very strong, and new ones are desired, the fol-

lowing method will be found to work well:

Take from each four hives two cards, on which the brood are just coming out of the cells. Place these eight cards, with all the adhering young bees, in an empty hive, altering the frames so that not two from the same hive will be together. Shake on top of these frames the young bees from two or three other cards. Now cover the new hive, and place it where it is to stand. In about forty-eight hours give this new stand a sealed cell, or a queen, and it will be ready for house-keeping.

Those who have not tried this plan may think that a big fight will be caused by such mixing up of strange bees from different hives; but such has not been my experience, and I have made a good many artificial stocks in this way. I only remember one occasion on which the bees rebelled against such an unnatural proceeding. That rebellion was caused by my overlooking on one of the cards, the queen from one of the old stocks. As soon as the strange bees came in contact with her, her old subjects rallied to protect her, and a mortal combat was the result. By separating the cards from the same hive the bees become so confused, that they lose all disposition to fight.



The old bees will return to their old stands, but those under eight or ten days of age, never having been out, remain where they are placed. That there may be no lack of young bees, those from the two or three extra cards are shaken into the hive.

I generally prefer this latter method to the former. By it a strong new stock is at once obtained, and the original stocks are very little weakened by taking only two cards from them. In a favorable season, one new stock may be made from every four about once a week, and all of them kept strong in bees and stores.

M. C. HESTER.

Charlestown, Ind.

[For the National Bee Journal.

### Experiments on Paper.

*Messrs. Editors:*—I see that one Delos Wood, of North Madison, Ind., wants to get his name in the NATIONAL BEE JOURNAL; and as he has put his name there of his own accord, or has been *hired* to do so, I will take the privilege to call him by his name, as he has used my name several times in an article under the above caption. In the first place, it is evident that this *fellow* Wood, has been hired by one of two men to write this article (that is, if he did write it at all);

either my old partner or Dr. Bohrer must have had a hand in it. And were I to give the reason why I dissolved partnership with my old partner, then the readers of the N. B. JOURNAL would know why Wood was told these things. But I do not propose to bring these personal matters into the columns of the JOURNAL, for they are of no interest to its readers. But should it become necessary, I can publish the whole of it in hand bill form. In the first place, I will say that Delos Wood, like W. H. Furman, of Cedar Rapids, Iowa, has an ax to grind, and they wanted me to do the turning, and take this plan to get it done. All right, I am able to stand it. Go in gentlemen, you will yet find out that I turn well.

In the first place I never told Delos Wood that I had no experience on the drone question, for there are too many men in this country who know that I have been experimenting for several years past. 2d. I never wrote such a letter, telling my partner that I was satisfied of the purity of drones from impure fertilized queens. 3d. I made no attempt to explain my experiments to my partner when he took but little interest in apiculture, but spent all of his time in building hives;

and I believe, saw only one or two queens fertilized in confinement.

I don't usually spend my breath trying to explain what I know to such men, besides it was not to my interest to do so. 4th. My experiments were all made before I was at Delos Wood's, —the latter part of July.

It will be evident to every reader of the N. B. JOURNAL, that Wood was not only *corned*, but *bored*, when he wrote that article. I have no doubt he will find out that it pays him to get his name in the JOURNAL.

If it were not for the respect I have for you, Messrs. Editors, and the readers of the JOURNAL, I should not have noticed Delos Wood; and will not do so hereafter.

WILL R. KING.

Franklin, Ky.

[For the National Bee Journal.]

### About Bee Hives—How Bees have Wintered in New England.

*Messrs. Editors:*—In the NATIONAL BEE JOURNAL of March 1st, 1871, pages 133 and 134, is an article from R. M. Argo on "side gathering honey." The writer says he had never tested Alley's hive, but thinks he is right in the way he has constructed his hive. And also says, that the surplus boxes should be within one-half an inch of the outside combs, and right in the body of the hive.

Now, friend Argo, the Alley hive is just that thing, only even better, in this respect. Instead of their being within half an inch of the outside combs, they are just that distance from the end of each and every comb, and directly in the hive, and the brood chamber and boxes are so constructed that they form the main hive. During the breeding season, the brood is in within half an inch of the surplus boxes, and without even the "*ingenious device*," the queen was never known to enter a box and deposit eggs.

I never heard that any one who had my hive in use, was troubled to get the bees to work in the boxes. No one has ever made that complaint to me, but on the contrary, all had the best success in that respect. I hope friend Argo will use one of Alley's hives at no distant day, and he will have his good opinion of them much strengthened. Of course we all know why friend Argo thinks more of the Triumph, than he does of Side Gathering hives generally. It is natural for us all to blow our own horns. I find no fault, however, with what was said about the Bay State hive in the article above referred to.

If no one objects, I will tell your readers how bees have wintered throughout New England. Never did they winter so poorly; and never did they gather so much honey dew as



they did last season, and we think that it was the cause of the death of all our bees. Dysentery brought on by eating this kind of food, and long confinement to the hives proved their ruin.

Bees have done no breeding during the winter, and now they are nearly one month behind where they usually are at this season of the year, and young bees have just commenced to hatch.

All kinds of bees, that is, pure Italians, hybrids, and black bees, were all served alike. Neither was there any respect shown to hives. The only thing needed was a warm day occasionally, so that the bees could fly out. That we could not control, and so we had to suffer the loss of our pets.

I managed to save all my best breeding queens, and judging by the way the orders come in from old and new customers, I shall have use for them by and by.

We consider the NATIONAL BEE JOURNAL a good paper to advertise in, as a great many who write us say that they saw our advertisement in the NATIONAL BEE JOURNAL.

H. ALLEY.

*Wenham, Essex Co., Mass.*

ALL worker comb should be saved for future use. No matter how old it is, every scrap ought to be put away where the moth can not get at it until wanted. We have worker comb in our hives over twenty years old, and the bees raised in it appear to be as large as any.

[For the National Bee Journal.

### Bees, Hives and Men.

*Messrs. Editors:*—I thought I would write a little about the bees in this part of the country. I have lost thirteen out of thirty-nine colonies. One of my neighbors has lost forty out of eighty stands, and all who keep bees have lost more or less, as far as I can hear. Now what is the cause of all this loss? Some say dysentery, others say cholera, bad honey, and so on to the end of the chapter. But I will tell you what is the matter. The poor bees are patented to death. They hardly dare come out of the hives for fear of infringing some one's patent. Two or three square blocks at the entrance is patented, in fact the air they breath is patented. Langstroth's air chamber is patented, and then the hive is filled up with sticks and slats inside, and they are patented; so-called moveable comb frames, a misnomer. Now allow me to say, fearless of successful contradiction, that a movable comb frame bee hive, in the popular sense of that term, has not yet been invented. There has no man got one, I do not say. But some men may, by cutting and tying, and waxing or fastening comb in the frame for a number of years, get a few hives that they can handle if they take them out every day or two in

the honey season, but if they do not, the bees will fasten them ten times stronger than they did before. What I mean by a movable comb frame, is, one in which a swarm of bees can be put, and let them fill the hive with comb themselves, (for I can not make comb any more than that man down in Tennessee can,) and then if they can be taken out as represented, that hive would be a movable comb hive. But enough of this.

There seems to be some disease among the editors of our JOURNAL, they appear to be short lived. What is the complaint? Oh, it is perhaps, the Tick dollar. That is a bad complaint, but not always mortal.

Now, Mr. Editor, please hold on until the fourth of July, and I will send you a whole years subscription at one time.

Wishing you the best of success, I remain, yours,

V. AKER.

*Wanatah, Laporte Co., Ind.*

[For the National Bee Journal.

**"Tunder and Blitzen."**

*Messrs. Editors:*—Hooray! the bees are swarming. Elisha, go in the barn after the old cow-bell, and be quick. Mary Ann, ring the dinner-bell "like blazes." Anna Merrill, get an old pan and beat it hard. Phoebe Mariah, blow your nose off. Elijah, blow the old horn. Jeremiah, whirl your whirl-a-ma-gig. I will raise the devil with the

old horse pistol. Now, all hands at them. Make more noise. That's right, Flora, bark as loud as you can, old dog. The old pistol is empty, give me the dish pan, no matter if it is new. Altogether now. Thunder, I've knocked the bottom out of the thing. Never mind, old 'oman, I'll get another. By gosh, they are going higher and higher. There they go to the woods. Come boys, say we go for 'em. Mercy, how hot it is, I'm completely exhausted. Let 'em go to Sherman where they belong, I can't run another step. Well, 'tis too bad to lose such a large swarm, but there is no use crying over spilt milk. My trousers are busted all to pieces. Had we made more noise the little "cusses" would have settled.

No doubt but what some of our readers will see how they act when bees swarm, in reading the above. When bees swarm, remain perfectly quiet, and they will settle where they can be got at. You can't make a whistle out of a pig's tail, no more than make bees settle by making a big noise.

SHIST SOOKOFF.

[For the National Bee Journal.

**Waite—Furman.**

*Messrs. Editors:*—Why don't some of our "great lights," go for W. H. Furman's pile of greenbacks, now that he has



raised them to \$2,500.00, which sounds as if he meant biz.

Our friend, L. C. Waite, boldly professed at the Cleveland convention, that he could succeed about nineteen times in twenty, or twenty times in nineteen, I forget which, in fertilizing queens artificially, and poor deluded Furman "can't see it," and is rash enough to go a big pile on it.

I do hope he will not have to Waite much longer to be convinced, for I think it will pay L. C. more for three months work than he could make in the same time in the Quarter Master's office even under Grant's administration.

Is this article short enough for friend Nesbit?

W. E. LADD.

Brentwood, Williamson Co., Tenn.

[For the National Bee Journal.

### Ravages of the Dysentery.

*Messrs. Editors:*—If it is true that "misery loves company," then I certainly ought to have felt pleasant while reading the last number of the JOURNAL. The dysentery has been among my bees, as well as Dr. Bohrer's and several others. Most of them were at my farm, nearly fifty miles from here, and were not visited from about December 1st to March 15th. At the latter date, fifteen stocks were found alive out of thirty-nine that were in good condition last fall. Of this number, three

have since died, leaving twelve from thirty-nine. I am fearful that one or two of these are so weak that they will do me but little good the present season. It seemed to me that if my bees had been at home, so that I might have kept up a careful watch, I could have saved many stocks. In fact, I felt decidedly guilty of carelessness. But it seems that all the skill and expense of Dr. Bohrer was powerless to afford any relief. "Fifty stocks dead out of eighty," is his record. I am a little ahead—in dead bees.

The stores in my hives were mostly gathered from the buckwheat. Out of nearly two hundred great cans extracted the first week in September, not one soured or spoiled in any way. It did not show any signs of candying until late in the spring.

The bees commenced dying in December and continued until all were gone. Twenty-six of my best stocks were surrounded by hay on all sides, excepting room enough for an entrance on one side. These fared a great deal worse than those that stood without any protection. I account for this in the following manner: The winter was unusually cold and steady, probably not more than five days were warm enough to cause the bees to fly out. A day that would warm up the hives that stood in the open air

sufficiently to cause the bees to fly out, would not affect the bees in those that were surrounded by hay. As a consequence they did not leave the hive as often as the others to discharge themselves, and hence the disease destroyed them more rapidly. Am I correct in my surmises? Let us hear from the knowing ones.

E. H. GASTMAN.

Decatur, Ills., May, 1872.

[For the National Bee Journal.]

### Crazy and Deformed Bees.

*Messrs. Editors:*—I subscribed for your journal last September, while attending the exhibition at Cincinnati, and I have found it filled with valuable information.

It is true there has been some sparring between some parties, but that suits me, for I like to see men develop their wit. I do not think, however, that it would be agreeable to all parties to have much of that kind; actual experience in the bee-keeping business will do more good. But all this is foreign to my purpose.

Bees wintered tolerably well in this neighborhood, and have been working well since warm weather set in.

I transferred two colonies to the Wilkinson (movable comb) hive about three weeks ago; they had wintered in the old log hive, and one colony came near starving out. A week

ago they began to drive bees out of the hives, and when driven out they crawled round for a time and then died. Some of them appear to be crazy. None of them can fly, and upon examination I have so far found them crippled, the wings, generally, being the injured part. One colony, being very strong, has turned out as high as three hundred in a single day. The brood comb was handled carefully in transferring. Besides a great many of the bees that are driven out appear to be old ones.

Query: What is the cause of so many invalids, and how can the disease be avoided? Some one please answer through the JOURNAL.

At some future time, when I can arrange my thoughts in due form, I will write. Wishing success to the JOURNAL and the bee business, I remain

Yours, respectfully,

J. J. Cox.

Washington, Ind., May 20, 1872.

[For the National Bee Journal.]

### Fertilization of Queens.

*Messrs. Editors:*—In answer to numerous letters received in respect to the pure fertilization of queens, I wish to say through the JOURNAL, that where there is black or impure drones, to confine them to the hives on the day or days when the young queens are ready to take their flight. If the apiarian has



his queen cells all of one age, he will soon get through with the worst. After the young queens become fertile the impure drones will do no harm. If this is done at a time when the bees can gather no honey, the bees and drones can all be confined to the hives for a few days by giving plenty of ventilation. Be sure to let none fly but pure ones. I followed the above for years with good success. Drones of a dark redish color are the best. I discard all light and grey ones to breed from.

AARON BENEDICT.

Bennington, Ohio.

[For the National Bee Journal.

### Bee Notes from Maine.

*Messrs. Editors:*—In my previous communication, I promised to give the readers of the JOURNAL some of my experience in keeping bees under difficulties “away down in Maine,” among the fogies, granite rocks, pine trees, and icebergs. But as some of our friends here take exceptions to the latter part of the closing sentence, which they think is too hard on “Old Maine,” I will retract one-half, and leave out the “granite rock and pine trees,” from this part of the State, though they are to be found within its limits. But I still insist that the “fogies” and “icebergs” are among the staple productions of the country, if I may be allowed to judge from my experience, and

the past winter, which has but just left us. It has been a tough winter for bees, “or any other man.” I did not get my bees on their summer stands until the twelfth and thirteenth of this month, (April). My bees wintered badly, the cause of which I will give in a future number, and, as I am behind time with my “notes,” go back to the beginning and *begin*.

One year ago, while prospecting for a “bee location,” I made a visit to friends in the Northeastern part of Maine, (forty miles north of my present location), and upon inquiring of a few unsuccessful ex-bee keepers, or bee losers, I was informed that “bees would do nothing here,” “they had tried it and found it didn’t pay,” as “most of the bees after a few years trial, had died.” Sometimes after swarming two or threetimes, an old colony would fail to gather honey enough to winter, and “go up (!) before spring.” One “relative” said they would “run out,” he had “tried it himself, and it was no use.” (That “relative” has since bought three colonies of bees of me; made arrangements for making *fifteen* movable comb hives, and, reckless mortal, subscribed for the NATIONAL BEE JOURNAL, and bought an Italian queen. He read the back numbers of the JOURNAL, which I loaned him, and I, being a “Bee Doctor,” pronounce

his disease the most malignant form of the *apis febris*, (bee fever.)

Under all these discouraging circumstances, and many others that I have not time or space to mention, I decided to remain and see if I could not make bee keeping pay. To get a start and prove it on a small scale, the first year, I tried to persuade some of my friends, near by, to purchase a few swarms and let me take care of them on shares. Failing in this, I in company with a brother who had become "affected" by some "bee literature" I had carelessly left "laying around loose," purchased eight swarms of one man. I afterwards got four of another person, and went to work making hives and transferring, and before August we had upwards of five hundred pounds of extracted honey, and thirty colonies, all in movable comb hives. But as I am spinning this out too long for a *short* article, I will preserve the rest for another "effusion."

I like the suggestions of brother somebody, Nesbit, I think, on short articles. That's what we want, gentlemen; short and a good many of them. I am glad to see so many new correspondents to the JOURNAL, I feel more at home among them, but still I like to hear from the "old heads" too. Success to the JOURNAL and bee keepers generally.

J. M. HATCH.

Holton, Aroostook Co., Maine.

[For the National Bee Journal.

### An Answer.

*Messrs. Editors:*—I would just say, in reply to one statement made by Will K. King in the NATIONAL BEE JOURNAL, in Vol. III, March 15th, 1872, p. 182. I will first quote his own language, which says: "No man ever yet contracted the entrance to his hive and let out the workers and kept the unfertilized queen from coming out, and thus had them fertilized in the hive. If he did, all I have to say is, that he either has larger unfertile queens than I have, or his workers are smaller than mine." I don't disagree with Mr. Will R. King as to the queens not being fertilized when confined to the narrow limits of the hive. That may all be true, but as regards the entrance of a hive being contracted so as not to allow an unfertile queen from escaping, and at the same time it being large enough to allow the workers to pass out and into the hive, is a fact beyond controversy. Mr. Will R. King, thinking to the contrary notwithstanding. I have contracted entrances, invented by myself, which I have fully tested. They will allow workers to pass through them, quite readily too, and yet I affirm that no unfertile queen can pass through them. If Mr. Will R. King, or any other bee man, will send me two three-cent postage



stamps, which pays the postage, I will send him one of my contracted entrances free of charge.

I have often caught unfertile queens and tried to put them through my entrances, which could not be done without forcing them through. They might be of benefit in Mitchell's plan for fertilizing in confinement, if it proves to be a success. I find them of great benefit in keeping bees, when first hived, from going to the woods.

Respectfully yours, etc.,  
Vienna, Mo. J. J. JONES.

[For the National Bee Journal.

### Dysentery.

*Messrs. Editors:*—I look upon this as the most dangerous disease to which our bees in the West are liable. Unless some preventative or remedy can be found, the profits and pleasure of bee keeping must be greatly diminished. The loss of fifty or seventy-five per cent. of one's stock, in one winter, has no little tendency to cool his ardor in apiculture.

The important question then is, what can be done to prevent or cure this terrible malady? To be able to answer this question, we must first ascertain the cause of the disease. On this point the *doctors* can not agree. I presume the truth is, there are several causes, or a combination of causes. But with us, I think the sole cause has been

in the honey. My loss has been quite many, being forty-one stocks out of sixty-four. ■

I wintered my bees in a dry, warm, dark and well ventilated cellar. In the same place I kept ten stocks through the previous winter, without the loss of a pint of dead bees from them all. The disease could not have been induced by moisture, for my cellar was almost as dry as my sitting room, no sign of mildew appearing on any of the combs. It could not have been caused by a low state of temperature, as that never got down to the freezing point. If there was anything wrong about the temperature, it was too high. They had abundance of upward ventilation, and bottom also. The cellar itself was ventilated by a flue in the wall, opening near the bottom of the cellar, and running out at the top of a chimney. A stove from the dining-room above was connected with this flue, creating a constant draft on it; besides this, an inside cellar door was open most of the time, especially at night. I considered that they had all the ventilation they wanted. Then where was the cause of the disease? I used the extractor pretty freely in the early part of last season, but took no honey after the first of July. When the drouth set in, about the first of August, the stocks all had

enough honey to winter on, but it had all been gathered after the middle of June. A good part of these stores were consumed during the drouth. A considerable quantity of honey was collected late in the season, but mainly from buckwheat. The bees worked ravenously upon the fall fruits, but whether they stored any honey from these, is more than I can say. They sealed over most of their fall honey, but much of it remained unsealed even up to the time they were put into winter quarters, about the 20th of November.

Now, from this statement, it will be seen that all the honey the bees had to winter on was stored *after* the middle of June, the most of it from the fall flowers, and much of it was never sealed. It seems to me to be a reasonable conclusion that such honey, especially the unsealed, would be unhealthy for bees to feed upon during the winter confinement. And it was a fact that I observed, that the first stocks affected were those having the most unsealed honey. But the disease was not confined to those having unsealed honey. Stocks having nothing but beautiful cards of sealed comb, in time died as fast as the others.

My opinion, after investigating the whole matter—but it is nothing but an opinion and

can be taken for what it is worth—is, that honey made late in the season, whether sealed or unsealed, is not healthy winter food for bees. I also believe that syrup, made from good coffee sugar, is a safe winter food. This latter opinion is based upon those facts in my own experience. When I housed my bees last winter, I found one stock without even a spoonful of honey in its combs. I fed this all through the winter on sugar syrup and it came out all right this spring, with no sign of the disease about it. This opinion is also held, I believe, by Mr. Langstroth and others. If it be true, then, that bees will winter safely on sugar syrup, we have the remedy, or rather the preventative, in our own hands. It will only be necessary to extract the honey from the combs in the fall, and feed the stocks on the syrup. The difference in the value of the honey and the cost of the sugar, will more than pay for the extra trouble.

I desire to hear from our bee keeping friends generally on this subject before next fall, for I consider it the most important question now before the apicultural world.

M. C. HESTER.

Charlestown, Ind., April 3d, 1872.

SEE Clubbing List, for 1872, on second page front cover.



[From the Chicago Tribune.

**The Apiary.**

**SWARMING BEES ARTIFICIALLY—ITS SIMPLICITY—WHEN THE SWARM SHOULD BE MADE—SURPLUS QUEEN BEES—A SIMPLE METHOD TO MAKE BEESWAX.**

*Rural Home, Ill., May 11.*

The prejudice that many bee-keepers entertain against swarming bees artificially has probably arisen from its having proven a failure with many who have not thoroughly studied it and appreciated its advantages. This, however, has also resulted from its having been carried to excess in some instances, but this has not proven that this practice is inferior to the natural swarming. Neither has it shown that it may not be practiced by the novice as well as by the old, experienced bee-keeper. A description of it, found in any bee-book or seasonable article, combined with a little experience, will make one sufficiently well acquainted with the method of making artificial swarms; and there is no reason why every bee-keeper should not adopt it. Its advantages I have presented in former letters, and I need only say that it is attended with much less watchfulness and trouble than the swarming of bees in the natural way.

**[TIME TO MAKE ARTIFICIAL SWARMS.**

For the making of artificial swarms, there can be no certain time given, as the condition of the bees and the advancement of the season have to be taken into consideration. Therefore, it may sometimes be proper to begin swarming in May, while, in backward seasons, the second week in June is sufficiently early. When bees are stimulated by feeding in early spring-time, they will be sooner ready for dividing or artificial swarming.

**ADVANTAGE OF SURPLUS QUEEN CELLS.**

The necessity of having all new swarms supplied with queens as soon as possible, can be appreciated by all bee-keepers. The artificial swarms are usually allowed to rear a queen from young larvæ, which they generally succeed in doing: but, by a little labor done, in advance of the swarming season, this method may be improved upon, and the raising of queens be rendered more certain. When a new artificial swarm is to be made, from three to five frames of brood and honey, with a quantity of young bees, are placed in a clean hive; and, when they discover that they are destitute of a queen, from two to seven queen-cells are started. This swarm can, of course, only desire one of these queens, and hence the other cells may be made available for other new swarms, before they are destroyed by their builders. It is much easier to prepare these surplus queen-cells than to rear surplus queens; for many bee-keepers have not the time or requisite knowledge to attend to the latter. If one or two swarms are made about a week in advance of the swarming time, quite a number of these surplus sealed queens will be obtained, and they will be so nearly matured as to prove of much value to the new swarms to which they may be given. This spring has been rather backward; therefore, the swarming season will be later than usual. Very few swarms should be made this season, as the strengthening of the old colonies should be our chief aim, they having been so much reduced in numbers the past winter. The advantages that one good, strong colony maintains over two or three weak ones, is certainly appreciated by my readers. It will

gather more honey, rear healthier bees, defend its stores better against robber-bees, and the invasion of the moth-worms. A little later than this, I will give more minute directions for making artificial swarms, and hope that many who have never yet tried this plan will test it this summer. I would not have you suppose that it does not require care and attention, but am sure you will find it superior to the old method, and attended with less trouble and inconvenience.

#### A SIMPLE WAY TO MAKE BEESWAX.

Carrie H. asks for a more simple method of making beeswax than the one given in a former letter. Her father has many pieces of broken and soiled comb that he wishes her to convert into beeswax, that he may save the expense of buying some for his next winter's grafting. "Please be particular to give description of details, for I know nothing at all about it."

Well, Miss Corrie, place an iron kettle half full of water over a moderate fire, and, while it is heating, make a bag of strong mosquito-netting, and fill it with comb. Put it into the hot water, and, as it melts, as much again comb may be added. Twist the top of the bag so that the comb will not come out, and put a flat-iron or some other weight on it, to keep it below the water, and then proceed to dip off the wax with a spoon as it rises to the surface. It will hardly take fifteen minutes for all the comb to yield up the wax, when the contents of the bag may be used for fuel, and the remaining comb be taken through the same process. After all of it has hardened, put it into clear water without the bag, and, after it melts, dip it into greased dishes that will mould it into small cakes. I

knew a lady who moulded her wax in little scoloped patty-pans, and sold it for five cents a cake. But, for your father's use, it will not be necessary to dip the wax off as it is being melted the second time. But set the kettle aside in a cool place, and the wax will harden on top of the water in a nice, large cake. ELLA.

[From the Agriculturist.

#### Italian and Black Bees.

MR. EDITOR: In my last article from "The Apiary," I attempted to show your readers why it was essential to prepare their hives in winter for *early* spring, that they may not be troubled when the swarming season comes on; I also spoke of the great advantages to be derived from early feeding, or rather stimulating; there was one sad mistake I made in that article, I was made to say (in speaking of feeding the bees sweetened water,) one pound of *common* brown sugar to four or five *pounds* of water, this "pounds" should have been "gallons."

I will now say something of the superiority of the Italian over the Black, as I receive very many letters from men and woman through the Southern States asking the question, and as all write me that they are readers of your most valuable journal, I will answer through its columns, and I hope all will bear with me while I attempt to answer this question. In the first place, we are led to believe that the Italian is the original bee created *in the beginning*; the Black Bee is a different, or *degenerated* variety of the same species. We are told that when Columbus discovered America there was no bees to be found on the North American continent;



they were brought here from Germany in after years, and they have followed the sound of the woodman's axe westward as civilization has progressed, until now we find them even on our extreme western frontier. It was Black bees that were brought to America from Germany, and the question is now asked, Why do you think the Italian is the original bee created IN THE BEGINNING? I answer by giving you an illustration, the truth of which is verified by practical experience; you may take the best pure variety of farm stock you can name; for instance, the Berkshire hog—take six pure sows and one boar, now take six scrub sows and one boar, put them on a farm and let them run together and cross as they choose for ten years, the result will be there is very little Berkshire blood in them. They have degenerated from year to year until you have only the scrub left; just so it is with the Italian and Black Bee. Place, if you please, way out in the prairie—out of reach of any other bees—one colony each of Italian and Black bees and leave them alone for ten years, you will not have one single trace of Italian blood left among them, they have *degenerated* until they are all Black's.

Now, I would ask the question, if the Blacks were the original bee created IN THE BEGINNING, why did they not degenerate into Italians. Every practical, logical and philosophical man knows that pure stock of any kind will degenerate if left to itself; we find degenerated black bees. Bees that have occupied a hive for ten or twelve years are much smaller in size than those which have a hive well filled with new combs. Why is this? It is because the cells in the old comb are becoming smaller every

year. Each bee hatched in them leaves his silky cocoon adhering to the walls of the cell; such comb should be moved and made into wax—removing a sheet or two at a time, until it is all taken out. Reader, I know you think that I am getting off the track, but this vexed question of the *purity* and *distinctness* of the Italian bee, is exercising some men's minds very much. I take this occasion to give my views upon this all important question:

1. The Italian is superior to the Black in gathering honey; ordinarily the Italians will gather in a third more honey, the reason of which is that there are many flowers from which the Italians seek honey that can not be reached by the Blacks; their proboscis being too short to reach to the bottom of the cups where the nectar is secreted.

2. The Italian is more prolific in sending out larger swarms, and from two to three weeks earlier.

3. The late swarms from Italians seldom, if ever, fail to get a sufficient amount of honey to carry them through the following winter, while all late swarms of Blacks perish unless well fed and cared for.

4. The Italian is much easier handled, not being so irritable as the Black. Last, but not least, they protect themselves much better against their only enemy—the moth

“Now thanks to science and its handsome art,  
The apiculturist acts a wise part,  
The comb is built upon the moving frame,  
With smoke or sweet the fiery bee we tame;  
Control the busy inmates of the hive—  
Obtain their stores, yet save them all alive

“The brisk Italian now assumes the place  
Of the familiar black, old-fashioned race;  
Nimble, more energetic, more prolific;  
And happily in temper, more pacific;  
A more untiring and adventurous rover,  
And able to suck honey from red clover.”

WILL R. KING

Franklin, Ky.

## OUR SCRAP BASKET.

OUR SCRAP BASKET.—A new name for editorial, some of our readers say. Yes, rather; but we think if you examine, you will find that it contains some useful hints to beginners in bee-keeping.

### Our "Premium Queens."

We are not yet able to tell our readers when we can send them their "premium queens." The weather has so interfered with the rearing of young queens, that we have been very much disappointed in all our calculations and expectations, but are in hopes to be able to meet all demands some time in July.

WE propose, in the future, to have something to say ourselves, and not allow our correspondents to monopolize our columns, as has been done heretofore. Our contributors will confer a great favor on us, as well as our readers, by making their articles as short as possible. All who write for the purpose of puffing some hive or other, will please destroy their article before sending, as it will save us the trouble of doing it for them.

SEVERAL names were sent to this office, with money for the JOURNAL, without giving the name of town, county or State where they live. Persons sending for the JOURNAL should be careful to give their full address.

THE tincture of lobelia is about as good as anything for bee stings.

BRUSH off the bottom boards of your hives and see that they are kept perfectly clean.

If there are no creeks, ponds or springs near your bees, water should be given to them.

BEEES are interesting and instructive, and induce a habit of observation and reflection.

BEEES ought to be happy, as they are the only merchants not taxed—they gather and cell their own honey.

THE Italian bees, in some localities, will send forth swarms towards the end of this month, so watch out for them.

DON'T wait until your bees swarm before procuring hives; get them now and keep them in a cool place until wanted.



It is a good idea to stop up all crevices in new hives with putty, and the moth worms can not hide so well, which gives the bee-keeper a better chance to smash 'em.

Now is the time to kill moth worms. Bee-keepers, up and at them! Slaughter every last one of them, and there will be no moth millers to cause trouble to weak colonies.

Don't allow any old comb to be exposed, or the moth will not only destroy it, but will raise thousands of millers to make mischief. Keep your old comb in a cool place in a cellar.

BEEES do not like bad breaths, especially whisky breaths. Those having whisky on the breath, that do not believe this, should go near a hive of bees and see how it is for themselves.

BEEES consume large quantities of water when building comb and raising brood. Want of water is one of the causes of dysentery among bees. Knowing the great importance of water for bees, we again call attention to it. A bucket, tin pan or trough filled with water, with a few pieces of old comb or sticks for floats, for the bees to alight upon and drink in safety, should be kept near the hives, unless some stream of water is near.

THOSE who are fond of bees are fond of their house.

THERE is an item now going the rounds of the press, stating that millions of honey bees have been noticed crossing the Ohio river southward, near New Albany. Can any of our readers throw light upon it?

It is much easier to divide your bees and have the job done with, than to be eternally on the look-out for them to send forth swarms. Natural swarming is very unreliable. Those who have never practiced artificial swarming had better roll up their sleeves and go at it, and, our word for it, they will discover that it is not half as much trouble as they imagine. It is much easier to make a swarm than to have a natural one. Give it a trial and see.

Now while the white clover is in blossom, diffusing fragrance of sweet perfume and secreting honey faster than the industrious little workers can gather it, see to it that your bees do not work themselves out of a job. Give them plenty of room for storing up surplus, and empty the combs with the extractor. Do not allow them to hang outside of their hives doing nothing, when honey is abundant.

WE again call the attention of our readers to our Clubbing List. See 2d page front cover.

Put surplus honey boxes on all hives in this month.

Fasten small pieces of clean comb in each box, a few inches apart, and it will start the bees to work in them.

Hold the comb near a hot stove and stick it in the box.

Stocks of bees that have become strong can be divided toward the end of this month, if honey is abundant. Take a frame of brood, honey and pollen from eight different hives, placing empty frames in their places, and put them into a new hive, and remove a strong colony to a new place and set the new hive in its stead. It should be done in the middle of the day, when most of the bees are out in the fields. The earlier colonies become strong and are divided, the better.

[For the National Bee Journal.

### Report of the "Vevay Apiaries,"

From May 1, 1871, to May 1, 1872.

Colonies swarmed .....	0
Colonies attempted to swarm ....	0
Queens superseded .....	7
Queens lost .....	1
Colonies prepared for winter.....	144
Colonies lost during winter.....	9
Surplus queens prepared for winter.....	10
Surplus queens lost during winter .....	1

Those colonies lost were all away from town save one.

WM. FALKNER.

Vevay, Ind., May 1, 1872.

### Questions and Answers.

The attention of medicinal bee men is called to the following questions:

1. What is the cause of so many sick and deformed bees?

J. J. C.

2. What effect does camphor gum have on bees?

3. Is not the disease called dysentery with bees the seeds of foul brood.

4. Will queens in small stocks be chilled to such a degree as to injure fertility?

5. Why are bees more apt to swarm after a hard winter than a moderate one?

The above questions by

J. H. HADSELL.

Harry Goodlander, Greensburg, Ind., please answer the following:

You say you do not put your hives into winter quarters crowded with old bees. What do you do? Then you say, "I set the queen to laying in January." How do you do that? Then, "I give a dry hive for a damp one." Please explain that too, and oblige J. F. MACK,

Lainesville, O.

Some one tell us whether mouldy comb should be removed or not, and what is the origin of the drone? J. F. M.

I would like to know something more about Dadant's comb guide press. E. ESTEY.



On the mornings of the 18th and 19th ult., there was a heavy honey dew. I saw it on all kinds of forest trees—oak, walnut, hazel bushes, grape—all rough as well as smooth leaves. Is not that strange? both so early in the season and on rough leaves? Can you tell us what produces it? The lice theory, we can't go out West. I hear old bee raisers here assert positively, that they have seen it falling in the evening, and gone and tasted to be certain. Give us all the light you have.

L. G.

ANSWER TO J. H. H.—My experience proves that clipping the wings of queens is bad business. It may not shorten their lives, but I have noticed, what amounts to the same thing, that the workers replace mutilated queens at the first opportunity. I will never clip the wings of another queen again. L. C. W.

THE Des Moines *Register* says: "The Italian Bee Company are now receiving from Keokuk 250 colonies of bees. These, with the 100 colonies already in their apiary, will start them into business on a scale large enough to insure success. They also intend to raise choice poultry, and have some very fine stock on hand. The ladies composing this firm have the necessary knowledge of their business, and the requisite energy to make their enterprise both pleasant and profitable."

## PROGRESSIVE BEE CULTURE.

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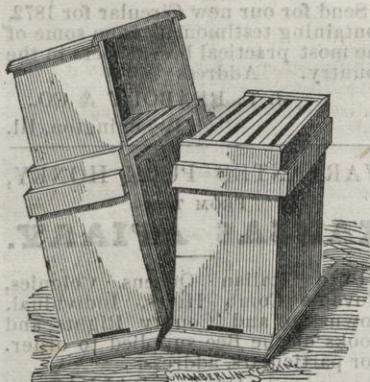
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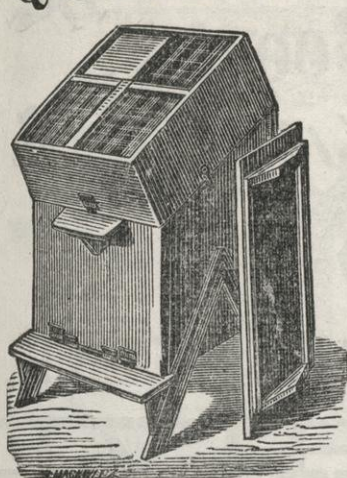
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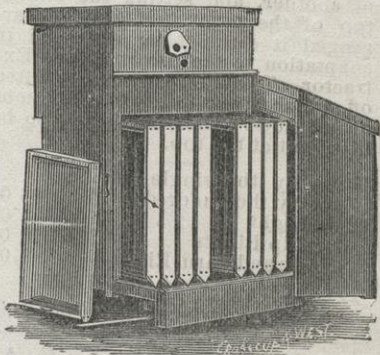
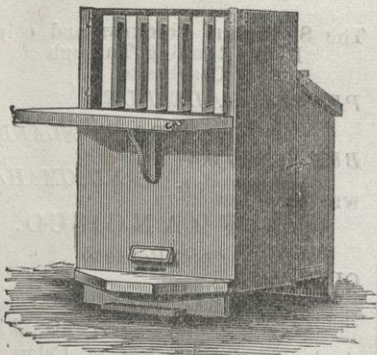
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