

Moon's bee world : a guide to bee-keepers. Vol 3, No 8 July, 1876

Rome, Georgia: A. F. Moon and Company, July, 1876

https://digital.library.wisc.edu/1711.dl/T2TUHT6MSCEUW8J

http://rightsstatements.org/vocab/NKC/1.0/

For information on re-use see: http://digital.library.wisc.edu/1711.dl/Copyright

The libraries provide public access to a wide range of material, including online exhibits, digitized collections, archival finding aids, our catalog, online articles, and a growing range of materials in many media.

When possible, we provide rights information in catalog records, finding aids, and other metadata that accompanies collections or items. However, it is always the user's obligation to evaluate copyright and rights issues in light of their own use.

MOON'S BEE WORLD,

-A GUIDE TO-

BEE-KEEPERS.

VOLUME 3.

JULY, 1876.

NUMBER 8.

Maury County Bee-Keepers Society.

The Maury County Bee-Keepers Society met at Culleoka Saturday, June 3d. The President and Secretary both being absent, Vice President Vaughan called the society to order and appointed S. D. McLean to act as Secretary. In attendance: R. H. Caskey, J. J. Jones, W. R. Webb, Jno. M. Webb, W. R. Covey, E. C. Fleming, J. F. Haley, J. C. McGaw, F. J. Moore, J. B. Jones, Travis McLean, J. C. Moore, G. W. Jones, W. B. Kannon, John Ballanfant, A. L. Prewett, Esq., Jas. Ballanfant, W. T. Ussery, S. C. Evans, and others, all of Maury ; J. B. Bray, M. G. Grigsby, J. N. Grigsby, W. W. Kannon, of Giles; J, M. Fry, W. J. Lawrence, of Marshall.

The minutes of the last meeting were read and approved. Dinner being announced the society adjourned to meet at one o'clock.

While in adjournment the President and others visited the apiaay of J. E.

Cowden, which from its novelty, attracted some attention. His apiary consists of a few colonies of bees, in gums, placed in a house, the bees entering from without through the wall. His hives were placed near each other and were strong with bees. Along the wall of the house, between and around the hives, the bees had built combs, presenting an appearance at once interesting and novel. The time having arrived, business was resumed when Mr. Vaughan read the following :

MR. PRESIDENT AND GENTLEMEN :

I presume that all present are aware that I make no pretensions as an orator, or am I in the habit of making public speeches or writing essays. That is entirely out of my line of business, and the thought occurred to me when the President appointed me to read an essay, he had about exhausted his supply of talent in that direction, if not he certainly would have selected some one more suitable. The subject selected for to-day is the general management of bees. or, in other words, the best plan to pursue to obtain the largest amount of profit. There having been so much written and re-written on this subject I have nothing new to offer, and, being a new beginner, fear I shall weary your patience and consume your valuable time. I do not propose to enter into a scientific discussion of the subject. Neither do I think it necessary. We need plain, practical advice, based on observation. The bee business is not unlike other pursuits. It requires knowledge, energy and perseverance, equaliy as much so, if not more than other occupations. It is essential to success to have everything done in the right way and at the right time.

In the North wintering seems to be the most important subject. To carry their bees through the long, cold winters of the North safely is quite a teat, and, as yet, no plan has been devised that has given satisfaction. Not so with us. Bees seldom if ever freeze in this climate. I have seen them wintered in old box gums, with cracks from bottom to top large enough to run your hand in, and come through safe und strong in the Spring. Since nature has done so much for us in giving us mild and pleasant winters, we should not be so unmindful of the comforts of our little laborers not to supply them with good comfortable houses.

While our bees need but little care through the winter season, we need not be idle. The bee business gives regular employment the year 'round. When not engaged in the yard you can put in all your time in the shop, that is if you make your own hives. Whether you make them or not, they should all be made and well painted during the winter months. Since movable frames have been adopted we can calculate just

how many hives we will need, and not be compelled to wait until the swarm is on the tree to make our hives, as was the custom in former times.

We will suppose then that our hive and fixtures are all in readiness, and Spring has come, and we are ready to commence the work in the yard. The first thing that should be done, the weather being warm enough for the bees to fly, each hive should be examined to see if they have a laying queen and plenty of stores. If no queen be found, there being no brood, unite with next weakest stock that has a queen. It is better to have one strong stock than four weak ones. My experience is that there is no profit in weak stocks. You should be sure that they have an abundance of stores at this season of the year, and if you have neglected your duty so far do so no longer, for should they be without supplies a single day, there is danger of losing them. My plan for feeding is to leave it with them in the Fall. Were I compelled to feed in the Spring I would give them full frames or a box. The planoof feeding a small amount of liquid sweets each day is a good thing if not neglected, but where a man has other duties to perform, "it requires time," he is so apt to forget it. I have always found where my bees had plenty of stores and nursing bees, they were strong in the Spring. As soon as the bees begin to gather honey, if you intend using boxes they should be put on the hives, but I would not advise the use of boxes exclusively. We have to adapt ourselves to circumstances. For instance you have on hand more bees than you can handle with the extractor. Then you can use boxes to an advantage. It saves labor, and almost every man can sell box honey to some customers that would not buy the extracted. It is very convenient to have enough full boxes on hand to give each hive one in the Spring, better still in the Fall, if you intend running the extractor and need extra combs. My plan to obtain them is to place one or two empty frames at a time in or near the center of the brood nest, between straight combs, at the same time carrying the same number of combs from the outside of lower story to the second. By so doing I seldom fail to get worker comb built, which is a very important item with every bee-keeper. You should keep your bees building comb as rapidly as possible until you have a sufficient supply to fill your hive.

This brings us up to the swarming season if allowed to swarm natural, also the time for extracting, which should commence as soon as the honey is sufficiently ripe, not until. I never think it advisable to extract until the honey is capped over, and if you will be governed by this rule you will never have sour honey. I dont think it safe to extract honey too close at any time. The honey harvest is cut short very often in midsummer, and bees can scarcely gather enough to subsist on ; therefore if you take all their supplies, brood rearing is suspended. So be generous and only take a part. If you are using boxes, as soon as your first ones are nearly full raise them up and place empty ones beneath them, and continue so doing through the honey harvest. You can obtain more honey from large boxes than from small ones. There is very little difference in the time required to fill a three pound box and a ten or twelve pound box. Small ones sell best. A five or six pound box is a nice size for market. I would not think of putting on dry ones, but place in each

one a nice piece of comb. and depend on it you will have a full hox of nice honey before the bees begin to work in a dry box. Use your new drone comb for that purpose. There is not a difference in quality between extracted and box honey, if properly managed, that some contend, and if we only had a home market for our box honey, it would be a nice husiness. After you have done extracting, the honey harvest being about over, proceed to make up as many colonies as you desire to to increase your stocks to, using your surplus combs. having previously reared vour queens in neuclei. The greatest trouble with new beginners, is, they attempt to increase their colonies too fast. When very strong it is safe to double, provided you have plenty of combs, honey, and bees; if not, stop short, for whenever you make up a colony make it strong. I believe in full stocks, with plenty of stores. After you are through increasing, the work is about over, until we commence preparing for winter. That consists in removing all surplus combs from the second story, and giving to each colory at least five frames of solid honey in the lower story, beside what is stored in the upper part of brood combs: then fill above the frames with guilts, made for the purpose, or old clothes, carpets, cotton seed or almost anything that is convenient, and pack them down hard. then contract entrance and leave them quiet and have no fears as to the result. C. C. VAUGHAN.

Mr. J. J. JONES has had no experience with box honey, and supposes the honey in boxes is liable to be injured by moth.

MR. CASKEY.—If colonies are weak, is it advisable to to feed when uniting? MR. JONES united five colonies, mak-

227

ing but one, by shaking all the bees in a new hive when they united readily. He unites a queenless colony to one^{*} having a queen, by setting the queenless colony on top of the other.

MR. GRIGSBY makes the bees all fill themselves with honey and then unites them.

MR. CASKEY unites by taking the combs of the colony with a queen and setting them in the queenless colony.

MR. GRIGSBY. Has Mr. Vaughan ever had experience in wintering in the top chamber? Will not bees winter better in the upper chamber, and will not combs mold if left in the lower chamber?

MR. VAUGHAN thinks no advantages are gained by wintering in the upper chamber.

MR. GRIGSBY.—The heat from bees are more concentrated at the top of the hive.

MR. McGAW winters by elevating his hives by placing something under them; wants no ventilation at the top; but thinks bees are not injured by any amount of ventilation from the bottom.

MR. VAUGHAN began bee-keeping by buying a patent hive ventilated all over, top, bottom and sides. His bees closed all except what he assisted them in doing, and when they need ventilation he gives them more room.

MR. BRAY.—Is it advisable to extract from the brood combs.

MR. CASKEY finds no bad results in extracting from the brood combs.

MR. JONES finds it more convenient to extract from the upper chamber only. Gets no combs built when extracting.

MR. BRAY.—Did Mr. Jones ever see any poplar or linden honey that was taken before it was ripe.

MR. JONES has seen lindon honey taken when it would rattle against the

sides of the extractor like water, considered that thin, as it sours.

MR. VAUGHAN,—What bees gather is no more honey until it undergoes a distiling process in the hive than the sap from the maple is sugar.

MR. GRIGSBY.—It is honey but diluted with dews and water.

MR. BRAY has seen water stored in combs with a slight sweet connected with it. Thinks bees extract the water from it which leaves the honey.

MR. JONES has never seen water stored in combs, nor found any authority on the subject where the bee has any apparatus for separating the honey and water.

J. C. McGAW.—The least amount of water in honey ruins and causes it to sour.

A visitor to Mr. Jones. Do bees carry in water to wash out the cell?

JONES.—Don't know what they do with it.

W. T. USSERY.—Is there any means to prevent bees building drone combs?

MR. VAUGHAN.—No sure method; advise having combs built in centre of brood nest.

J. J. JONES.—Are the drones of a fertile worker capable of fertilizing queens?

W. B. KANNON.—Is there any such thing as a fertile worker?

J. J. JONES.—From evidence we have from others and from our own experience we would say, yes.

MR. KANNON.—Think there is no such thing as a fertile worker.

MR. JONES.—Workers are undeveloped females and from the light before us we are fully satisfied there is.

MR. KANNON.—Has the queen any discretionary power over the laying; can she lay drone or worker eggs as she pleases? JONES.-She has.

M. G. GRIGSBY.--Queens will lay worker or drone eggs as she pleases; never saw workers reared in drone combs.

Mr. GRIGSBY then asked permission to read a paper from Dadant & Son, which they had enclosed to him, and requesting him to read at this meeting of the Society. Permission being granted, Mr. Grigsby read as follows:

To the Maury County Bee-Keepers Association :

MR. PRESIDENT AND GENTLEMEN: — We have just received a copy of the proceedings of your society at the meeting of May 6th, 1876, in which Mr. Wm. J. Andrews, your Secretary, accuses us of having humbugged or swindled him. We now come before you demand a hearing to defend ourselves from this charge. You cannot condemn us without hearing us.

In a private letter sent last fall, and also in a letter just received by us, Mr. Andrews informed ns that Mr. W. W. Kannon, of Culleoka, complained of us having swindled him. We will begin by answering this charge. On August 2d, 1875, Mr. W. W. Kannon wrote to us complaining of an imported queen which we had sent to him on June 15th. and he called her a hybrid. To this we answered that the queen sent by us had been received from Italy on May 24th. and that we could not find a single impure bee in the hive (No. 212) which our books indicated as the one in which she had been for twenty days. But as Mr. Kannon said in the same letter that all men were liable to mistakes, we asked him if he was very sure that he had not made a mistake. To this he answered that he was sure that it was the same queen, and that if you gave him no satisfaction he would box her up

and send her back to us. We replied that if he would send her back with an affidavit, establishing that it was the same queen, we would send him another. To this Mr. Kannon answered nothing. Now we are not in any way acquainted with with Mr. Kannon, and know nothing of his honesty, but in this case we think that we did as much for him as any one else would have done, and we energetically deny his right to call us humbug either privately or publicly.

When Mr. Andrews informed us that Mr. Kannon claimed to have been humbugged by us, we, of course, denied the charge, and told him the circumstances. Now Mr. Andraws accuses us of having sent him a black queen, producing black bees and black queens.

We deny this charge entirely, and for a very good reason. We had not a single black or hybric queen in our apiary.

If this statement is doubted I will ask any of you to write to Mr. A. N. Draper, of Upper Alton, Ill., who was here about August 1st, 1875, and who saw us destroy a few hybrid queens that we had left, and give away some pure and purely mated queens because they were over three years old. Therefore, we could not, if we chosed, send a black, queen to Mr. Andrews since we had none.

To us, then, the question is clear. Mr. Andrews had his queen replaced some way or other by either brood or a young queen of his own black stock.

To you, Mr. President and Gentlemen, the question is not so clear; is remains thus: Either Dadant & Son are humbugs, and Mr. Draper's testimony in their favor is a willful lie, or else Mr. Andrews make one of these mistakes so common to beginners, and has replaced his dark imported queen by a black native, without his own knowledge. ,Which is the truth? Andrews is right close: he is your Secretary, he can speak to you and argue the case. Dadant & Son are far, and they have but a small chance to defend themselves. Be not too prompt in deciding.

We know nothing positive about Mr. Andrews' experience in queen handling, but we judge that he is not a very old and experienced hand, by his own writings. He wrote to us October 1st, asking for a colony, because, as he said, "I do not want to take any risks in introducing." This gives us the impression that if Mr. Andrews fears risks of introducing he is not a very practical queen dealer.

Which of the two are the best established, Mr. Andrews' experience of queen handling, or our honesty? To decide this question, we demand of your society that a committee of three members be appointed to take informations about Dadant & Son, to write any or all the business or reliable men of Hamilton, Ill., to its Mayor or City Council, or to its City Treasurer, or to its Postmaster, or to the editor of its paper, the Rural Messenger, and ask this question, "are Dadant & Son honest, square, and honorable?

Mr. President we are not ramblers; we are not traveling agents; we have lived here for thirteen years; we are settled, responsible business men. The older partner of this firm was an advertiser and a contributor of the American Bee Journal before 1869; enquire about us; enquire of those who have known longest and find us out.

In closing, we will ask, not as a favor, but as a justice, that this answer be read at the June session of the society, and that it be published in full with the report of the meeting in the same pa-

pers that published the report for May, 1876. CHAS. DADANT & SON.

Hamilton, Ill., May 19, 1776.

MR. GRIGSBY then moved that the papers just read be published with the proceedings of the Society. Adopted.

On motion of S. D. McLean, Mr. J. J. Jones was appointed to write an Essay on Honey, and that the same be the subject for discussion at our next meeting. Adopted.

Mr. J. Grigsby and W. B. Kannon applied for membership and was unanimously received.

Mr. J. Bray then moved that the Society adjourn to meet at Columbia the 1st Saturday in July. Adopted.

S. D. MCLEAN, Sec'y. pro tem. COLUMBIA, TENN., June 7th, 1876. Messrs. Chas. Dadant & Son:

As I was unable to be present at the last meeting of the Maury County Bee-Keepers' Society, at which your letter, as given above was read, I take this method of replying thereto. Before proceeding, however, to notice any points in your letter, we will in the first place give a statement of facts, and which facts, as detailed by us, we are willing to be qualified to.

We had been purchasing quite a number of queens in order to Italianize our stock. This naturally drew us into conversation with Mr. W. W. Kannon, who had been handling Italian bees for several years. In one of these conversations he and Mr. C. C. Vaughan both informed me that they had got a queen of Dadant, but both expressed themselves as being very much displeased with her, and both regarded her as a black queen, and her progeny being hybred bees alone. In all my conversations with them I defended the Messrs. Dadant, and told them that I could not believe it possible that Dadant or any BEE WORLD.

other breeder "would be so idiotic as to commit so barefaced a fraud," or in words implying as much. I told them that I intended ordering a queen of you, but was advised by them not to do so. Mr. Kannon said, " if you do you will get a queen like the one I got." I replied to him that I thought not, as he had expressed so much dissatisfaction to you that I thought my chances the better for getting a fancy light queen. I then wrote asking if you could furnish me a fancy light colored queen in nuclei. You replied that you could, and would furnish me such a queen on the receipt of twelve dollars. It is true that I wrote you that "I did not want to take any chance of introducing." In purchasing a valuable queen I was not so penurious but what I preferred paying an extra two dollars for four combs, worth of themselves the money, to takingany risk of introducing. My advice has always been and is still, and so it is of all honest dealers to their patrons, to buy valuable queens in neuclei. I could, sirs, cite you to numbers of persons, were it necessary, but you know, as well as I do, that there are scores of instances of practical bee-keepers who have lost queens in introducing them. But I digress. I sent you a money order for the queen you had written me you could furnish. In a few days thereafter the queen arrived, but, Lo! and Behold ! instead of getting such a queen as I ordered of you, I received a black. In charity to you, and being hopeful that she would prove all right I mildly called her dark. Others saw her in a day or two after she was received, and they called her black. Hear Mr. White, I have his certificate. "I was in your apiary the next day after you received your Dadant queen, which you exhibited to myself and others at the same time.

4.90

We all pronounced her a black queen, and told you that you was humbugged. Not only was the queen black, but many of the workers which accompanied her.'

When I had received her I told Mr. Kannon what kind of queen I had received. He replied, "I told you so," and I have often since been laughed at by him, Mr. C. C. Vaughan and others for suffering myself to be humbugged (that is the mildest way I can put it) after knowing what they had received. I still continued to defend you, hoping I would in the course of time be able to turn the laugh. I wrote you when she was received that she was "dark, I might call her black," but I would not cry out humbug on you, like Mr. Kannon, until I had fully tested her. Here is your reply :

HAMILTON, ILL., Sept. 24, 1875. We have not at all humbugged Mr. Kannon, for we have here a daughter from the queen we sent him, who is very pure. Moreover we offered him to replace the queen, provided he sent with her an affidavit establishing that she was the same queen. To this he made no reply. If we did not send you a very light queen, it is because we only had then 5 imported queens in nuclei. We have two very light queens in the last importation received a few days ago, and will send you one on receipt of eight (8) dollars. If you want one of these order at once."

CH. DADANT & SON.

We didn't order at once however. Your excuse for not sending a light queen was because you then had "5 imported queens in nuclei." Now, if the Messrs. Dadant can't make up a nuclei on short notice they are not very "practical queen dealers." You may dodge and squirm from the issue as much as you desire, but I shall hold you to the issue between us, which is just this: I ordered of you a light queen, but, instead of getting what I ordered, I received a black because you then had "only five imported queens in nuclie." She is worse than a hybrid unless as you claim that the *black* Italians are *the best*. If a stock breeder was to order of another a *white* or *yellow* animal and a *black* one was sent him would he not have just cause to regard himself as "humbugged or swindled?"

Lets look into the matter a little fur-Are there no others besides Kanther. non and myself who have complained of Dadant's dark or, more properly speaking black bees. Turn to page 228, Vol. VIII, American Bee Journal, and we put you Mr. Dadant, on the witness stand. In replying to Mr. T. G. McGaw, a well known breeder, who had complained of your dark queens in a former number of that Journal, you say : "I intended preserving for Mrs. E. S. Tupper, (who, by the way, at that time, claimed an enviable reputation for herself as you now claim for yourself, yet, with sorrow we say it, has since been arrested for forgery, and we might also cite Gen. Adair, N. C. Mitchell and others,) and for myself all the dark queens, for we both knew very well that the light colored queens are less prolific and less vigorous than the dark (that is, all black ones.)

Now, how do you excuse yourself to Mr. McGaw? You say: In the hurry, the queens having been changed of boxes, it was impossible to select the lightest for our patrons. I selected one for myself, because she was nearly, if not quite black."

Here you admit having imported queens "nearly, if not quite black," yet your letter above says "we could not if

we chose send a black queen to Mr. Andrews, since we had none."

Again you say to Mr. McGaw, "I will choose for him one of the lightest colorqueens."

Mr. Kannon introduced his queen. You well know that there was a chance of her being lost. To him you say, "make an affidavit establishing that she is the same queen." To Mr. McGaw, who is a breeder with an established reputation, you say, "in the hurry, the bees having been changed of boxes, it was impossible to select the lightest."

To myself you say, " if we did not send you a very light queen it is because we only had then five imported queens in nuclei."

Again, sirs, do not your replies to Mr. McGaw and myself go to prove on your part a bit of sharp practice? You advertise single queens for ten dollars; two for eighteen. Do you not, on the first order, send out dark (black) queens, knowing that they will not be satisfactory, and will not stand the established test of purity, and then solicit the second order at eight dollars, thus securing the sale of two.

Still again is there not a want of consistency in your letters, when you say, in 1873, to Mr. McGaw that you 'have queens "nearly, if not quite, black," and that they are more prolific and vigorous, and, in 1876, you say to me that you "have no queens dark as the native," and to the Maury County Bee Keepers' Society, "we could not send Mr. Andrews a black queen since we had none."

The queen that I purchased of you was black when she arrived. If she has been superceded, the queen I now have is her duplicate. But she has not been superceded. She came in a nuclei, and there has never been a queen cell on her combs. That she came from Italy I do not deny, nor have I ever questioned the fact, but that there are black bees in that country, I think there is a preponderence of evidence going to show conclusively, your opinion that all bees in Italy are pure Italians to the contrary. To show that the queen exhibited at the meeting of the Maury County Bee Keepers' Society in May, 'is not a common native queen, I will introduce first, Mr. S. D. McLean, and then Mr. M. G. Grigsby.

CULLEOKA, TENN., May 27, 1876. Friend Andrews:

As you request a note from me regarding your queen, Miss Dadant, I will say that I have seen her. Although she is dark, or, I may say, black, yet there are peculiarities connected with herself and offspring which settles my convictions that she is not a common native queen, at the same time she is not a queen which at all meets my fancy to breed from." S. D. MCLEAN.

Now hear Mr. Grigsby.

LYNNVILLE, TENN., May 16, 1876.

The queen you and Mr. Staples exhibited at the last meeting of the Maury County Bee Keepers' Society was almost, if not quite, as black as any black queen, and her progeny as black as that of a black queen, though I think they have an appearance different from any black bees that I have ever seen. I do not wish by this expression to say that I think Mr. Dadant a humbug, for I do not believe it, yet I give you a description of the queen and her progeny for your accommodation, simply because you request it.

It appears to me too unreasonable that an importer of Italian queens would send out for or as an imported queen a queen producing bees without a mark of Italian blood.

M. G. GRIGSBY.

Mr. McLean says that she is not a common native queen. Mr. Grigsby, who also manifests a kindly feeling toward you, says, "they have an appearance different from that of any black bees that I have ever seen." These two gentlemen struck the key-note—they are the black bees of Italy, imported by yourselves, as you admitted in 1873 to Mr. McGaw, if not, and being entirely different from any bees in this country, the question naturally rises, where did they come from?

Here is what some others think of her. Gen. A. Bowen says "she has no yellow band at all: she is all over black. If I had not been told she was an Italian I should have regarded her as a fine black queen. I would not wish to breed from her at any price."

J.C. Moore says: "From her appearance I would take her to be nothing more or less than a common black queen, and were I to receive such a queen from any breeder I should consider it an imposition."

E. C. Overton says: "She resembles the queens in my colonies which are called black much more than the Italians I have seen. I would call her a queen of the black stock. I bought a queen of you, but selected a very different one in appearance."

In conclusion, gentlemen, permit me to say that I havn't the shadow of a doubt in my mind that I am now in possession of the queen I got of you, and that I was humbugged when I got her. To deceive is to practice a fraud. Before I ordered the queen you assured me that you could furnish me a lightcolored one. I charge that you did not furnish me with such a queen as I ordered of you, and you promised me, and you have never yet denied it, but, on the contrary, admitted the fact by saying the reason you did not send me a very "light queen was because at the time you had five only in nuclei." It is useless to protract this controversy. Please answer the following questions. I have asked them before but have never been able to get any reply from you.

1. Did I not write you previous to ordering a queen, and ask if you could furnish a light-colored one, and did you not promise to furnish me with such a queen?

2. If so, did you send me such a queen?

¹ 3. If I ordered a light and you sent a dark queen, did you comply with my request and your promise?

4. If, as you say, Italian queens should produce a progeny showing "three yellow rings," and the one you sent me does not do it, have you sent me a pure queen?

As this is an open letter, we will say that we have as fine a strain of bees as we have been able to procure, and have many testimonials from those who have favored us with their orders, but we have not nor never will send out a Dadant daughter unless specially requested in the order, although we have in our apiaries two queens precisely alike bought of Dadant for imported queens. The Dadant queen in the yard of Mr. C. C. Vaughan, Mr. Vaughan tells us he will swear positively is the one received of Dadant through Kannon.

WM. J. ANDREWS.

For the Bee World. How I Manage Bees, No. 8-Extracting Honey.

REV. M. MAHIN.

A great deal has been said in the BEE JOURNAL of late concerning extracted honey. Some condemn the extractor altogether, while others regard it as a very important implement in the apiary. I have had and have used an extractor for five years, and am prepared to give a very decided opinion in its favor.

All who become accustomed to the use of extracted honey, not only like it as well as comb honey, but decidedly better. My wife was very much prejudiced against it at first, and wanted her honey in the comb; now she will not eat honev in the comb at all, when extracted honey is to be had. When I first offered extracted honey in this market my customers wanted box honey. and would have bought no other if it could have been had: but as there was none in the market, they would take a little extracted honev rather than none; and soon the demand exceeded the supply. Nine hundred pounds is the most. I have produced in one season, and I had no difficulty in disposing of it at home. In fact, every ounce was gone long before flowers bloomed the next spring. The price realized was 25 cts. per pound. My youngest son and I have a market garden, and run a delivery wagon, and we carry honey in jars, as well as fruits and vegetables.

I do not wait for the honey to be sealed before extracting. As soon as the combs are full, and the sealing process has been begun I remove the honey, and my honey is thick and good. As I am a Methodist presiding elder, and away from home one half of every week, I extract, during the honey harvest, once a week. I do not, as a rule, extract from combs that contain brood. It is difficult to do it without injuring the brood, and in general there is no necessity for it.

I designed in this article to tell *how* to extract honey rather than to discuss the merits of the extractor.

The best time in the day to perform the operation is the time when the bees are busiest gathering honey: and that depends upon the sources of supply. Some flowers yield honey only in the morning, as buckwheat; others yield most abundantly in the heat of the day, as white clover. When bees are gathering honey plentifully, extracting can be done anywhere, and robbing will not be induced, and no bees will disturb the exposed honey. At other times great care is necessary. The hives must be kept open as short a time as possible, and the extracting must be done in a room that bees can have no access to. At such times all opening of hives should be done very early in the morning before many bees are astir, or late in the afternoon when activity has mostly ceased.

Being ready to begin the work of extracting, I blow a little smoke from rotton wood in through the entrance of the hive, and having opened the hive blow in some smoke at the top. I then lift out a comb, and by a quick vertical motion shake the bees off in front of the hive, having a board slanting up from the ground to the front edge of the alighting board, to facilitate their re-entrance. Those that remain after shaking I brush off, using for that purpose five small heads of broom-corn tied together. Placing the brush just above the bees I give it a short quick motion which dislodges without hurting them. As soon as all the combs have been removed-all that honey is to be taken from-I close the hive, and let it remain until the combs are returned. I usually extract honey only from frames of comb in the upper stories of my hives.

Concerning the uncapping of sealed honey, and the rate at which the extractor is to be run specific directions can not be given. The novice must learn by experience. One caution, however, is important. Do not turn too fast, or you will damage the comb. Run the machine slowly at first, and gradually increase the speed until you ascertain the rate that will do the work.

The honey, as it runs from the machine, should pass through a wire cloth strainer. The one I use is made by cutting a round hole, about five inches in diameter, through a piece of board, and pressing the wire cloth down through it, and tacking the edges on the upper side.

New Castle, Ind., June 10, 1876.

Are They Frauds?

J. F. MONTGOMERY.

EDITOR BEE WORLD:—I think you should cease advertising the house of John J. McAllister & Co., Chicago, Ill. I don't think they are disposed to do the fair thing. I shipped them a barrel of honey about three months since and have not been able to get a settlement, and from appearances don't think I ever will. Would say to your readers don't ship the above house anything unless you get pay for it in advance.

Would like to ask if you know anything of a patent bee hive called the Common Sense? One G. W. C. Gillespie has been traveling through our county, blackmailing bee keepers, threatening to prosecute them for using a twostory hive unless they would pay him royalty, telling that his was the only two-story hive ever patented, and that all other two-story hives were infringements on his. He called on me to pav him for the right to use a two-story hive, and on refusing threatened to prosecute me in the United States Court. He says his home is in Virginia, but is now located at Huntsville, Ala., twentyone miles south of here, and as you no doubt have a good many readers in Alabama, I hope you will warn them of him and caution them not to pay him money for something he does not own. To hear him talk one would think he owned as much as the late A. T. Stewart. He says he owns 1,000 colonies of bees and 1.900 acres of improved land near Des Moines, Iowo. Made and sold 70,000 bee hives last year at \$3 each, and a great deal of other gas that I can't think of. Please hand him round.

Poplar commenced blooming about a week ago, but to-day is the only day we have had for honey. Bees brought in a fine lot to-day. I have fifty-two colonies in good condition, and everything favorable. Hope to get a quantity of honey this season. Will report to THE WORLD.

Lincoln, Tenn., May 10, 1876.

Seventy thousand bee hives in one season, and those of a kind so little known and used in this age of progress is something very remarkable. In all of our experience, we do not know of a practical bee-keeper in this country that uses one of them. We will soon give the readers some light upon the subject.—ED.

For the Ree World. EssentIals to Success in Bee Culture.

W. B. STONE, M. D.

MR. EDITOR :- The first step necessary to success in bee culture, is a properly constructed hive. Almost any pattern of outside case will answer, provided it contains movable comb frames. These comb frames should be what are termed "loose fitting," i. e. with spaces all round and between them of threeeighths of an inch, suspended by the top slat, extending at each end beyond the uprights, about three-fourths of an inch.

There should be a square bar one-fourth of an inch nailed to the under side of this top slat, diamond like, i. e. with corner of this bar resting against the slat. Then raise the back side of the hive some three inches higher than the front, and the result will be straight combs. Remember the frames are to extend from the front to the back.

Now that the apiarian has secured straight combs, one result is gained in securing the largest yields of honey, and we take it as granted that honey is what he wants.

The second important contrivance that is necessary is an Extractor, styled a "Honey Slinger." With this we can take much more honey than we possibly could if we take the comb along with the honey. There is beauty in economy as well as increased wealth. The Honey Extractor is the great economic machine of the apiarist. By extracting the honey as soon as the combs are full and sealed (and not sooner : unless you would have soured honey) and returning them to the bees to fill, and repeating as often as you can until near frost, you can get much larger yields of honey.

Now is the time to begin to sow buckwheat for late summer and fall pasture. Continue to sow until August.

The man that would succeed well with his bees must not neglect to provide pasture for them; and especially is this necessary in this section of country.

Mr. Editor, I am much pleased with your BEE WORLD. It grows better and better with each number, and let me say to all bee-keepers, take the BEE WORLD or some other bee journal as they are also essential to success in your pursuit.

There is a good work begun in the

236

WORLD, and I would say let none that are guilty of humbuggery escape their deserved excoriations.

A brotherly greeting to you brother Moon, brother correspondents ond readers of the BEE WORLD.

Fountain Run, Ky.

For the Bee World. Notes from South-East Louisiana.

WM. L. GORDEN.

The past winter and early spring has, with us, displayed the advantage of the modern hive. Our bees began in January to gather honey, consequently breeding early and rapidly, drones apnearing the last of February. I divided two colonies about the 1st of March; in a day. or two it began raining, and we had a severe freeze following the rain, killing the budding and blowing flowers, thus cutting off bee supplies. Away went the drones and much of the young brood, and one of my colonies took wing, locating in one of my neighbor's hives, and another one I had to hive five times, bringing them back twice near one-fourth mile. Finally I confined them to their hive three days, putting a plate of honey on the honey board, and letting them out late on the third day. They have done well since. I fed with honey in plates, elevated in four or five places in my apiary-had no fighting during the feeding. Had it not been so convenient of access to the hive, thereby demonstrating their general starving condition, I should have probably lost half my colonies; they have become very rich in honey now-too rich I fear, not leaving enough space for the queens, and I have no melextractor to empty the combs. Am increasing my stock by sub-division, and getting considerable honey, cutting out comb and all.

A Mr. Baldridge, from Illinois, I think, has come amongst us, and has now Dr. Marshall's apiary in charge, at this place. Calling the other day at their place, he was not at home, so I had to forego the pleasure of an acquaintance and chat about hives and bees.

I am making my hives now 15x15x10 inches inside, upper storics same size "ad libitum." All my comb frames are interchangeable.

Bussywinds, April 29, 1876.

Sketches from Tennessee-Bee Culture.

S. D. MCLEAN.

Some engage in bee culture for the pleasure it affords them as a passtime; others as a means of furnishing their own tables with one of natures richest luxuries, while others engage in it as an occupation for the dollars and cents they may realize from it.

The last named object is doubtless is the stimulus which induces the majority to become bee-keepers. The overwhelming reports of a few who have been eminently successful has acted like enchantment in creating an excitement on the subject, and causing many to engage in apiculture who are utterly incapable of controling an apiary; incapable from the fact of their ignorance; yes wilful ignorance of the subject; wilful because they refuse to inform themselves. Why refuse information? Simply because that information is derived chiefly from reading, and there is such prejudice existing in the minds of many in regard to book knowledge, on farming, bee-keeping, &c., that it is next thing to impossible to eradicate it. The consequence is that many fail.

But on the other hand, where it is followed by persons who take an interest and acquire the necessary information in the business and who have energy and industry sufficient to give bees that care and attention they deserve, it may be made equal, if not superior in point of remuneration, to that of any other rural pursuit, considering the amount of capital invested.

BOX AND EXTRACT HONEY, &C.

Different localities require different management of bees to attain the best results.

For instance, an apiary in our own locality run for box honey would not compare at all with one run for extracted honey.

It is a known fact that bees build comb only when they are storing honey.

As this locality is favored with but two short seasons or harvests when they store much honey. (one when the poplar and the other when the linden is in bloom) bees here build but little comb except in those seasons. But during those harvests the honey comes in so rapidly that it is impossible for bees to construct combs fast enough to receive it. The only alternative is to have combs built in frames and during those seasons resort to the use of the extractor, thefeby giving more room for honey. But in other localities, as in some of the northern states, where white clover is the main dependence, the flow of honey is not so rapid but of long and steady duration. Bees have ample time to construct combs to receive the honey as fast as gathered. The preponderance in such localities is in favor of box honey.

Our northern bee-keepers take advantage of the above named fact, which is the great secret of their success in raising box honey. In regard to the honey resources of the extreme south we are ill advised.

slow to make known their resources. Although our southern friends have been requested to give their resources for honey, from some cause or other they fail to give the desired informa-The BEE WORLD is published in tion. one of the extreme southern states, vet we fail to find in the south that spirit emulation in the cause of apiculture which is so desirable.

Culleoka, Maury Co., May 30, '76.

_____0___

Advantages in Bee Keeping.

S. M. H. BYRD.

MR. EDITOR :- As a large number of your readers are the best apiarians in the county. I do not feel well qualified to write for their instruction: I had rather be a learner than attempt to teach. We may however exchange ideas and experience with profit to each other. I regret that every man who raises bees does not read your valuable journal. I am frequently asked, by those who have a few bees, what advantages the moveable-frame-hives have over the common box or gum hive? Will partly answer their question through your journal. To one who does not expect to pay any attention to his bees except to get what honey they gather, leaving their case all to chance. I answer moveable frames are not worth much; but need attention to make them pay, just as poultry, sheep, cattle, or horses need attention. What stockman turns his horses, sheep and cows into the grass fields and leaves them there without any kind of care until he wants to use, shear, or slaughter them? On the contrary, he looks after them constantly and supplies their needs. While bees need less care than almost anything that is domesticated, they require some Bee-keepers of the south have been attention. Moveable-frames enable bee

238

keepers to give the needed attention intelligently. Greater advancements have been made in all that pertains to apiculture through the use of frames during the past few years than in all time before. The box hive is almost a sealed book, a locked and guarded safe. Frames enable us to read the books without injury, furnishes the key by which the safe is opened and examined at will.

When the young queen is nearly ready to cut out of her cell in the spring, and we know that a swarm will probably issue in a few days, we may do our own swarming in a very few minutes, without risk of their coming out, settling on some high inconvenient place or going off to the woods. When worms get into the hive it is very easy to open it, clean them out, and destroy the worms. When colonies become weak, con bs may be taken from strong ones and given to the weak to equalize them, and in this way all may be kept strong. Queens may be raised from the best breeders to supply all swarms, or colonies needing them. Much time is thus saved just when it is very important that all stocks should be ke kept strong. Should colonies become queenless at any time, it may be found out and another queeu introduced before the bees all die out. Honey may be taken without disturbing the work of the bees or destroying the brood, by breaking and mashing it up. Then the honey is in so much better condition for use, or market. Who would not rather have, upon his table, a nice white piece of well-filled comb, taken from the box just as put up by the bees, with scarcely a cell broken, all pure honey, than a mixed mess of broken comb, bee-bread, black wax and dead bees? All know when honey is put on the market in queens for my little apiary, and the

good condition it finds more ready sale, and at higher prices, than an inferior article would. Frame hives well made will last a long time, and may always be ready for use with but little trouble. Those who wish to use the extractor of course find the moveable frames a necessity. A large number of honeyraisers think that extracted honey pays the best per cent. These are some of the advantages of the moveable frames over the old box hives. Others might be mentioned, but you will probably think this article already too long.

My first swarm this season came out on the 22d of April. I have made a few artificial swarms that are doing well, but in consequence of some of my hives being made of green lumber, the frames would not work well after the shrinkage, and I was compelled to let most of my best swarms out. Had several swarms to run away, but saved most of them, and they seem now to be doing well. Bees have not stored much surplus yet, but I think they will stop swarming out and give their attention to storing sweets.

Cedartown, Ga., May 28, 1876. ____0---

A Beginners Experience.

G. W. H. GREEN.

Two years ago I transferred eight colonies of common bees to frame hives successfully. My frames are 11x15 inches outside measurement, and are suspended by screws on metallic rabbits. In October, 1874, two Ligurian queens, from Dr. J P. H. Brown, of Augusta, Ga., were safely introduced by caging and sprinkling with sweetened peppermint water. Their progeny were seen in due time.

In April, 1875, I began to rear

eight colonies were increased, by artificial swarming, to fourteen during May and the early part of June. Italian queen cells were inserted into twelve hives; four of which resulted hvbrids and eight pure Italians; Some "trouble occurred in inducing two colonies to accept these young queens. One was lost or killed, three, and my other five queens remained and deposited eggs for three weeks or longer, and then were missing. In two or three instances the young queens were incased in a lump of worker bees, and when released the workers would immediately imprison them again. In this manner I fear several were killed.

The fourteen colonies gave but little surplus honey in 1875, and went into winter (?) quarters strong in numbers but weak in stores. They began to gather honey and pollen, and the queens to deposit eggs, before Christmas. Then the sudden and wet cold weather, occurring at intervals, killed the flowers and checked the supply of honey. 'The colonies thus struggled on depending chiefly on the syrup given them. These stands were brought through to April in a weak condition, one containing a queen from Dr. Brown came near starvation. I was very busy during a few days of cool weather, and after it turned warm I neglected to feed as usual. On a warm afternoon while inspecting the different hives. I found many workers crawling out and fall among others, already dead on the ground. An examination exhibited their condition. Many worker bees were dead on the bottom board, and the queen dragging herself slowly along and peeping into the cells in quest of honey, but in vain. Soon a frame from another hive and a supply of syrup

and progenv. My tolonies are now strong and gethering hodey rapidly.

For a short time I have been running a few colonies for surplus honey, intending not to make any swarms, and giving empty combs and frames. Also I kept the queen cells cut out, as I supposed. But to my surprise, a few days ago, a large swarm came out, almost in the rain, for it had been raining almost continuously for four days. While the swarm was settling, the old stock was examined and a young queen was found just coming out of her cell.

In the April number of the BEE WORLD, Rev. M. Mahin gave his mode of introducing young queens into black stocks, which excited my admiration. After full information I prepared a double number of cages and proceeded to Italianize four hybrid colonies. The cells were inserted and the cages introduced according to directions. All the cells were hatched with a supply of honey from their respective hives, The old queens were then caged and put into hives of pure Italians with honey from their own stocks. After allowing two days for these hybrids to miss the old queen and to form the acquaintance of the young ones, perforated paper was pasted over lower end of the cages, which were then replaced. About one hour after closing hives, they were examined, and the worker bees were found stinging the young queen to death. Honey was being gathered rapidly, and everything favorable as far as I could judge. After the destruction of the young queens, the old ones were replaced in their original hives, still caged; and within twenty-four hours liberated in safety. As soon as I could procure cells by starting another nucleus, I caged the old queens, and rewere given, which saved both mother moved them as before. Queen cells were again inserted in *comb*, under full control of the bees. I had the pleasure of seeing their kind reception. One of those last young queens has been lost, probably on her bridal tour.

The late Mr. Quimby, Rev. Langsthroth, Mr. King, Mrs. Tupper and many others maintain that pure Italian queens, mating with black drones, will produce pure Italian drones. I have a beautiful and pure queen, reared last year, which has some of the blackest drones I ever saw. Her workers are variously marked, but mostly three banded. This queen was my prolific, and led out the only swarm I had this season. These black drones from such connection confirms your opinion, Mr. Editor, it I am not mistaken.

In the second effort to Italianize my hybrids, when I found the young queens were well received, I examined the old ones, caged in other colonies, and found, in one instance, the wire cloth and every place made apparantly air tight and the old queen dead, with honey still within the cage.

What has been written above is not in a spirit of egotism, nor to contravene others opinions, but only a beginners experience at Sunny Side, near

-0-

Sparta, Ga., June, 1876.

For the Bee World. Bee Items from Central Illinois.

J. G. THOMPSON.

FRIEND MOON:—It is raining this morning, giving me a respite from the bee yard, and I will venture to give you a few items on beeism from this part of beedom.

My bees commenced swarming on the 9th inst., giving me three on that day and four the next, and since that time they have kept me jumping, and up to

the present I have had about 40 swarms from thirty-eight that I had to start with. They have all swarmed but six or seven, and several have swarmed twice, although nearly all the afterswarms I return, after destroying the queen cells as I consider them of more value in the parent hive than in a separate one. By-the-way, I must tell you about my big swarm. I have one that I stump the BEE WORLD to equal, and this is the way it came about. I had been confined to the bee yard for two weeks to the neglect of other work that should have been done. So one morning, it being cloudy, I told my wife I thought there would be no danger of swarms, so I went to the field half a mile away to plowing corn. I had not been at work more than two hours before I was summoned to the house where I found two swarms out, and of course settled together. One of them soon began to separate from the other and returned to its hive, the queen not having issued. and after hiving the other I returned to my work. I had not been there long before I saw the flag of truce flying, and on arriving at the house found three swarms out and settling together. I saw at once that I had no hive large enough to hold them, and I searched around and found a barrel and set about preparing it by putting in cross sticks and rubbing it all over inside with bees-was. In the meantime the bees kept boiling. and when I was ready to hive (or barrel) them there were six swarms all in a bunch, and you may believe there was a bunch of them, four of them being first swarms and two second swarms.

While I was getting them in, one of the swarms, thinking perhaps that their prospective new home would probably be somewhrt crowded, or perhaps getting disgusted at being thus mixed up with common trash or hybrids, showed their good sense by separating themselves from the rest and going back home, thus leaving only five swarms.

They are now working like busy bees, as they are, seeming to realize no distinction between a \$5.00 patent, movable frame, moth proof hive of the latest edition, with all the modern improvements, and a rough common salt barrel worth only 15 cents.

I have made holes in the top of the barrel and set a case of small frames on so that as they fill them they can be removed.

I have also two other barrels of bees, one containing three and the other two swarms.

If I have good luck I expect I will have a few barrels of honey to sell in the comb this fall. If any of our enterprising honey dealers will order soon I will contract at 25 cents per pound and ship as soon as the honey season closes "without breaking the packages."

White clover is very abundant this season—the whole country is covered with it—but we are having too much rain for the bees to get the full benefit of it.

Lynn is also just coming into bloom and if the rains would cease so that the bees could improve the time they would reap a rich harvest.

From my experience this summer I have lost my faith in the old orthodox notion that bees won't swarm in cloudy weather; for with me they just keep at it without consulting the weather if the rain does not pour right down, some times coming out between showers, and hardly having time to get into their hives before another shower comes.

Urbana, Ill., June 26th, 1876.

THE honey crop poor in this section.

For the Bee World. Bee Notes From Ohio.

D. H. OGDEN.

MR. EDITOR:-I have been a constant reader of the BEE WORLD and all other journals on bee culture for some time. and feel pretty well acquainted with many of your readers, and it would certainly give me pleasure could I impart anything that would be useful and interesting to them, from this part of the country. I see no correspondent from this place, but, my dear readers, you all have warm friends in apiculture from old Wayne connty, Ohio, and what would still give me pleasure would be to meet you at the Centennial Exposition in October next. What a pleasant time it would be to meet with all the old veteran bee keepers of our country, both ladies and gentlemen, at this grand exposition-probably the grandest that ever been witnessed by man.

Last winter I started in with twentythree colonies and came out with twenty-two—could have saved that one had I been able to see after them. My bees are doing finely for the care given them. Our honey crop looks quite favorable this season. Our bees did not experience much benefit from the fruit blossoms. Our main dependence is the white and red clover. Shall put on my boxes and give the bees all the 100m necessary for surplus honey.

I think, Mr. Editor, if you were to see my hives, you would be led to conclude that I had taken much pains with them. I aim to give them all the room they need. Will say to Miss Anna that she is not the only one that has met with losses, but we all hope for the better. Am sorry that the mechanics do not make your hiver better. I find generally plenty of sharp points in and about a bee hive, not to have them full of splinters. I find that bee business is rather a sharp business any way. I think if you were to see my bee hives all made like a piece of furniture and nicely painted and finished with marble finish you would be led to admire their beauty. It not only makes them look well, but makes them lasting. In swarming I would recommend a tube to trap the queen when coming out, Take a piece of tin five inches long and three or four inches wide. Take two strips the same length of the tin and one-half inch square nailed on each side of the tin. This will make the bottom of the tube. Now take a piece of glass to fit the top of this; have the glass so it will slide endwise; have a little block to shut the ends. Now when the bees commence to swarm, open your tube at both ends, and set against the entrance. This will cause the bees to pass through the tube, and you can easily catch her.

Wooster, Ohio.

For the Bee World A Few More Broken Pieces.

KINCHIN RAMBO.

MR. EDITOR .- In your April number, one of your correspondents enquires to know how he may tell a queen bee from a worker. I was glad he said that: for it satisfied me that I no longer stood foot in a second class of bee raisers. For I can tell a queen bee from a worker, and I can tell a drone from a worker. And if he had ever seen my splendid Italian queen from Moon's Apiary he would never have to ask that question any more. But he is now in a good school, and by close observation and careful reading of the BEE WORLD, he may soon become a ripe scholar. I hope to hear from him again soon.

I regret to see that some of your correspondents doubt the truth of some of the reports of heavy yields of honey. Well, I believe every word of them. Not because my experience corroborates them. But because they come from an honorable class of persons-bee raisers. But I suppose if I should ever take a hundred pounds of comb honey from one stand, in one season, I must write fifty in order to be believed. That reminds me of the Irishman who came to this country, and hired himself to work for a farmer. And being well pleased with the country and his employment he asked his employer to write a letter for him back to his friends in the "ould counthry." "Well," said his employer, "what must I write?" "Why," said he, "tell them what wages I am getting, and that I have meat to eat once ivery day." "Why should I write that," said the employer, "when you know that you have meat to eat three times a day, if you wish it." "Ah yis faith," says the Irishman, "but if you were to write it that way, they would ne'er believe a word I said."

I see that some of your correspondents are still insisting that honey-dew is the product of Aphis (or leaf louse.) Well, I wish they would answer me one question. How is honey-dew tobacco made? Is it not by spreading out the dry leaf at night in the honey-dew season? And if they will take the pains to put out a clean pewter dish for several nights, in a clear place, I think they will be convinced. For it was found in this neighborhood last year upon the smooth surface of a flat rock. *Floyd County, June* 1, 1876.

WRITE your experience for the benefit of others.

For the Bee World. Weather Notes for May, 1876.

Taken between 7 and 8 o'clock, A. M.

WM. J. ANDREWS.

Day	Ther	Weather.	Wind.
1	56	Cloudy	N-E
2	46	Rain	North
3	48	Clear; first swarm	N-W
4	52	**	S-E
5	62	Rain	South
6	67	Clear	South
7	62	Cloudy; showers	South
8	61		N-W
9	52	Clear ·	N-W
0	60	••	West
	60		North
12	68	X	S-W
13	68	••	North
	62	••	S-E
15	70		South
		Clear; extracted	South
7	72	Cloudy; rain at 11	South
8	68	Clear; rain at 11	South
19	70	Clear	East
20	68	**	S-W-W
21	80	Clear; showers about noon	South
22	68	Cloudy	West
23	68	Clear	North
24	67	· · · · · · · · · · · · · · · · · · ·	North
25	68	Cloudy; rain last night	S.E
		Cloudy	North
		Clear	North
28	6-	Cloudy	South
29	68	Clear Clear	South
30	70	Clear	N-W
		Rain	South
	Co	lumbia, Tenn., June, 18	76.

For the Bee World. Nuclei, Or Full Colonies for Rearing Queens.

H. H. TAYLOR.

Mr. S. A. McLean in his interesting paper on queen rearing, read before the Maury County Bee Association, and publiehed in your last number, asserts that there is a marked distinction between queen raising in large colonies and those raised in nuclei hives; that the former produce large and well developed queens and the latter small and correspondingly small ones. This seems to be contrary to the generally received opinion on this subject as is

evidenced from the fact that the majority of apiarists raise their queens and generally from small or nuclei colonies. As it is a matter of economy in the use and distribution to do so it is important to know how true the remark is The late Mr. Quimby examined this question of raising queens in small colonies with his accustomed care and ability. and after many experiments came to the conclusion that queens raised in small nuclei colonies are more uniformly good than those raised in large colonies for this reason, among many others given by him, that as but few cells are given them the nurses in proportion are even greater than those in full colonies and the few cells therefore receive greater care than numerous cells in large colonies. Apart from experimental tests the conclusion of Mr. Quimby seems supported by obvious reasoning. Why should a large number of bees improve the quality or size of the queen? A few bees will work with the same amount of instinct in the construction and care of a queen cell that a greater number will do. If the cell receives a proper degree of heat and the inmate is fed with the proper kind of food in sufficient quantities, it is all that nature requires for the rearing of a queen, and this degree of heat can be given to one cell or two cells and the proper food administered by a few bees in a small nucleus hive as well as the same or greater number of cells in a more populous hive. Both requisites are attained by a few bees confined to a small space as well as by many bees dispensed over a larger space. If the cluster is sufficient to keep up the re quired amount of heat and the bees kept active by sufficient food placed in the hive, it is all that is necessary, with food in the cell, for the development of a perfect queen. There seems no possible reason, therefore, why a queen reared in this way should not be, in every respect, equal to one raised in a large colony. As it is more economical to use a few bees than many for this purpose I think we may with safety and advantage rear queens in nuclei hives and reserve our large colonies for more profitable field work, at least until we perceive there is an evident determination among our queens-a consequence not likely to happen for this cause: Experienced bee-keepers care very little, perhaps, about such questions. They have their own views; but to the large class of beginners it is important that practical rules laid down by their more experienced brethren should be as nearly true as possible.

Pointe Coupee, La., May 15, 1876.

For the Bee World. Occurring Thoughts on Reading the May Number of the Bee World.

WM. J. ANDREWS.

The first occurring thought is to make our task a great deal shortor than we have been doing, and shall act on that inward suggestion and have but little to say this. month.

QUEENS, DRONES, HOWELL-SHERENDEN. We would call the attention of friends Howell and Sherenden to an article on page 105 May number Bee-Keepers Magazine, entitled "The Bees of the Island of Cypras—No. 4," and request them to read it, and give us their views of the ideas expressed therein, and to you, Mr. Editor, I would say that you will probably find it a good article to select and present to your readers through the WORLD, as having a considerahle bearing on the drone theory. ALBINO BEES.

We were just on the eve of sending

friend Pike an order for a pure tested Albino Queen, but on reading "A Few Nuts," by a beginner, concluded to await friend Pike's reply, and see upon what he based his claims of having "the best in the world." A great deal has been said of late in the bee journals of dark Italians being the best. "Melanism is the opposite of Albinism." Melanism then is black, and if the dark strains are the best perhaps the darker they are, even to a glosoey black. the better they are. Now if any of your readers (hope vou will pardon me, Mr. Editor; I am not trying to euchre you out of a free advertisement), would like to go to the extreme from Albinism we would say that we have what we bought and paid for as an imported Italian queen, what we and all who have seen her would pronounce to be Melano, and if any would like to have a daughter from her they can get them very cheapwill exchange a few for almost any kind of truck, and now for fear "Beginner" may come back at us with "a few nuts to crack," we would further add

1st, That the distinguishing markings of our *Melanos* from pure Italians are that they are very dark—yea, black.

2d, Our *Melano* queen "produces progeny that are all uniform in their markings"—which may be "pure Italian markings," as there are *black* bees in Italy—but no markings of hybrids.

3d, As to the marking of our Melano drones we cannot say, as we have never permitted her to rear any, not wanting any black drones in our apiary.

4th, We fear our *Melanos* will not produce uniform progeny, as they were probably fertilized by yellow drones.

5th, We claim no advantages for our *Melanos* over the pure Italians, but we will say that they are "good honey gatherers." We do think "they will commend themselves to that class of bee-keepers who desire bees of uniform markings—provided they want these morkings to be *black*.

A QUEER DISCOVERY.

Friend Kellog says he found two queens in April in one hive. In the same month we found four in one hive.

STINGS.

Friend Kellog did you ever open a hive that the bees had just superceded their queen? If you never did and once get into such a scrape, we think you will become "innoculated" if you can ever become so. We had such a mishap last November and again to-day (May 15th.) Under such circumstances we think they will make a "feller" prove his grit even though he be provided with vail, gloves and a Quimby smoker. I think I got your compliment of 31 stings and "more too" today, but they caused but very little swelling.

FANCY BEES.

Friend McLean when we said we were going for *workers* we meant a little bit of pleasant *ironny* on our *Melanos.* "Beauty and utility" can go hand in hand, and we think *doctor* you can boast of it—and justly too.

ECCENTRIC.

The American Bee-Sournal has a correspondent who writes over the above nom de plume. We have read many of his artictes with interest, but were somewhat displeased in reading his last in the May number of the Journal. To our mind it is an evidence of poor manners, bad breeding or a weak brain, for any man to decry another for his poverty or misfortunes, and equally as much so to cast any *sleers* on any one not possessed of an education. There are many men of large and comprehensive minds who advance many good ideas,

yet possessed of a very limited education and this is especially true of beekeers.

CONCLUSION.

For the last four or five days we have been having warm, pleasant weather. Our bees are doing finely. There is a superabundance of white clover. and poplar is in full bloom. They are filling their hives with honey from these very rapidly. The Extractor, with many is now in full play.

Columbia, Tenn., May 15, 1876.

For the Bee World. The Drone.

J. W. HOWELL.

MR. DDITOR :- The articles that I have heretofore written for your valuable journal, I thought was so plain that there could be no mistake about them, but it seems as if I were mistaken. I wish now to make the subject plain. if possible. The position I take is simply this. I cannot believe the statements made in the books in regard to drone raising without impregnation. Hamlin, on page 11, says: "Eggs are sometimes laid by the queen before her impregnation, but they invariably produce drones." Now this may be claimed by some to be a quotation of Hamlin from other books, but if so he has failed to mark it as such. I deem it unnecessary for me to quote other authors or to reply to the criticisms of any former articles, but will merely offer a correction of the editor of the BEE WORLD. where he makes me say, in quoting from Dzierzon, "all impregnated eggs produce drones." Whereas, my quotation says, or should say, "all unimpregnated eggs produce drones."

All standard authorities claim that impregnation takes place in the air and on the wing. If this be true how can we account for many things in the bee hive. Might not impregnation take place somewhere else-say in the hive, which would perhaps explain the hatching of eggs laid by a wingless queen? Now let us examine impregnation as it is, and found to be true in all cases. A sine qui non-in impregnation is the presence in the seminal fluid containing microscopic insects, universally found in the seminel fluid of the male called spermatazoa. Prof. Leidy, of Philadelphia, after examining the spermatheca ot an unimpregnated queen, reports that "the ovaries were filled with eggs, the poison-sac full of fluid, and the spermatheca distended with a perfectly colorle-s, tran-parent, vicid liquid, without a trace of spermatazoa. On the same subject I will quote a di-section which Luckart undertook at the request of Berlepsch. "He found the state and contents of the seminal pouch of this queen to be exactly of the same nature as those found in virgin queens. The seminal recepticle in such females never contains semen-masses with their characteristic spermatazoids, but only a limpid fluid destitute of cells and granules." What more can I say when I assert that impregnation can not take place in the absence of spermatazoa, for they are the only vivifying principle in existence, and where else are they found save in a healthy seminal fluid? No one has yet claimed to have found them anywhere else; neither do I think that any one ever will assert it. Now in the name of common sense, how is it possible for a virgin queen, (which has not been impregnated), to produce a living insect? Is not what I have stated above sufficient to justify me in making the assertion that I did in the January number of the BEE WORLD, "that the various writers on bee culture

must be mistaken in regard to the rearing of drones without impregnation.

SWARMING AND HONEY.

Sure enough the cold weather in April caused our bees to kill off their drones and postpone swarming for this season almost entirely. Out of thirtythree hives of my bees, only three of them swarmed, and we think swarming is over here for this season, notwithstanding they are strong and honey has been plentiful since the 1st of this month. Poplar blooms yielded abundantly, but is now about out, and white clover just in good plight. This is the best honey season we have had for several years. And so as we get but little increase. We will get the more sweet. Kenton, Tenn., May 29, 1876.

Our revelation of the quotation given by friend Howell of Dzierzon was or should read, all unimpregnated eggs produce drones, while it reads impregnated eggs, &c. However we will take the responsibility of its being our mistake; that it should have read unimpregnated eggs.

Now if friend Howell will take no exception to our pen we will tell him how we convinced our self upon this point. A good many years ago we followed experimenting with bees, and especially upon any point we could not easily understand. We made a nuclei of two frames, all worker comb, and filled with plenty of young bees, not a drone cell or a drone in it. The neuclei had plenty of young bees to keep up animal heat. We placed in it a queen cell caged. The grub queen was about ten days old. We placed them in a warm dark room and commenced feed-The hive being well ventilated ing we did not open them until the eighteenth day or thereabout, and then we found a fine young queen laying. And BEE WORLD.

what did she lay-drone eggs. We let them stand until they hatched, and they hatched drones. We tried two more with the same result, and had we kept trying until now it would have been the same. Now, friend Howell, try this, and if you are not satisfied I will pay all time and cost. It does seem strange that such results can be obtained without impregnation. It would really seem that the mother bee was an exception to almost everything else. Some of the workers have the same power, but they have undoubtedly been fed on some of the same food that the queen receives, which has to a certain extent developed the organs sufficiently to lay eggs. We must admit that there must be great stimulating power in the food prepared for the queen, and a food that is entirely different from that given to the workers or drones. The great querry has been how can the queen lay eggs that hatch without first being impregnated. The facts show conclusively that the queen and some workers have that power.-[ED.

MEMPHIS, TENN., June 20, '76.

Last June, 1875, I bought of Dadant & Son two home bred queens. I sent them twelve dollars for two. They returned me two dollars and two queens. I tried them until October following, when they proved poor hybrids. I sent them ten dollars more and told them they were poor hybrids, thinking they could send the money back if they were honest; but no, they kept the money and sent me two queens—one very good and one more very poor.

C. H. GETCHELL.

MATOON, ILL., June 21, 1876.

'Bees doing finely; forage good; white clover principal forage; honey No. 1; our season is very favorable; prospect or a large yield. S. D. BARBER.



Sundries from Sunny Side, Southern Miss.

ANNIE SAUNDERS.

I am requested to tell the bee-keeping world why I chose bee-keeping as a means of support instead of the cultivation of small fruit or some other employment. Various considerations influenced me and I am not sure that I can remember them all myself now. The moveable frame hive, the extractor, and the Italian bee, each of course exerted its influence. The management of bees was an industry undeveloped in the South, and I thought I would do good by trying to awaken an interest in it. I thought of the tons of honey ungathered, and how nice and how healthy it is and what a blessing it would prove if appropriated by our impoverished people, but I had not the faintest idea of its full merits until since—indeed I am not sure that I hold it at its value now.

I like natural history and knew the occupation would afford me great pleasure; from the time I could read had never slighted anything in book or paper relating to bees, though I had never met with any work devoted entirely to the subject till I determined to go into bee keeping as a business. Then for a year before getting any bees I made myself familiar with our bee books and journals on the subject, and engaged Mr. Hereford to transfer my bees and introduce my queens when I did start. I would have commenced much earlier but for the fear of displeasing my family. I made all of my arrangements before mentioning the subject to them, thinking that there would be less probability of opposition after I had gone so far. Imagine my delight when I found there was not the slightest disapprobation-they thought teaching terrible, but bee-keeping delightful.

I considered it an employment which would require very little help, and allow me to remain at home. I loved the dear ones then so much that I could not think of leaving them, and perhaps self-conceit made me fancy they could not do without me. "Picking stings out of my face and hands" is a very small part of my business. I have had very little experience in handling cross bees, but the little I have had I think so interesting that I purpose giving the readers of the BEE WORLD the benefit of it sometime hereafter. Stings had an unusually bad effect on me. I came near having erysipelas from one of the first, but I believed, as so many wrote it, that the system would become accustomed to the poison, and moreover that if proper attention was paid to the fancies of the bees there was no occasion to get the stings at all. Besides it may be that the thought that the poison of the stings might cure neuralgia had some weight in reconciling me to them; for I had been quite a martyr to that painful disease. But by far the most unpleasant thing, to me, connected with the busines has been-killing roaches. I dislike killing moths quite as much, but have not had to encounter them so often. My repugnance to this task was this State, who said in his article, July

almost unconquerable. I suppose I do more heavy lifting than I should, but not so much as you gentlemen would do. I keep empty hives and move the combs into them instead of lifting all at once-that is I generally do so, though I sometimes lift hives, comb and all, determination supplying the place of strength. Many thanks to Mr. Andrews for the assurance that I am always welcome. I can well believe as you say that your wife always attends to things right. If I had not chanced to know her I might have regarded that as a pleasantry like the rest. No, sir, that nephew did not catch it, and does not know now the mischief his forgetfulness did. I know that no scolding could undo or mend it.

May 10, 1876.

We have on hand another interesting letter from the same lady, which will appear in our next.

For the Bee World. Our Bees-On What We Fed and How We Succeeded.

MARY BAKER.

MR. EDITOR:-On page 171 May No. Mr. B. W. Stone wants to know how his brother bee-keepers fed and succeeded in wintering bees. Well I suppose friend Stone would not object to a sister bee-keeper giving her experience. We left honey enough in our hives last fall for the support of our bees through the winter, but found some that did not have quite enough. We took from strong ones and gave to the weak. We have never lost any bees with disease. We lost two or three this spring, but they were neglected, which was sufficient reason for their dying. We would like to hear from Dr. G. M. Simmons, of

No., Vol. 2, that he intended to feed altogether on sugar syrup. Now Doctor please give the readers of the WORLD vour experience.

Thanks to friend Hicks for a drawing of his hive; cannot see that your hive is as good as ours: perhaps it may be better. We can open two sides of bottom story or brood chamber and draw frames one by one until all have been removed, then close up bottom and remove all the top frames if we chose. We have transferred all out of Buckeye this spring and put them into Simplicity. Our bees are doing splendid now, but came very near losing them after the snow the 19th of March, which killed nearly everything that had bloomed. Our bees began to swarm on the 6th of May. We began extracting the 12th. I cannot tell how long we will extract. I never saw the promise of honey better in all my life. The Alsike clover as well as the white and many other flowers are in full bloom. and it seems that every flower is sending forth its sweets. I believe we will have to extract both bottom and top frames. Success to the BEE WORLD.

Hernando, Miss., May 14.

Hotes and Querries. CONDUCTED WM. J. ANDREWS.

Bees are swarming from young swarms hived in March and April at the rate of ten or twenty swarms per day. I expect to trible my increase this season. My bees have increased so much faster than I expected that it has been with much difficulty that I could procure hives for them. I have taken a large amount of choice honey from them and expect to take much more. E. STAHL.

Kenner, La., June 8.

I keep about fifty swarms of bees each on four plantations, have experimented considerable and learned the habits and nature of the bees before I ever read a bee-book. Bee-keeping has been a sourse of amusement to me during leisure hours to watch closely their habits. I keep them for my own pleasure. GEO. B. AETASBUT. Council Bend, Ark, June 18.

WE are having a splendid honey season now and have had for two past months. D. A. PIKE. Smithburg, Md., June 21.

0

BEST bee season ever known since 1862 Will have to extrect almost daily from this date so long as the honey season yields so great.

R. M. ARGO.

Lowell, Ky., June 9.

THE honey flow is abundant at this time. Hives are full of bees and honey, and the swarming fever runs higher than usual. C. W. JONES.

Coral Hill, Ky., June 8.

HONEY harvest very good up to date Young swarms here filled their hives full. F. E. GLOVER.

0-

Taylor City, May 13.

Our bees are doing splendid the last ten days; the best honey harvest I ever saw. One swarm in my apiary gained twenty-seven pounds in one day.

-0-

J. N. HOLLETTE.

Pennsville, Ohio, June 19.

My bees are doing but little good. Have taken 1.500 lbs., and will take that much more. I think I can make it net me $12\frac{1}{2}$ cts. this year, as my honey is J. F. MONTGOMERY. very nice. Lincoln, Tenn., June 28.

BEE WORLD.

BEES have done but little good up to date. It rained the first week of the poplar bloom; after that the yield was light. The flowers secreted but very little honey. Only got about one thousand pounds—a great fall off from that of last year. I moved my bees a distance of nine miles to a large grove of linn, where honey is abundant in good seasons. I expect to commence extracting soon. After the linn bloom is over will return them home, where the sowerwood yields a good supply.

J. F. MONTGOMERY. Lincoln, Tenn., June 19.

LAST fall I started with four swarms of Italian bees. Two of them however had become much reduced—so much so they could not survive the winter. This left me with two swarms, which I have increased to four good swarms. Had one swarm that kept their queen five days in the same hive with six others of her own age. Honey is scarce—poor season. GEO. NOBLE.

Atlanta, Ga., June 21.

I WISH to know if it is too late to Italianize—if not, the best plan. My bees are doing pretty well; raising brood rapidly. W. D. ROBERTS.

-0-

Clinton, La., June 27.

It's not too late. Can Italianize any time between this and October, with perfect safety. The Gold-Mine queen was changed twice in September and October, 1875. See plan of introducing Italian queens.

My bees have made but little surplus honey up to date. I divided them in the spring. Was that the cause.

-0-

Decatur, Ala. F. LUDWIG.

The wet weather no doubt is the cause of no surplus honey. There will be none here of any amount unless we get a heavy honey dew.



Table of Contents.

Maury County Bee-Keepers Society...226 How I Manage Bees, No. 8-Extract-

ing Honey-Rev. M. Mahin.....234 Are They Frauds ?-J. F. Mont-

Notes from South East Louisiana— W. M. L. Gorden......237 Sketches from Tennessee—Bee Culture—S. D. McLean......237

Advantages in Bee-Keeping—S. M. H. Byrd238

A 'Beginner's Experience-G. W.

- A Few more Broken Pieces-Kinchen Rambo.....243

Weather Notes for May, 1876, taken

Introducing Queens.

First, there is no infallible rule: destroy the black queen, encage your Italian queen in a wire cage with a little unsealed honey and half dozen workers. Dr. Davis' queen nursery is just the thing to keep queens in. The few workers keep the queen more contented. Should any honey get on her the workers will clean it off: cut a hole in the center of a comb the size of the cage. and in the brood nest; gently place your cage in and close up the hive; wait until the third day; examine every comb carefully and destroy all queen cells started; quietly let out your queen on a brood comb. If the bees surround her and feed her all is well. Should any show hostility to her, place her in the cage and liberate her the next day, and all will be well. Among many plans tried this is the safest and best.

ANY person sending us the July number for 1874 we will send them the BEE WORLD three months free.

It's quite gratifying to hear of the many favorable reports of large yields of honey, coming as they do from almost every portion of the country.

Choice Stock.

At one time, and for years, we were a breeder of the pure Durham cattle and Spanish Merino Sheep. The custom among all practical stock breeders is to give names to any and all animals of superior merit; and when an extra animal was obtained it was kept and a big name given it. The same custom may with propriety be followed by breeders of the Italian mother bee. We have in our apiary three superior Italian queens, which we prize almost invaluable. Their names are Victoria, Emprese and Gold-Mine.

MUCH space has been taken up with the proceedings of the Tennessee Convention. We publish it entire by request. Many valuable articles will not appear until our next.

J. F. MONTGOMERY wishes to be heard through the columns of the BEE WORLD. He claims that McAlister & Co., of Chicago, Ill., swindled him in a sale of honey. McAlister wrote us that the honey was so poor that they intended to have it analyzed. Since then they have sent us a sample of honey which is very dark, with rather a peculiar taste as well as smell. They say nothing of its being analyzed.

WE have recently purchased of G. W. Bowen, of this city, his entire apiary, which we have had the management of the two past years.

Do They Still Live.

Will some kind bee-keeper please inform us whether W. H Furman, af Cedar Rapids, Iowa, and T. H. B. Woody, of Manchester, Missouri, are living. We advertised for these two gentlemen for a long time with promise of pay. We sent bills for pay and what is still worse no reply. We wrote them time and again, but no reply, and finally came to the conclusion they were numbered among the things that were, until quite recently, in looking over one of our exchanges, Colman's Rural World, behold we saw an article from friend Woody on cheating and swindling.

Querry.—Did he think of the the printers bill.

PERSONS writing us and expecting an answer must bear in mind unless they give their name plain, with county and State, they need not feel disappointed in getting no reply. THE Los Angles, (Cal.,) *Herald* says that at the present rate of increase it is estimated there will be in four years 1,-000,000 stands of bees in Los Angles, Santa Barbara and San Bernandino counties, which will produce annually 100,000,000 pounds of honey, \$20,000,-000, which is more than the value of the sugar and molasses crops of Louisiana, Texas and Florida combined.

ERROR.—On page 247, last paragraph, should read "we placed in it a queen cell"—omitting the word "caged."

Special to Merchants and Business Men.

Having made extensive improvements in my Printing Office, I am now prepared to execute, in the very best style, every kind of Mercantile Printing as Letter Heads, Bill Heads, Statements, Circulars, Catalogues, Price Lists, By-Laws, &c., &c.

Legal Blanks of every description constantly on hand.

My facilities for such work are first class and I can guarantee compl to satisfaction at lowest rates. Please give me a trial order, and if I can give you as good work for same money as you pay in New York and other markets would be grateful for your patronage.

Very respectfully, ALBIN OMBERG.

Publishers Department.

Advertising Rates.

SPACE.	1 Month.	2 Months.	3 Months.	6 Months.	l Year.	
1 Page	16 001	30 00	40 001	70 00	125.0	
% Page	12 00	20 00	30 00	55.00	80 00	
i Column	10 00	18 00	25 00	45 00	75 00	
34 Column	8 0	15 00	20 00	35 00	70 0	
% Column	7 00	12 00	18 10	25 (0)	50 00	
% Column	6 00	10 0.1	15 00	20 00	30 0:1	
1/4 Column	5 00	8 00 3	12 001	16 0	20 00	
1 Inch	2 50	4 00	60	9 00	15 640	
1/2 Inch	2 00	3 00	5 00	7 00	12 00	



In order to supply the wants of my costomers, I have made arrangements this season to receive every few weeks, Queens from the districts in Italy where the finest type of the Ligurian or Italian bee is found. Send circular to DE. J. P. H. BEOWN, (1y1c) Augusta, Georgia.

BEE WORLD



9 50

2 50

TIMES

BEE WORLD.



in white or any color desired is on many thousand of the finest buildings of the entry many of which have been paintct sixyears, and now look as well as when are paints, by CHEMITAL FAINT has taken Fersor the HIMS at twenty of the Sorte raise of the Ua or shope entrol of colors sent free. Address MTLE 3803,100 % ater Street Cleveland. O or N.Y. FLACE, TAINT CO. 103 Chambers St.

AGENTS CAN MAKE 25,000 A MONTH

WORKING FOR

THE THISTLE EDITION,

The only Fully Illustrated Edition of

THE WAVERLY NOVELS

Of American make ever offered to the public.

E. J. HALE & SON, Publishers, 17 Murray Street, New York.

"An exceedingly beautiful edition, a gem of typographical beauty," says the N. Y. World, Forty eight volumes, averaging 400 pages each, and containing nearly two thousand illustrations, will complete the series. Two volumes issued monthly.

Subscribers supplied with two volumes monthly. Eleven month's deliveries now ready. Apply at once for territory to Care E. J. Hale & Son 17 Murray St., N. Y.

A re You Going to Paint Then Buy the N. Y. ENAMEL PAINT CO.'S CHEMICAL PAINT,

AND SAVE ONE THIRD THE COST OF PAINTING and get a paint that is MUCH HANDSOMER and will last TWICE AS LONG as any other paint. Is prepared ready for use in "HITE or ANY OLOR desired. Is on many thoasand of the finest buildings in the country. many of which have been painted six years, and now look as well as when first painted. This CHEMICAL PAINT has taken FIRST PREMIUMS at twenty of the State Fairs of the Union. SAMPLE CARD OF COLORS SENT FREE Address. N.Y. ENAMEL PAINT 00.103 Chambers St. N. Y or MILLER BROS. 109 Water Street. Cleveland. 0.

Pure Italian Queens for 1876.

I have on hand a choice lot of queens, propagated in populous colonies last season, which I offer at \$5,00 each. As I expect to rear queens the coming spring, I offer two queens after 15th June for \$500. I will send out none until their brood ls tested, and will pay express charges on same. Satisfaction guaranteed. "VINEYARD APIARY"

AGAIN WINTERED SUCCESSFULLY

Tested queens or full colonies furnished again this season. In my non patent hives. No useless traps or fixtures about them, Send for prices.

Address Box 130. Joseph M. Brooks. Columbus, Indiana.

4ttc W. P. Henderson, Murfresboro, Tenn.

255

BEE WORLD



Dalton, R. R. Selma. Rome and

CONDENSED TIME CARD.

GOING NORTH.

GOING SOUTH

Arrive Mobile
Leave Meridian 1:05 a m
Arrive Meridian 1:00 a m
" Selma
Leave Calera 5:20 a m
" Rome 9:10 p m
" Dalton

At Dalton with E. T., V. & Ga., for New York, Philadelphia, Battimore, Boston, and all points east, Virginia Springs, North Carolina and East Tennessee Springs.

At Dalton with W. & A. for all points west. Going south-making close connection at Meridian for Vicksburg, Jackson and points in Miss. With M. & O. R. R., for all points north and south of Meridian. At Mobile with N. O. & M. R. R for all points in Louisiana.

Through Sleeping Cars are run between Mobile, Ala., and Dalton, Ga., without change.

March 7th, 1876.

256

RAY	KNIGHT,	G. P.	& T. Agent,	
5-11p			Patona, Ala.	

High Class Poultry!

All the choice varieties Land and Water Fowls. The best imported and prize stocks of Poultry, Turkeys, Geese, Ducks, Guineas, Fancy Pigeons, &c. Each variety of fowls bred on a separate farm. Only first-class stock sold, and satisfaction given. Descriptive circular free.

TEN CENTS will procure, post paid a copy of my elegant new Illustrated Descriptive Catalogue. Superb and reliable.

FIFTY CENTS will purchase "THE PIGEON LOFT," our new Illustrated treatise.

CHESTER COUNTY MAMMOTH CORN

yields from 75 to 125 bushels shelled corn per acre, and is the best variety yet produced. Selected seed \$4.00 per bushel; \$1.50 per peck; 50 cents per pound free by mail. Sample packet 10 cents. Circulars free.

BLOODED CATTLE.

Short Horns, Jerseys, Guernsys, Devons and Avershires. Choice CHESTER WHITES. (a grand specialty.) Berkshire, Yorkshire, Essex and Poland China Aogs. Cotswold and Southdown Sheep. Sporting and Thoroughbred Dogs, Ferrets, &c.

Circulars free. Oorrespondence solicited. Addrsss,

W. ATLEE BURPEE. No. 1332 Arch St., Philadelphia, Pa-

5y1