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T H E

National Bee Journal.

DEVOTED TO THE CULTURE OF THE HONEY-BEE.

Vol. III. FEBRUARY 1, 1872. No. 3.

[For the National Bee Journal.]

Italians A Distinct Species—Hybrid Drones.

Messrs. Editors :—I never was inclined to enter a ring of my own accord, for a fight ; but, when I see that there are several *doctors* and *doctresses* in the ring, and should a fellow get hurt he can surely get medical council near at hand, I feel like taking a hand, especially when I am assured from *dear bought* experience that I am in the right. Is the Italian bee a distinct species? I say yes ; and if you, Mr. Editor, had been with me last season when I fertilized all, or nearly all my queens *in confinement*, you could have seen for yourself that such was the case.

I took young queens, raised from a queen that came as near

duplicating herself every time as it were possible to do (for I could have placed one dozen of her queens before you, and with my magnifying glass you could not have selected one that was lighter or darker, or in any way different from the other, after they were three months old). I will admit what every close observer will, that queens are always lighter colored when just hatched, than ever afterwards. I have one queen at this time, which was nearly, or quite as bright all over as the cover of this Journal, when she was hatched, and is yet the brightest queen I ever saw, and her workers are brighter than the brightest. I can readily account for it, and likely at some future time will do so. These young queens above spoken of, I fertilized *in*

confinement with drones, each one of which I selected and handled with my own hands. These drones were taken from a colony, the workers of which were uniformly three banded, plain and distinct, and the young queens from their (the drones') mother, were of the greatest uniformity in color. I fertilized these queens with the drones named, and I had as pretty, *pure* bees as was ever seen in Italy. I now took young queens, five in number, raised from my old stand-by, that produced those so uniformly alike, and put them in my fertilizing house, and took drones from a hybrid colony, the queen of which had undoubtedly met with a black drone. I had these five queens fertilized *in confinement* by these *hybrid* drones; they commenced laying, and in due time, their young came out, and to the casual observer, or *one who does not want to believe otherwise*, they looked as pure as my purest, but I was determined to make a close examination of them, so I gave them a good dose of chloroform, so that I might the more easily examine them with my glass; as soon as I brought the glass to bear upon them, I could plainly see that the third band was a very bad one indeed, and in

many instances it was scarcely perceptible to the naked eye. I now raised some queens from the mothers of these last named bees, and there were no three of them alike; some having the black on the tip of the abdomen to run high up, while others were very bright, and others again, were almost entirely black. I now fertilized *in confinement* three of these last named queens, taking one of the brightest, one medium, and the darkest one. I had them fertilized by *hybrid* drones, and it proved what I was after knowing; that was, that the *drone progeny of any queen is affected by fertilization*, although it may not show itself to the naked eye in the first generation, and but little in the second, yet in the third it is plainly seen; and, sir, I could by continuing to breed them to the *hybrid* drones, have as black bees and queens as could be found in the United States; and, sir, it would not take many generations to do so, all the doctors, doctresses, Dzierzons and microscopes to the contrary, notwithstanding.

How strange it is, that some men will hold on to a theory, when practical experience, from those who ought to know, tells them to the contrary. I did not think it at all necessary

(after Mr. M. C. Hester's article in No. 12, Vol. II, page 296) to say anything upon this subject, for Mr. Hester's experience and mine exactly agree, but I see one of the doctors is out in No. 2, Vol. III, and his *horns* seem sand-papered for the occasion; he says, referring to his saying the Italian was a hybrid:

"This term falls short of the term hybrid, as the latter means half of one kind of blood and half of another."

Will the learned Doctor tell us where he got his definition of hybrid? "*Half of one kind, and half of another;*" think of it for one moment; how a man can make a dictionary read to suit his notions. The word hy'brid or hyb'rid is derived from the Greek, *und ubris*, which means *injury, force, rape*; the Latin word *hybrida*, from which hybrid is directly derived, means mongrel; an animal or plant produced from the mixture of two species. Are we to conclude from this only definition given by Webster, that both of the animals, plants, or insects are to be of pure blood, and crossed only once, in order to produce a hybrid? Not by any means. If so, I ask what would the learned Doctor call the progeny of a three-fourth blood Alderney to a seven-eighth

Durham? I wish him to come up to the trough like a man, for we now intend to give him all the *fodder* he can stand to. I have no doubt he will try to avoid the plain facts, by asking questions, and will say it is all *fodder and chaff*. We expect as much, but if we are not mistaken, we will yet choke him on his own words. Some men remind me of the fellow who could not tell the time by his watch, because there were two hands: "does not know which to believe." It is a tolerably sure sign that they have partaken of more refreshments than their system required.

Mr. Editor, in conclusion, I will add that I, as well as the doctors, advertise *pure* Italian queens for sale, but I am not like some of the doctors; *I know that mine are pure*, for I have had a good time getting them so, and have discarded all that were not *fertilized in confinement*. I have never been able to have a queen fertilized by a drone, *from a virgin queen*, and I do not believe that it can be done. My experience teaches me it can not, although a few of the members of the Cleveland Convention disagree with me.

WILL. R. KING.

Franklin, Simpson Co., Ky.

[For the National Bee Journal.

Bee Keeping as a Business—Will it Pay?

On pages 321-326 of Nos. 13 and 14, we find an article headed, "The Honey Bee—Will it Pay?" For the last year I have made taking care of bees and raising surplus queens for market my exclusive business during summer time. I have communicated my failure and success during the seasons 1869 and 1870 to public papers, and my report was copied into numerous papers of this country as well as in Europe, as something remarkable in the achievement of apiculture. From this fact I judge that a report of my this year's business would not be uninteresting to some of the readers of the JOURNAL. Not to occupy too much space, I will be as short as possible.

In consequence of a very large sale of stocks in the winter and spring, I had at the beginning of the season of 1871, only 290 colonies left. Of this number five were so weak, and queenless too, that I concluded to unite them with other weak colonies. Of the then remaining 285 colonies, 13 more were queenless, or had drone-layer queens, and they became very weak before they could be requeened. About one dozen of the stronger stocks were used to furnish worker-bees, from which to rear surplus queens

for market, and were of very little account in gathering the surplus honey. Most of these stocks left were only second quality, as I make it a principal point in my dealings to sell only No. 1 stocks. These stocks were kept, 105 in my Southern apiary, 43 in my Northern apiary, and 137 in my home apiary. At the end of the season they had increased, in all, to 646 colonies, of which I sold 27 during summer time, united two, and wintered in 617, all of which are in good condition, so that I do not expect to lose more than about one per cent. Last winter I had lost only three colonies, out of 730 wintered in. If I wanted to do so, I could easily take 2500 pounds more of honey with the extractor, and then leave them in good condition to go safely through the winter and spring. But what I have already taken is fully satisfactory to me. I took, contracted and delivered to C. O. Perine, in Chicago, extracted and comb honey enough to come to \$4,046, expenses included, at the rate of 25 cents for white comb honey in boxes and little frames, and 15 cents for extracted and dark comb honey, in all not quite 20,700 pounds. This amount, and what I sold in small lots at home, will make my gross income for surplus honey, about \$3,100. We—I mean my two girls and myself—had estimated

our surplus honey at the end of baswood blossoms, to over 2,500 pounds, but owing to the dryness in August and September, we only got the above stated amount.

I will only add that I realized for queen bees and young swarms sold during the summer time, \$807, and leave it to the readers of the JOURNAL to estimate the increase in stocks, 232, and then answer the question at the head of this report for themselves.

ADAM GRIMM.

Jefferson, Wis., Dec., 1871.

[For the National Bee Journal.

Transactions of the North American Bee Keepers' Society.

The committee appointed at the late meeting of this society at Cleveland, to publish its proceedings, will, as soon as it can be done, have them printed. They will only be sent to members who joined the society at Cleveland, and such as may obtain membership by sending their names with the membership fee of one dollar immediately, or before the first of March.

It will not only embrace a full report of all the discussions at Cleveland, which included all the most important questions pertaining to apiculture and by the most experienced bee keepers, but also the equally important discussions

at Indianapolis and Cincinnati, the year before.

No bee keeper that wishes to keep up with the rapid and wonderful progress that the business is now making, can well afford to do without it.

On account of the size of the book, the funds on hand will not admit of the publication of extra copies for sale. Persons desiring copies for sale, who will send ten dollars or more, will have sent to them books to that amount, at cost of publication and packing. The cost can not be ascertained now, but will be low enough to allow a good profit on sales, and the more that are ordered, the less will be the cost per copy.

There should be at least one thousand of them sent out. Every dealer in any article pertaining to apiculture, and every queen breeder, can find sale for a large number, or can give them as premiums, with advantage to himself and those to whom he distributes them.

Orders for membership that are received during February will be filled. Send to either of the committee most convenient.

D. L. ADAIR, Hawesville, Ky.,
Chairman. H. A. KING, 14 Murray street, N. Y., Secretary N. A. B. Society. N. C. MITCHELL, Treasurer, Indianapolis, Ind.

[For the National Bee Journal.
From Salt Lake City.

Messrs. Editors:—I am not much of a writer, and I am quite young in the bee business, although some forty years ago I did a good deal of bee hunting, and could handle the little pets to a charm, which I find a great benefit to me now. I was most as good as a man that I was acquainted with in the State of Maine, that had but one eye, talking about how far he could see a bee; he said he could see one fifteen minutes after it got out of sight. I have hunted and taken up as many as ten and eleven swarms of bees of a fall, and sometimes two swarms in one tree.

Now I will give you a little of my experience of this year with the little yellow pets, as I keep no others.

I have seen in the JOURNAL a great many ways laid down to get rid of the fertile workers, and as they are very troublesome here, and as I have had a good deal to do with them this summer, I find when you undertake to raise a queen from the brood, and she gets lost in going out to get fertilized, and before you can get another one hatched out, the hive will be full of fertile workers. The best way I have found yet to get rid of them is to take from a good strong swarm and a good fertile queen, and about

two cards of comb brood bees and queen, and set them into the hive with the fertile workers, and they will make them get without notice. Then you can give the other hive a queen if you have one, and if not, a queen cell, or let them raise one for themselves. I think we have been bothered with some twenty or twenty-five swarms this year with fertile workers, and in bad cases of robbery, when bees are weak, if camphor, peppermint or anise will not stop them, I have found by putting on a bee feeder three or four days, and then let them out just at night, and they feel so rich and saucy they can whip two or three swarms. I use a bee feeder that I can screw on to the front of the hive, and no other bees can come near them, and if you have no bee feeder you can make one by making a platform in front of the hive; then make a box about one foot square, four inches high, without a bottom, and cover the top with a light piece of factory cloth; cut a hole in one side about the size of the entrance of the hive; then take a piece of old hard comb, about ten inches square, fill it with honey, put it up near the center of the hive, and set the box over it, and you have as good a bee feeder as can be made, and as cheap.

We have had no cold weather

as yet, and bees are doing very well here.

If this is worth printing, wherever I have put the cart before the horse, please shift them.

I have K. P. Kidder's, King's and D. L. Adair's works on bees, and the JOURNAL, that suits me the best. I find once in a while a subscriber. Bee business has not got a start here yet.

You find two dollars enclosed for the BEE JOURNAL. Please send it to S. H. Putnam, Salt Lake City, Utah.

Yours, etc.,

MOSES THURSTON.

Salt Lake City, Dec. 29, 1871.

[For the National Bee Journal.]

Why Bees go to the Woods.

Messrs. Editors:—Being an humble farmer, and somewhat illiterate, it is the last thing I would have thought of to write for a journal, but having become a member of a clu of ten for a Rough and Ready hive and an Italian queen, and receiving your books and BEE JOURNAL, I have read them with pleasure, if not profit, I conclude I will try my hand for once. And I will say I think I have discovered one thing about bees, that will be profitable to all bee keepers, that swarm in the natural way. I became the owner of a swarm of bees when a boy of fifteen,

in 1810, my father not being able to refrain from striking when a bee came in his reach, I had all the care of the bees to myself; it was all the property I called my own, and I would be as much vexed when a swarm would leave me after I had raised it, as I was in after years when I lost a horse. I soon came to know that bees often sent a squad or detail to hunt a hive before swarming, and if successful, would be sure to go, if not prevented. All the remedy I knew of that time was to catch the queen and crop her wings, but that could not always be done, for I could not know of their discontent till they would get the advantage. Now, how to prevent this squad of pilots from taking the swarm off was my study for about fifteen years. At last it occurred to me that those whizzing fellows, that darted around and stung outsiders and lookers-on, and sometimes gave me a pop, were the chaps that done the mischief, and that they were the last to join the hive, if they went in at all. One day I had a fine swarm, and I saw the queen go in the hive; now, the thought came into my head, if I gather up the hive and carry them off and hide them, won't that beat them. No sooner thought than done. I gathered up the sheet at the four corners, leaving some bees behind, and hid them away in

a corner. Since that I have not lost but one swarm that I hived myself, in thirty years, and more of that hive hereafter.

I had a neighbor that had some half dozen hives of bees, and the first swarm of the season left for parts unknown; he told me of his loss; I told him of my theory and practice and success; he said he would try it. His bees swarming briskly, and all staying, he was soon out of hives. A swarm came off, and no hive ready, he had a box with flour in it; he concluded to use it for a hive, and knowing that bees would eat flour, he did not clean it. When the bees were hived, he said they looked like a set of millers. Dinner being ready, and having company, he forgot his bees for an hour; he went to see them; they were sitting quiet, when in came some twenty to forty bees, that had no sign of flour about them. They set up a roar, and in spite of all he could do they were on the wing in two minutes, and left for parts unknown. Now, did not those pilots go to the tree to see that all was right, and return, and is it not probable that it is a general rule for them to do so?

Six or seven years since, the first swarm of the season was slow to cluster; they went some distance, and at last clustered on a pole about as thick

as a man's arm, lying across a gutter, about two feet from the ground. Four days after the same hive swarmed and went to the same place, on the pole. Then I began to smell a rat. Ten days, and another swarm came and went to the pole. A fourth came off and went to the pole, late in August. I was hoeing some weeds in the morning, and found a swarm on the pole; says I to myself, here you are, pilots and all; now if my theory is correct, you will certainly go to the woods, but I will hive you and hide you. Accordingly I took them away and hid them, as usual, believing they would certainly go to the woods, the day being cool. They stayed that day. Next day at noon they were at work nicely. I felt disappointed; however, about two o'clock I went to look at them, and there was but one bee in the hive. They had left a comb three inches long, and there were eggs in both sides of the comb.

Now, I believe the first swarm of the season generally send a squad to hunt a hive. I know they do sometimes, and if successful will leave, if you put them in the best of hives. I believe that squad are last to go into the hive, if they go into the hive at all, and that to hive bees on a cloth, and, before they are all in, gather up the cloth and carry them some

fifty yards, to some private place, and let them stay till morning, and you will not lose them. The squad will return to the hive from whence they came, and wait for the next swarm.

And now, my dear sir, if you think this worth publishing, all right; if not, right also.

JOSEPH REASONER.

New Cumberland, Grant Co., Ind.

[For the National Bee Journal.

From Kansas.

I see by the last JOURNAL you call for reports on the condition of the bees. In this vicinity all the frames are yet filled nearly solid with capped honey, giving the bees very little room to crowd together or breed.

There is not a honey-extractor in this county, and there are over one thousand hives of bees here, but many will get them this spring, and try slinging this season.

Our bees were put into winter quarters November 15th, by the weather, and it has remained so constantly cold ever since that they have ventured out but once, and have consequently consumed very little of their stores.

Considerable interest has been around in the past year in apiculture, and many are changing from the old box hive to some kind of movable frame,

and asking where they can get Italian queens this year.

Of course we expect to be able to supply the demand, if not too great, and save the loss of long shipments by mail or express.

Nearly all the bee men I have had the pleasure to meet seem to be of that pacific class one would expect to find amongst men who have to be slow of movement, and still slower to anger from handling the stingers.

It is, therefore, with much surprise I read in the JOURNAL of the irascibility of your Eastern Bee-ists, and wonder if you are all Egyptians or Hybrids.

It does seem as if a subject of so much importance ought to be handled without its leaving any sting behind.

Practical Facts are what the mass of bee keepers are after, not merely quarrels on fine points, seen only under the object glass of the microscope.

Call out, if you can, the details of management of such men as J. W. Hosmer, and let us make our land flow with honey—without the milk, except of human kindness.

Yours, for peace,

G. F. MERRIAM.

Topeka, Kan., Jan. 20, 1872.

HAVE you looked to your bees? They will need but little care this month (February) if properly attended to before.

[For the National Bee Journal.

Black Mail.

Messrs. Editors:—While bee keepers are learning to handle their pets with success, and learning to guard against moth, and other enemies to bees, would it not be prudent for them to learn to guard against a set of vampires and swindlers, passing through the country and collecting a royalty (black mail) from bee keepers, claiming to have letters patent for some feature in their hives (bee keepers?). To hear them read their complicated claims, one would almost suppose that they *made* the honey bee and controlled all its actions.

The patent office was created for a blessing, but I think it has proved a curse.

Look at the multiplied hundreds of claims. One hardly dare drive a nail, lest some scamp come along with a patent for the hole that it made.

Bee keepers, I am tired—yes, Old Harry is tired—of this everlasting cry of “infringe! infringe!”

Bee keepers, let us be up and be doing; let us unite and rid the country of all such. Our interests are not safe while such men go unpunished. There is a remedy; let us apply it.

One grand reason why hundreds will not take hold of bee

culture, is because of these vampires. Ask a man to go into bee culture; his answer is, “I would like to, but if I buy a movable comb hive, some one else will come along with another patent, and I would have to pay for it again, and perhaps three or four times, and that would take all the profits.

Bee keepers of America, protect your interests; unite, and bring these vampires down.

HARRY GOODLANDER.

Leesburg, Ind., Jan. 5, 1872.

For the National Bee Journal.

Drone Question at Cleveland.

Messrs. Editors:—I notice, in both the NATIONAL BEE JOURNAL and *Bee Keepers' Journal*, a most extraordinary method of reporting the discussion of the above question, at the North American Bee Keepers' Convention. It consists simply of a verdict from the reporter, without giving the argument used by either party, I understand that a report should consist of the argument used by all who took part, and leave the bee keepers of the country to render the verdict.

As Prof. J. P. Kirtland and myself were the principals in the discussion referred to, I desire that we both should be correctly represented. I asked the Doctor directly if he disputed the revelations of the microscope upon this question.

He answered that he believed it all to be true, but that notwithstanding its correctness, practical queen breeding had induced him to think that there was a taint of impurity transmitted to the queen bee, and consequently to her drone progeny; that is, in cases where she had been fertilized by a drone differing from herself in variety. He also stated that he had been led to this conclusion in his experiments in Italian queen breeding. I again asked him if he felt fully convinced that the Italians were a pure and distinct variety of bees. Here some objected to my question, urging that it had reference to another subject. It was so declared by the Chair, and the matter came to an end. Yet it is plain to be seen by the most casual observer, that if the Italians are not a pure and distinct variety of bees, they will not do to depend upon in giving us a final solution of this question. What Professor Kirtland's belief in regard to their purity may be remains to be seen, after he is questioned and cross-questioned upon this subject. This was not done at Cleveland, for reasons already given, be they ever so creditable or discreditable to the body of bee keepers before whom it was ruled out of order. I claim that the question I put is so inseparably interwoven with

the subject under discussion that it can not be fairly debated separate from it. It was for this reason that I put the question to Dr. Kirtland.

I claim this to be a true representation of the discussion, as it began and ended, between Dr. Kirtland and myself. He is not the man to hoot at microscopic investigations, but is a full believer in it.

G. BOHRER.

[For the National Bee Journal.

A Mystery.

Messrs. Editors :—Will your friend Benedict, or any of your numerous and experienced correspondents, be so kind to answer through the JOURNAL, what the trouble was in the following case?

The circumstance was this: I bought an Italian queen of Hawkins & Robins. We went over and got the queen about the first of August, of last year. She was a very fine looking one, indeed. We caged her carefully with a few bees, brought her home and put her in the top of a hive over night. Next day we introduced her into a healthy, artificial swarm that I had made some days before. About three weeks afterwards, when we began to look for young Italians, we opened the hive and found the bees were decreasing, and no young in the combs. We looked the

combs all over carefully; found the queen; she looked nice as ever, and lively. There was on one comb, on each side of it, a few cells with eggs, perhaps two or three hundred, the balance of the combs that were not filled with honey, were nicely cleaned up.

We thought she would surely keep on, and we would in due time see her offspring on the wing. We waited patiently, till we knew there ought to be young bees coming out. We took them out again, and to our astonishment there was not a young bee in the comb, or hive, and no eggs in the comb. The queen still looks well as ever. After keeping her six or seven weeks, we carried her back to Hawkins, as an unfruitful queen. He said that he had some nice young queens that were raised from the brood. She left when we took her away. She was a queen that had been sent to him in a lot that he bought. He put her into one of his swarms, and she went to laying eggs again. We took another queen and put into the same swarm where we kept that one so long, and she went to laying eggs, and in due time there was Italian bees flying.

Now, what say some of your experienced bee men? Let us hear from, and greatly oblige,

JONATHAN OWENS.

Onarga, Illinois.

Bee Keepers' Association.

The Livingston County Bee Keepers' Association met at the Court House, in Pontiac, on the 16th inst., and effected a temporary organization by calling S. B. Legerwood to the chair, and appointing O. F. Pearre, Secretary.

On motion of Hon. J. F. Culver, J. S. Sleeth and U. M. Springer were appointed a committee to report the names of officers for a permanent organization.

During the absence of the committee, S. B. Legerwood addressed the meeting at some length on the culture and habits of bees. His remarks were both interesting and profitable. At the close of his remarks the committee returned and reported the following names:

For President, Jonathan Duff; Vice President, J. S. Sleeth; Secretary, S. B. Legerwood; Treasurer, J. F. Culver. Committee on Constitution and By-Laws, I. J. Krack, W. D. Powley, U. M. Springer and John Keith.

Committee on programme for the next meeting, Jonathan Duff, William Powley and J. S. Sleeth.

On motion, it was resolved that the President, Vice President and Secretary, be appointed an executive committee, and that it be a part of their

duty to see that the call for the next meeting be properly circulated.

On motion, it was resolved that the next meeting be held at the Court House, in Pontiac, on the 21st day of December, A. D., 1871. On motion it was resolved that the county papers of Livingston and adjoining counties be requested to publish the proceedings of this meeting. On motion, meeting adjourned.

O. F. PEARRE, Secretary.

For the National Bee Journal.

Workers Will Destroy Queens.

Messrs. Editors:—I wish to ask through your journal a question, and believing that you will answer me, I will ask, what is the cause of queen cells being found in a hive where a queen had been but a short time introduced, and apparently well received. The swarm was not strong, and could not be making any preparation for swarming. The queen was only one year old, and to all appearance was a fine, healthy, vigorous queen, yet I found several queen cells nearly ready for capping. I destroyed them, and soon, to my surprise, I found more in about the same place as the first. I destroyed these also. Presuming that they had a good young fertile queen, and did not need any, and much

less swarm, in a few days they had a lot more, nearly in the same development, and on examining them, I found a cluster of bees on my queen, smothering her. She made a pitiful noise, and I soon released her, taking care to secure her in a cage, and took her away to a queenless colony, where in due time she was received, and proved to be one of the finest queens I ever saw. I left the old hive with their last lot of queen cells that they had completed for their new queen, and one of them was kept by the bees, which proved to be a good one, and all was right in that hive afterwards.

An explanation upon this matter will be thankfully received.

w. c. w.

Hopefield, Arkansas.

We have known of several such instances during our experience in life, and am fully of the opinion that a portion of the worker bees have become antagonistic towards their mother queen, and have set themselves about the work to supersede her. There does seem to be a hatred with a portion of the workers towards their queen, as it can not always be said that the main cause is the age of the queen or even ability to lay her sufficient amount of eggs to keep up a populous swarm, for I have had them seek the same

on queens, where I have found them trying to destroy her, and taken them and given them to a queenless swarm, and kept them for two years afterwards, with good success. When I find queen cells being started in hives where there is no signs of swarming, I am satisfied they intend to supersede their queen, and in this case I use my own judgment. If the queen is young and fertile, take her out at once, as death must follow if she remains in the hive. There seems to be nothing that I ever have found to appease their anger. I have tried the experiment of repeatedly destroying all the queen cells they would commence. This would do no good, as they would renew their efforts at once by rearing more. I have tried feeding, but with no success. They were bound to destroy their queen anyhow. This they will do unless taken away. I have known one or two cases where the queen was taken away from a hive in this condition, some of the workers would at once destroy every queen cell in the hive, and then commence anew, and all would go off well. ED.

A FERTILE or prolific queen is one that has had connexion with the drone or male bee, and is capable of laying eggs that will produce workers, drones or queens.

[For The National Bee Journal.

Basswood as a Honey Producer.

Messrs. Editors:—I have a word to say as regards my success in bee keeping.

We had 24 swarms of bees in the spring, which we have increased to 76 swarms.

The crop of white clover was good, but we averaged only about one barrel of honey from the 76 stands.

From basswood our gains were six barrels of nicer and thicker honey.

In all we have taken from the bees, 2,800 pounds will cover it.

I have an acquaintance that did not get one pound of honey from white clover, but from basswood he got 1,500 pounds. I believe it would pay to cultivate basswood for its honey producing qualities. Here we have it in abundance, but we propose to put out a great many this fall. They grow rapidly; more so than any other trees of the honey producing kind.

Yours truly,

W. S. COGSHALL.

West Groton, Tompkins County, N. Y.,
Aug. 28th, 1871.

The above article was mislaid, or it would have appeared sooner. Let us hear from you, gentlemen. ED.

[For the National Bee Journal.

Questions.

Please ask of the readers of your valuable journal the following questions :

1. I will have thirty stands of bees to Italianize next summer, and as I have yet to get my queens, what will be the best course to pursue to Italianize them. Some of the swarms are to be transferred.

2. What should be the inside measure of a hive containing ten frames? Should the outside frames for storing honey be a greater distance apart than those more used for breeding, which is generally in the center of the hive ?

3. In transferring bees from the old hive, where the combs are old, would I not get straighter combs by driving a portion of the bees into my new hive, without using any combs ?

Will some of the readers of the JOURNAL please answer, and much oblige,

JOB YOUNGS.

Springville, Linn Co., Iowa.

[For the National Bee Journal.

The Coming Bee.

The coming bee is like the coming horse, a mule; or like the coming man, a mulatto. It seems nonsense to me, to talk of the coming bee. Who is competent to tell what may be beyond; what his reason of sight and brain may reach.

Man's perceptibility is small; small as well as the little bee, which is to be. Although the bees, as well as the man, may be improved. So with all the animal creation.

But we may as well talk of the improvements, to see what the coming bee may be. In my mind, the way that any one will ever know what the future bee may be, is the present bee judged by the past bee. Bees, like all other animation, or creation, for an improvement must be sired, as well as dammed, by the best bloods of their species. The most of bee raisers look well to their queens, but are not particular enough of what drones they mate their queens with; they put all confidence or stress on the mother. With stock and poultry, it is the male that is counted on for the great improvements of its species.

I hold that the drones must of necessity be of the best and purest of blood, and from the best of mothers, to produce the best results for the improvement, to produce the best effects for the coming bee.

Bees, like man, must cross and re-cross to keep health and strength. I hold, there is no man living who can tell what improvements are yet to come in bees or man.

I must agree with Prof. Kirtland, and others, in regard to the drone pairing with the queen; that she is no further a

pure race when such a cross is made, or in fact a representative of her race, viz: pure Italian; she must inherit or imbibe a taint of the male. And like begets like, with the insect as well as with the animal.

I have yet to learn, that when the queen's abdomen is compressed in a worker cell, that she is to produce a worker's egg. In first swarms I have seen eggs on new comb, not over three-eighths of an inch out or finished, where there was not any earthly chance for compression of the queen's abdomen, and still when these cells were finished out and capped, would produce a worker bee.

J. H. HARDESELL.

Breesport, N. Y.

[From the Homestead Champion.

Bees and Honey.

Few people seem to fully appreciate the high value of bee-keeping. From their labors is derived an excellent and delicious treasure, which can be procured by no other means. Honey is procured from sources which do not decrease or absorb any other treasure that we enjoy; hence, the excellent treasure which that little, faithful pattern of industry gives is nearly all clear gain, as it robs nothing else of our uses, and comes to us in no other manner; the nectar of forest and flower is only

thus saved to us. Therefore bee-keeping and honey raising should be liberally encouraged and highly prized. In fact, it is worthy of governmental recognition and encouragement equally with fruit and flower growing. The busy bee is ready to work and to die for the civilized—always follows his advance on the frontier, is as easily domesticated as fowls, and as easily managed and handled by the intelligent and gentle hand; and there is no more need of killing the little toiler, to enjoy the rich fruit of his labor, than there is to kill hens for their eggs, or a sheep for its fleece. And we believe it would be as just and desirable to have a division for the Apiary in the Agricultural Department as of botany or entomology, and even more so. D. S. C.

State of Kansas Bee Keepers' Association.

The first annual meeting of this body was held in the court room, Lawrence, on Wednesday January 3d, a large number of members being present.

A letter was received from Judge Guthrie, of Topeka, expressing his regret that his professional duties prevented his being present. Wm. Barnes, Esq., of Topeka, was also unable to be present, in consequence of sickness.

The following gentlemen entered their names as members, viz: M. Shaw, Rev. Mr. Lovejoy, Mr. McAllister, T. M. Work, D. E. Bonahan, W. Vell, W. Styner, Dr. Tenney, and E. P. Riggs.

Messrs. Cameron, McAllister and Blackburn were appointed a committee to prepare subjects for discussion.

The election of officers for the ensuing year was then proceeded with, which resulted in the election of the following gentlemen:

Dr. Dallas, President; Noah Cameron, Vice-President; R. P. Briggs, Treasurer; John Blackburn, Secretary.

For the National Bee Journal.

A Resolution.

A resolution was passed at the late meeting of the North American Bee Keepers' Society in Cleveland, Ohio, urging upon the attention of the Governors of all the States, Territories and Provinces in North America the importance of appointing an apiarian Professor in every agricultural college on the continent. The suggestion of D. S. C. may be considered as amendatory of the resolution referred to, and we feel safe in saying that the Society will accept it.

Let the Governor of Columbia and the Chief of the Agricultural Department see to it

that the Capitol of the United States and Territory of Columbia is not behind in this important matter; let every one feeling interested urge this matter onward. Congress will aid in this matter, as well as any other that will benefit the people; they have ever been willing to vote money to any institution or enterprise that adds wealth to the nation, and most assuredly would not refuse in voting aid to assist in gaining strength and power—to aid a branch that is adding millions of dollars to our country annually. Let us have the co-operation of this country, and great will be the result.

[For the National Bee Journal.

Italians.

Will some of the many readers of the BEE JOURNAL please answer the following question?

What do persons do to their bees, so that they can gather them up in their hands, and throw them up in their air, and scrape them off of the combs and hives, and yet not get stung? This was done at the State Fair, at Kalamazoo, Michigan, last fall. Does anybody know who it was? There was no person stung, though there were hundreds around.

What is the cause of honey running down on the bottom board of the hive, this time of year?

JOB STOCKTON.

Williamsburg, Ohio.

Bee Keeping in Tennessee.

[The following letter is published at the request of Mr. Holladay.—ED.]

Crossville, Cumberland Co., Tenn. }
January 12, 1872. }

MR. ARTHUR HOLLADAY:

Dear Sir:—Yours of 1st inst. is at hand, and it affords me pleasure to respond to your inquiries.

There are portions of the county in which we have much poplar, but there is not much locust, willow, nor basswood; however we have vast amounts of dogwood, huckleberry and blackberry. There is much white clover in the open fields, and more of it each succeeding year.

As to bees, there are more or less of them all over the county; but the natives uniformly keep them in the gum-hive of antiquity. We have one gentleman from the North, the Rev. W. C. Condit, of Howard Springs, Cumberland county, Tenn., who is working himself into the business as rapidly as his circumstances will allow, making the Italian bee a speciality. I am satisfied that he is very familiar with, and skillful in his business, and I have heard him express the opinion that this county was better adapted to bee culture than any other one in the circle of his knowledge. I think his opinion is entitled to respect.

Our great weight of timber

is white, red, post, Spanish, yellow, black and chestnut oak, white and yellow pine, chestnut and black gum—much sassafras and chincapin. There are also large amounts of wild flowers in the woods, which come early and last late in the season. Bee culture is what I should have adopted as a business only that I am afraid of them, and they seem to have an aversion to me, therefore we keep apart.

This county is liberally watered with springs and streams of sweet, pure and very soft water. Such portions of the county as have been cleared and tilled have been abused, as is general all over the South. It is to be hoped that the Northerners, who are settling here, will do differently, and a very important reformation in the management of land is being wrought.

Our county is admirably adapted to fruit culture. Our fruit is of peculiar excellence, and we have such kinds as will keep long, and retain their flavor. I have lived in New York, New Jersey and Ohio, but nowhere seen apples of such excellence as here. Our soil and climate also produce very fine small fruits and vegetables. The climate is wonderfully salubrious. We are two thousand feet above tide water, the atmosphere is remarkably pure and bracing, and imparts a

degree of health and strength rarely experienced elsewhere. For the cure of weak lungs this climate is almost a specific, and the same may be said of nearly all the ailments of man which are so general at the North. There is a class of diseases which our chalybeate waters are quite sure to cure; such as affections of the kidneys, and diseases which are peculiar to women.

The formation of these table lands is sandstone. We have lime rock, but it is the exception and not the rule. Our soil is sandy loam, and the sub-soil, clay loam, sustains a drouth well, and is very sensitive to manure, even remarkably so. Coal of excellent quality abounds, and frequently crops out at the surface. It may be termed semi-anthracite, some is bituminous and free from sulphur.

In silver and copper this whole table is believed to be exceedingly rich, and the ores are comparatively near the surface. Silver has been found very recently; already the vein has been traced ten miles. Some ore from it has been assayed and analyzed at the Smithsonian Institute and pronounced silver and galena. In a few weeks this mine is to be opened.

We expect two railroads, which are to run through this county, to be commenced this

season, one to run north and south, the other east and west.

In the spring of 1866 we had but two Northern families in the county—now about one hundred and fifty, and probably before the close of the year we shall number at least three hundred. If you should come here you need have no fear of fever and ague, nor mosquitos. In the *woods* are plenty of wood-ticks and fleas where the hogs nest, but none in the absence of hogs and dogs. There are some rattlesnakes and copperheads, but we who live here seldom think of them.

In the summer our heat is not so intense as at the North, the mercury rarely running as high as ninety degrees, and in winter very seldom dropping to zero, even for a day. Our nights are *always cool*, so that sleeping, with us, is a luxury.

Now, my dear sir, I have given you much more information than you asked for, and you may feel at liberty to ask for more yet if you desire to do so, provided you enclose at least two postage stamps, for that is what it costs me for stationery and postage per letter; for my time I make no charge. Show this to your neighbors if you desire to, or have it printed if you wish others to be posted concerning this country. I close by saying that I am not a real estate agent. Our winter is broke—*grass is growing.*

Yours truly, W. W. POWELL.

[For the National Bee Journal.]

Comments.

Messrs Editors:—In your private letter to me, dated January 20th, you ask why you do not hear oftener from me, and intimate that it may be because you differ from me on the drone question.

No, sir; I am a Free Thinker in the freest use of the term, and while I claim the right to do my own thinking, and to express my thoughts freely on any subject which interests the public, or any part of it, I admit that all others have an equal right; and if I try by any other than fair means to influence their opinion, I do them a wrong. While I am free to hold an opinion, I am, (as Mrs. Woodhull is with her love), "free to change it every day, if I like," and I will change every day, if I can be convinced each day that I was wrong the day before. In fact, I have changed my opinions on some subjects connected with bee culture, within the past two years, and I thank the JOURNAL for bringing about that change. "Wise men sometimes change, fools (and bigots) never do." I shall not class myself with the fools.

It is not necessary to give my reasons for not writing sooner. Laziness, if I confine myself strictly to the truth, will cover the whole ground.

My bees are quiet in their

winter quarters, and I will not disturb them, but will give you a history of the progress of bee culture in this part of the world. Two years ago I tried to get subscribers for the JOURNAL, but not one could I get; giving two dollars for a bee journal was throwing away money. To-day there are seven JOURNALS taken at this office, and they will be taken by those who now take them for sometime to come, because they are interested.

My friend, Mr. Harding, said the first time he saw me handling bees, that he "would not do it for all the gold in Montana." Soon after he had a severe attack of bee fever, and now he is insane. His insanity is of a mild type, however. The first evidence I had of his being crazy, was his handing me two dollars to send for the JOURNAL. Since then he has bought bees in box hives and has transferred them to movable comb hives, and any pleasant day he can be seen with his head in a hive with the bees all around him. He is no drone, but is a genuine king bee. Three distinct yellow bands, warranted pure. His case is hopeless.

Mr. Trickel, another neighbor, has the same disease. He takes the combs out of his hives and slings the honey at a great rate.

Mr. Peterson has been bitten by the same dog. He loves

honey, and says he wants more than he is able to buy, and has concluded to produce it. He takes the JOURNAL, and is going into movable comb hives, Italian bees and honey extractors. In fact, he is a lunatic.

I had some young men working for me last summer. Three of them have "got it." One will establish a house in Davenport, Iowa, for the sale of honey, next spring the other two have each a swarm of bees. Young Mr. Duffey is a subscriber for the JOURNAL, and can talk about nothing but bees. He has stopped going to dances, parties, etc., much to the disgust of several young ladies to whom he was paying his "devours."

I take two bee journals, and advise every one to do as much as that at least. There is room for all, and there should be no jealousy between them. I am glad I can always recommend your JOURNAL as being free from jealousy and narrow minded meanness. Your counsel on the hive question will be approved by three-fourths of the bee keeping fraternity. The idea that because a man has patented an article, he can put a stop to all improvements on a prior invention, is "too thin."

Yours, respectfully,

JOHN M. FOLLETT.

Atkinson, Jan. 26, 1872.

Value of the Honey Crop.

In 1860 the national census reports 23,366,357 pounds of honey produced in the United States, and 1,322,787 pounds of wax. Of this amount about one-tenth belongs to the State of New York, whose product that year was 2,369,751 pounds of honey, with 121,029 pounds of wax. North Carolina produced the next largest amount—2,055,969 pounds of honey; and Kentucky stands third on the list—2,750,000 pounds.

When the census report of 1870 is known, it is thought by those most fitted to judge in the matter, that owing to the increased intelligence in apian science, and the widely-spread interest in the bee-culture, the honey product will be found to be increased more than 150 per cent. over the product of 1860, which, for the honey alone, at the very lowest average sale rate of 22 cents per pound, would amount in round numbers to about \$14,000,000. Now, if it be considered that this large amount, which is yearly being increased, is only the saving of that which concealed in our natural flora, would otherwise go to waste, so far as man is concerned, we rise somewhat to the dignity of this great subject in political economy—bee keeping.—*Genesee Democrat.*

For the National Bee Journal.

Queen Bee.

Messrs. Editors:—I am much pleased with the JOURNAL, as it contains a good variety of reading matter pertaining to the honey bee, a subject which I feel a deep interest in, and from the JOURNAL I expect to get information that is valuable to any one connected with apiculture.

I wish to contribute to its columns some of my observations, as its pages are for that purpose, and as considerable has been said on the drone question, I will state, first, I had last season an Italian queen that mated with a black drone, which could not be told from black drones in any particular, that I could discern by the naked eye. I mention this instance for some of the drone theorists to manage. I would mention a rather remarkable instance of a queen, she being an Italian by birth; I put her in a nucleus box, and I wished to introduce her into a full colony; I put her in the hive selected for her future home, and kept her confined for some days, and then released her, and they appeared to receive her well. In some days afterwards I opened the hive to notice the brood which was left; on opening it I found the queen that had been removed some time before; I caged her

again, put her in the hive, and kept her confined for several days, and she was again released, and left that hive again, and, not finding the bees in her old home, she went back and entered another hive, and the queen which was in that hive was killed, and the new one presided in that colony. This I consider a very singular and very rare circumstance, and could any of your many readers solve it they will do well. We would be glad to hear from them.

ISAAC C. LINDLEY.

Elizabethtown, Ind.

For the National Bee Journal.

Mountain Bee Plant.

Our friends who are contemplating putting out a honey producing crop the coming year for their bees, should not forget to send to Mr. A. Green, of Amesbury, Mass., for some of the seed of the Rocky Mountain Bee Plant. We are told by those who had it in bloom the last year, that they never saw anything that equaled it for honey. At the same time it is a very beautiful flower, and would appear to great advantage in any garden or lawn. We have heard enough of it to warrant us in recommending it to all bee keepers and lovers of beautiful flowers. Send at once to him for circular and directions for planting, etc. Advertisement in this number.

Big Bee Battle.

The Jackson, Tenn., *Whig*, of the 26th of December last says that Captain Brown, of that city, recently robbed three hives, and Dr. West, a neighbor, robbed four. The bees, thus deprived of the fruits of their labor, became furious, and uniting, making an army of seven hives, they invaded the premises of Mr. Horace Bledsoe, and made a severe attack on five of his hives. Bledsoe's bees were taken by surprise, and, although outnumbered, fought for their homes with desperation. The battle lasted several hours, and four of Bledsoe's hives were literally destroyed. The invaders were finally repulsed, after being almost annihilated. The ground for yards around was black with dead bees. Mr. Bledsoe, although a serious loser, buried the dead warriors with the honors of war. Few of the invaders survived the battle, and out of the five of the defending hives, four were destroyed. It is the bloodiest bee battle on record, and deserves to be handed down to posterity.—*Genesee Democrat.*

Death to Bees.

The intensity of the cold weather we had lately in this locality, can be judged from the fact that Mr. Brewer, living a short distance from

this city, found three of his best and heaviest swarms of bees frozen to death. An examination of the hives showed an abundance of honey, proving that there was no lack of food. The hives were in the same position they have occupied for several seasons past, but the cold snap seems to have been too much for them—every bee being frozen stiff on the combs. It will be remembered that the thermometer stood on one night during that "spell" 28 degrees below zero.—*Exchange.*

I see on page 200 of the NATIONAL BEE JOURNAL, of July 15th, 1871, Mr. John M. Follett tells us that he prevented his bees from swarming until after the baswood and white clover was gone. Will he please tell us, through the JOURNAL, how he does it, and oblige

MRS. ANNA MARTIN.

Hillsboro, Iowa.

Italian Bees in Utah.

The last report of the Department of Agriculture, at Washington, says a Utah correspondent, writes that there were a number of Italian bees imported into that Territory last spring, and that they have thus far proved a decided success; in many instances, one hive producing four to six swarms, and 100 pounds of honey and upward.

EDITORS' TABLE.

To Our Readers.

With this number of the *JOURNAL*, it is truly gratifying to be able to say that this volume commences with a largely increased subscription list. It is, nevertheless, true that the bee keepers of the country are becoming awakened to the great and important interest of apiculture, and have become interested to the great interest of sustaining a bee journal—an organ of communication for all the bee keepers of the country. We will say, as we have often said, with the increasing patronage that we have met with since we became interested in the *JOURNAL*, we have steadily increased in numbers, and should we judge from the many letters of congratulation received from different parts of the country, that the progress is moving onward, the interests of the *JOURNAL* are still increasing, and it will be our constant endeavor to make it one of the best and most reliable bee journals of this or any other country.

The *JOURNAL*, we are happy to say, receives high recommendations from many of the

leading presses of the day. They give much credit to the interest it manifests in spreading apiculture, literature, etc. Many of our friends are at work soliciting subscriptions. The *NATIONAL BEE JOURNAL* is now a welcome visitor, and read in every State and Territory in this fair country; it is read wherever bees are kept, with the greatest of interest, and by the greatest men of the day; it teaches apiculture in its simplest form; it gives all the various improvements connected with apiculture; also the Italian honey bee, in its purity and quality; it sets forth every and all that pertains to the interests of the honey bee, in every way, and it is truly gratifying to see the great interest and waking up to the subject. Our friends South are becoming more interested in apiculture than heretofore; they begin to see where they have lost in neglecting their bees. But the South is being made to bud and blossom like the rose; in many places of the South may be considered the Eldorado of the world, and they have taken hold of it

with energy, and will carry it out upon correct and scientific principles, and while we have such men at the South engaged in this rural branch, as a Hamlin, a King, a Burbank, an Argo, a Nesbitt, an Adair, and many more, apicultural interests must advance, and the country must ere long become the wiser for it. Again, we have other men there, we are happy to say, that remind us of them almost daily with the large subscription lists they send in, with names of our bee keepers. Many thanks for your kind efforts; we hope to be able to repay you with the presence of the JOURNAL, well filled with choice reading matter. And we will say to our friends, many of the communications will have to lay over. Our friends have seemed to remember us, as we have nearly enough for two JOURNALS on hand now. But you all shall take your turn; this rule must work, and then all will be satisfied. So, friends, pass in your communications, so as to be on time—all will be served alike—happy to see them.

A Review.

It is a pleasure to review life, and to call to mind the interests attending the progress made in the highway of apiculture; and we can safely say it is not every one that reaches a very enviable distinction in

this branch of rural industry, from the very fact man has not, until within a few years, learned the most successful manner and mode of cultivating the honey bee. In times past many entered upon this rural branch without even understanding the first rudiments of apiculture, and to many their great anticipations were swept away like the waves of the sea, only to be remembered, and continue in freshness, unless their memory give up her empire, and the current of thought shall cease to flow in its accustomed channel.

It has often seemed to us that the enthusiastic apiarian who entered upon apiculture as a branch of rural economy, and with a view of securing wealth, will have only to pursue his avocation with energy to accomplish the desired expectation. Yet he will, as do the farmers, trust to the all-wise Creator for his seed in harvest. Should the farmer be successful with a bountiful crop, the apiarian that has followed his avocation will be sure, with proper and skillful management, to meet the same success. But, should he try to follow this branch for notoriety or fame, he would resemble, in no small degree, the traveler ascending the Alps, or the high and precipitous mountains of our country.

A few Words to our Correspondents.

We have now on hand a large amount of publishing matter, enough to fill two JOURNALS, a portion of which must necessarily have to lay over until our next issue. We shall hereafter give each correspondent his regular turn in the JOURNAL, which can not but give entire satisfaction. We have now on hand several articles from our correspondents, which shall come in due time.

Further, will ask of the correspondents that you put a heading to your articles. This will suit you better than for us to put something that might not suit you. Also, sign your name and address in full; also, give date to your articles. This will enable all to know if their articles are neglected.

THE WESTERN AGRICULTURIST, of Quincy, Ill., comes to us this month filled with interesting reading for the farmer, and we are surprised that Mr. Butterworth, the publisher, can furnish so good a paper for only \$1.00 a year. It is printed in neat pamphlet form, just right for binding, and every subscriber gets a binder free. The number for this month contains reports of the Illinois State Agricultural winter meeting, and State Horticultural meeting, and reports of local Horticultural and Agricultural Socie-

ties, with an Educational Department and a Bee Department in addition to the former Household Reading, Gleanings, Correspondence, etc.

Mr. Isaac Miller, of Bucyrus, Ohio, sends us two specimens of Italian bees, No. 1 and 2. He wishes our opinion as regards their purity. They being dead, we can not judge as well as when alive, but they do not appear to fill the bill of pure Italians. No. 2 is rather the best specimen of the two. Should say that they are mixed with the black bee.

Mr. N. S. Johnson, from Tennessee, writes that he has heard of a new bee feed, in case the bees are short of honey. Make a corn cake, out of water and meal; make it pretty salty; bake brown, cut top crust off, and put it where bees can get to it when out of honey. They will eat and do well, he is satisfied.

Our readers will see Mr. Huff's card, advertising alsike clover seed for sale. We can cheerfully recommend the seed Mr. Huff grows as genuine. We have purchased of him several times. We have seen stalks of this clover grown on Mr. Huff's farm that measured within a few inches of six feet. His land is high gravelly soil.

A. F. MOON.

10,000 Queen Bees Wanted.

We are ready to enter into a contract for ten thousand queen bees, to be delivered to us during the year 1872.

The queens must be warranted to be pure Italian, and to be delivered during the months of May, June, July, August, September, and October.

The queens to be sent by mail, post-paid, to our patrons, either by the single one, or more. Safe arrival, and purity, must be guaranteed in every case.

We would prefer to enter into a contract with a number of queen breeders. The more, the better.

We mean business. Give us your best terms, and the number you will agree to furnish, and the number per month.

Address **MOON & MITCHELL,**
No. 92 East Market Street,
INDIANAPOLIS, IND.

GARDEN AND FLOWER SEEDS.—

Our readers will find in this number the advertisement of that well known Seed Grower, James J. H. Gregory, Marblehead, Mass., who is the originator of many of our most valuable vegetables. We are informed he now raises over one hundred varieties of Vegetable Seed, and is constantly producing new varieties. His business extends over all parts of the country, orders being received and promptly filled from

more than fifty thousand customers annually.

His new Illustrated Catalogue is now ready, and will be sent free to all.

Vick's Floral Guide, for 1871 and 1872, is one of handsomest and most valuable publications of its character that we have ever seen, giving a complete list of all the most desirable varieties of the flower world. It contains valuable instruction to all engaged in the floral department. Mr. Vick knows wherof he affirms. It is beautifully and tastefully illustrated. Address. **JAS. VICK,** Rochester, New York.

To the Bee-Keepers of Indiana.

Those favorable to calling a meeting of bee keepers for the purpose of organizing a State Association during March, will please send along their names.

Pure English Berkshire Pigs

Bred and for sale by **I. N. BARKER,** Thorntown, Ind. Choice pigs \$25 per pair.

SEED.

THE ROCKY MOUNTAIN BEE PLANT, by mail, post-paid,

Per pound \$1.00

Per half-pound50

Over four pounds, by express.

Address, **A. GREEN,**
Box 342, **AMESBURY, MASS.**

**WARRANTED PURE HONEY,
FROM THE
KANSAS APIARY.**

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

DR. L. J. DALLAS,
Baldwin, Kan.

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

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

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

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JOHN E. SIMPSON,
General Superintendent, Indianapolis.



"BEE LINE."

Cleveland, Columbus, Cincinnati and Indianapolis Railway.

BY WAY OF CRESTLINE

ON and AFTER MONDAY MAY 15th, 1871,

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

STATIONS.	No. 4.	No. 6.
Indianapolis	10:10 a m	*7:55 p m
Muncie.....	12:36 p m	10:12 p m
Fort Wayne.....	4:00 p m
Union	*1:45 p m	11:29 p m
Dayton..... p m
Bellefontaine.....	4:10 p m	1:46 a m
Crestline.....	*6:40 p m	4:30 a m
Cleveland.....	9:45 p m	*7:30 a m
Buffalo.....	4:10 a m	2:00 p m
Niagara Falls.....	10:10 a m	4:30 p m
Rochester.....	*7:15 p m	5:30 p m
Albany.....	4:10 p m	1:30 a m
Boston.....	5:50 a m	11:00 a m
New York City.....	6:35 p m	6:40 a m

Indianapolis.....	10:10 a m	*7:55 p m
Sidney.....	3:16 p m	12:52 a m
Toledo.....	5:40 a m
Detroit.....	9:10 a m
Crestline.....	*6:40 p m	4:20 a m
Pittsburg.....	1:25 a m	*12:10 p m
Harrisburg.....	11:25 a m	10:35 p m
Baltimore.....	3:35 p m	2:30 a m
Washington.....	5:00 p m	5:50 a m
Philadelphia.....	3:05 p m	3:00 a m
New York City.....	6:00 p m	7:40 a m

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

All trains leave Indianapolis daily, except Sundays.

*Stop for meals.

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

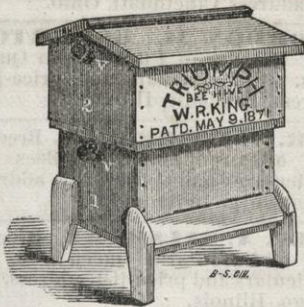
Ask for tickets over the "Bee Line," via. Crestline

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- Township rights, from 10 to 50
- Farm rights 5
- One sample Hive and Farm Right 10
- One Hive to those wishing to try it. 5

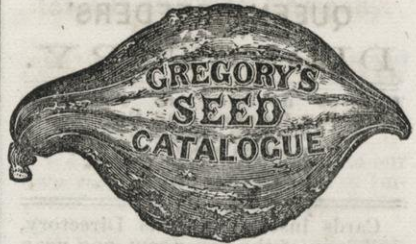
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- For 6 " " " " 30
- For single " June & July 5
- For 6 " " " " 25
- For 12 " " " " 40
- For single " Aug. & Sep't. 4
- For 6 " " " " 20
- For 12 " " " " 36

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HIVES of all the improved varieties for sale.

We are agents for the PEABODY HONEY EXTRACTOR, the best one in use; and are also agents for MRS. FARNHAM'S NON-SWARMING ATTACHMENT, which can be applied to any form of hive, and the only non-swarmers which we know will give entire satisfaction.

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It is now claimed by those wintering bees in them to be the best Hive they ever tried for wintering bees; and we are in constant receipt of letters from all parts, saying that the ROUGH AND READY HIVE is free of moisture, frost or ice, while the other hives are troubled with it, and their bees die by the hundreds. We are glad to hear that the "Rough and Ready" is carrying its bees through the winter in good condition.

We say to the bee keepers of America, we are proud of our last improvement on the Rough and Ready Hive, and we have now added what we call

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