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A GUIDE TO BEE-KEEPERS.

VOLUME 1.

FEBRUARY, 1874.

NUMBER 3

[For the Bee World.] Fair Grounds Near Rome, Ga., Sept. 11th, 1873.

HE Bee-Keepers Convention of Georgia and Alabama met in convention to-day—present Prof. W. J. Borden, presiding. The Convention was called to order by the President.

The essay, "Can Bee-keeping be made profitable," written by Dr. J. P. H. Brown, of Augusta, Ga., was read and ordered published and original copy filed.

On motion, the Convention adjourned to meet at the exhibition rooms, Fair Association in the city this evening at 7 o'clock, P. M.

THOS. J. PERRY, Sec'y

Exhibition Rooms, Fair Association, Rome, Ga., Sept. 7 1873, 7 p. m. }

Convention met pursuant to adjournment, President Borden in the chair,

On motion an opportunity was of-

fered to all present who were not members to enroll their names as members.

John H. Newton of Athens, Ga., and John Lawrence of Cedar Bluff, Ala., enrolled their names.

On motion Article 1st of the Constitution was so amended as to strike out the words "of the Cherokee Country," and in Article 3d, to strike "one" Vice President from each county represented in Georgia and Alabama," and insert in lieu thereof, "two Vice Presidents from each State." After a full, free, and a frank discussion of the various topics and interchange of views and ideas. The Convention then went into the election of officers for the ensuing year, which resulted as follows:

President, Col. W. R. Hanna, Oxford, Ala., Vice President John H. Newton, Athens, Ga., Judge W. H. Hampton, Talladega, Ala., Dr. J. M. Lawrence, Cedar Bluff, Col. W. G. Gammon, Rome, Ga. Corresponding Secretary, Prof. W. J. Borden, Oxford, Ala.; Secretary, Thos. J. Perry, Rome, Ga. Treasurer, Capt. C. O. Stillwell, Rome, Ga.; Executive Committee, Col. J. M. Morton, Oxford, Ala.; Dr. W. M. White, Atlanta, Ga.; Capt. L. C. Mitchell, Rome, Ga.; W. M. Mc-Pherson, Oxford, Ala.; P. M. Johnson, White Plains, Ala.

On motion it was resolved to hold the next annual Convention at Oxford, Ala., on the third Wednesday in August, 1874.

On motion the Executive Committee and Corresponding Secretary are hereby instructed to make all the necessary arrangements, give due and timely notice of the time and place of the meeting of the next Convention, and extend a cordial invitation to all bee-keepers whosever disposes to attend said Convention.

Several short addresses were made, all urging the members to stand by and work for the Association, as it was destined to do a great work in building up apiculture in the South, and will be the means of developing that branch of industry so long neglected. Many admitted that they had learned more during the Convention than they ever learned before, as to the management and culture of the honey bee.

The Convention then adjourned to the time and place designated.

W. J. BORDEN, acting Pres. THOS. J. PERRY, Sec'y. Michigan Bee-Keeper's Convention

Grand Rapids, Mich., Sept. 17, 1873.

7:30 P. M.—The sixth annual convention of the Michigan Bee-keeper's Association met pursuant to notice, in the Court-house at Grand Rapids, Vice President A. C. Balch, of Kalamazoo, in the chair.

The minutes of the previous meeting were read and approved.

A number of those announced for papers not being present, the Sectretary proposed that extemporaneous remarks be made upon some subject of present interest to bee-keepers.

The subject of "Hives" was decided upon. The point contended was for the most part "the relative merits of one and two story hives.

Mr. H. A. Burch, of South Haven, claimed that in his experience the hive with a single story had proved the most successful. He increased the capacity by horizontal extension, and in this manner secured the largest amount of brood, and consequently the largest yield of honey.

Mr. James Heddon, of Dowagiac, defended hives of two or more stories. He piled his hives one upon another to the height of two or three stories, and said by changing the frames from one part to another of the sections, he had induced the queens to go' into all parts of the hive and deposit her eggs, thus filling every part with brood. Mr. H. had sixteen swarms in the spring; he increased them to thirty-three, and had taken over 400 bls. of extracted honey. His bees were in excelent condition this time.

IF several days of rainy weather should inceed a swarm coming off, they may die of famine, if timely relief of honey is not given to them.—Wildman.

He had combs to fill his hives at the beginning, thus obviating comb building entirely.

Mr. Everard, of Kalamazoo, used a simple box holding frames, and containing about 2,800 cubic inches. His hives contained but a single story.

Mr. Henry Palmer, of Hart, Oceana County, used single story hives of from 2,000 to 6,000 cubic inches ca-Mr. Palmer commenced the pacity. summer of 1872 with eleven swarms. Did not allow any increase, and got over 3,000 lbs of extracted honey. One swarm had produced 526 pounds during the summer. He commenced in 1873 with six swarms, and had increased them to twenty-five, at the same time taking about 1,000 pounds of surplus honey. Mr. P's location abounds in large quantities of basswood.

Mr. Frank Benton, of Shelby, Oceana county, used hives of a single story, holding from ten to twenty frames. Those of greatest horizontal length had given best results. Would use second stories when he had sufficient empty combs. Would place the combs in standard size for wintering indoors.

Mr. Tomlinson, of Allegan, used a hive of one story, and very shallow frames, only six inches in width. He had, during the summer just passed, increased his swarms from 5 to 20 in number, and had taken 400 pounds of box honey.

The meeting was rather informal, and considerable digression from the main subject was indulged in.

Adjourned until to-morrow at 9 o'clock, A. M.

THURSDAY MORNING SESSION.

The President still being absent, the chair was filled by Vice President Balch. The order of business was announced to be the consideration of "artificial swarming" and the "Honey Extractor."

The subject of artificial swarming was discussed and the various methods stated by Messrs A. C. Balch, C. I. Balch, Heddon, Everard and Porter.

After the experience of some of the members present with the Honey Extractor was given, the meeting adjourned till evening.

THURSDAY EVENING'S SESSION.

The meeting was called to order by the President, T. F. Bingham, of Allegan, who had arrived during the day.

To the great satisfaction of all present, Prof. A. J. Cook, of Lansing, formerly Secretary of the Association, put in an appearance at the meeting.

The topic for the evening, as announced at the previous meeting, was the all important subject Prof. Cook had prepared a somewhat lengthy, able and scientific paper, which he read to the convention.

This paper drew out a most hearty vote of thanks to Prof. Cook. Some remarks were made, and the experience of members stated on the subject under cohsideration.

Mr. A. C. Balch stated that according to his experience very little venvilation was needed in winter, and

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gave his reason for such a position. He stated that with much ventilation there would be a constant escape of heat, and that the temperature inside the hive would be more variable. He thought uniformity of temperature a great desideratum. He had noticed that when the temperature reached 42 degrees Fahreinheit in his cellar the bees became restles and upeasy. · Mr. Palmer puts about three inches in thickness of straw around his bees inside the walls of the hive; also straw above seperated from the bees by canvass. He buries them deeply in the snow and gives them very little ventilation, and has had good success.

Mr. Porter stated that he put his bees in winter quarters by placing the hives in a long row about eight inches apart, and packing straw around and between them, leaving only the front open. The cap he filled with straw and chaff, and held the straw in place by a single thickness of cotton cloth. His bees wintered as well as could be wished for, while the neighboring bees were nearly all lost. But behold, when the warm weather came and the bees flew out. instead of returning as they should, - they went into other hives until the number wintered, seventeen, had been reduced to ten. This procedure was entirely inexplicable to him.

Mr. Bingham had a similar experience with bees in the spring, and thought that the cause was barrenness or some other difficulty with the queen.

Mr. Heddon said he commenced the winter with sixty colonies. He

put some of them in a cellar and left some out. He buried some in snow, and put straw and chaff around some, and yet he could not discover that difference of condition made any perceptible difference in results. He believed it to be some disease among bees similar to the epizootic that prevailed among horses a year since.

Mr. Knapp, of White Pigeon, said that his experience had been similar to that of those who preceeded him. He had learned how to handle his bees very well, and how to get honey from them, and now if some one could tell him how to winter successfully, he should think the victory won. The trouble with his bees seemed, as in so many other cases, to be "dysentery."

Mr. Tomlinson put bran around his bees inside the outer covering, and then buried them in the snow, the result being quite satisfactory. Mr. Bingham gray his opportune

Mr. Bingham gave his experience on warming bees. He took a swarm of bees that had run so low in vitality that they had hardly life enough left to buzz, and put them into a room heated to a temperature of 106 degrees. The bees came out and some of them voided their fæces, the number, however, being comparatively small; all, however, had "a fly." They then seemed to settle down as quietly as bees need to. Obviously the question of successful wintering is the great question of the day, and though much has been learned and written upon it within the past two years, the bottom has not yet been reached, and, without doubt, this is

the fruitful field for present investigation.

After a very interesting evening the meeting adjourned until to-morrow morning at 8 o'clock.

FRIDAY MORNING SESSION.

Meeting called to order by President Bingham. Minutes of last meeting read and approved. The convention then proceeded to transact miscellaneous business, the first in order being a resolution relative to amending the constitution so that instead of reading "at the time and place of holding the State Fairs" it should read "The annual meeting may be held at the time and place of the State Fair, or at any other time or place that the Society, may designate "

Motion made and carried that the Society hold a special convention at Kalamazoo, the first Wednesday in May of 1874.

Motion made and carried to empower the special meeting at Kalamazoo to appoint the time and place of holding the next annual meeting.

The election of officers was then proceeded with, the following being the result: President, A. C. Balch, Kalamazoo; Vice President, H. A. Burch, South Haven; Secretary, F. Benton, Shelby, Oceana County; Treasurer, T. F. Bingham, Allegan.

Motion made and carried, that the retiring President and Secretary receive a vote of thanks from the Society for the faithful manner iu which they have performed their respective duties.

A resolution was then introduced relative to amending the constitution

so that instead of the former number of officers, there should be in addition, a Vice President for each of the several counties of the State, so far as represented in the Association. Adopted.

The Convention proceeded to appoint Vice Presidents for all counties represented in the Society.

The meeting then adjourned until the first Wednesday in May, 1874.

Sec'y Mich. Bee-Keepers' Associ'n. T. F. BINGHAM, President.

WORKERS alone have the property of secreting wax. Scales of it ranged in pairs are contained in minute receptacles under the lower segments of the abdomen. * * * * This substance is produced by a particular organ, after the manner of other secretions.—Huber.

[For the Bee World.]

Notes of the Honey Bee.

Editor Bee World :

SCRY father moved from the town of Holly Springs, Marshall County, about the year 1841. I was then quite a small boy. My father was raised in North Carolina and was quite familiar with the honey bee and its workings. After settling where he now lives, some of our neighbors kept bees, and honey was a rarity with us. By some means Pa. obtained one or two swarms of bees. About the year 1848 or 1850, I became somewhat attached to the honey bee. and after a few years instructions from Pa, I was enabled to handle them as successful as he. We paid no particular attention to them in those days, and was taught in those days by some of our knowing bee men that the wild bee would sting more

J. W. PORTER,

than our light domesticated honey bee: it is pretty well known that the wild bees of the forest is quite dark. One morning when corn was in good roasting condition, our old coon dog came in while we were at breakfast. and gave us to understand he had treed a coon. As this was his custom to hunt in the morning and evening alone, Pa goes back with the dog and found he had got three coons in the ground. The dog soon took another track and treed a coon in a very large oak. In the evening some of us went to cut the tree. We soon found the dog had made a mistake. Instead of coon, we found it to contain a swarm of bees, and very small bees indeed. and quite black. The question soon arose, "why were they so much smaller and darker than the bees at home?" Some said they were a different bee-this was the reason given by many ; but one old bee hunter. and one who in his estimation knew more than all the bee men and journals in Christendom, said he could tell why and what made the bee dark color. "They say, I believe, he lives in a black-oak if the bee is rather dark color, and if light color he lives in a white-oak, or sweet-gum, as the case may be; but the color of the bee was taken from the tree whether light or dark. The swarm found in the tree was very dark. We put them in a hollow log prepared for the occasion, and at night we moved them home. For convenience we placed them near the gate where we passed them frequently, but whether the bees were naturally ill, or wheth-

er they being frequently disturbed by those passing by, I could not tell; but one thing I did know, they would sting much sooner than our home bees. Since that time I have cut another tree of about the same stock; they had several buckets of fine comb honey. I would like some information. Are these bees a seperate breed from the common bee? If not why are they darker? What causes them to be smaller than the common homebred bee?

I am much of the opinion now that much depends on the comb they are bred in. As to color and size, as the comb becomes smaller by being redressed after the young bees emerge from the cell it became thicker and the bees are smaller. When I was transferring a swarm of bees for one of my neighbors from an old barrel, an old fogy told me the bees would leave the new hive, that it was not the kind of hive they were used to, and they would not stay. I assured him that they would, and he remarked that "they always thought the honey bee was not proud, but if they would live in that new hive he would believe they were proud creatures." Bees have increased in log and box hives to large numbers, then in a few years would decrease to almost nothing. I have known of but little profit ever being obtained from bees kept in log and box hives. There is some now marketing their honey, and the price obtained is from ten to fifteen cents per pound. This is a fair average, and many find poor sale at that, But of late years people are

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pursuing a different course, and honey is gotten up in a marketable style, and brings a good price. We close by wishing the BEE WORLD success. W. R. BAKER.

Hernando, Desoto, Miss.

BEFS express not more love to their keeper than strangers, but they, (their keeper) being used to them with greater confidence, ventures among them, which some (more fearful) beholding, fancy that the bees respect and love them more than strangers.—*Purchase*.

[For the Bee World.] Antidote for Bee Stings.

SHIS is a question often asked by timid bee-keepers. Some old bee keeper will answer with a smile, at the same time making fun of it, "Oh, bee stings are nothing when you get use to them." But getting use to them is rather a serious undertaking, my neighbor Jones, I fear. I called on him the other day and found him with his head tied up and about one-third larger than the usual size, one eye closed and his lips-well I cannot tell how they looked better than to say like Brudder Bones' lips when he makes minstrel fun for the boys and the rest of them, and I will never tell you how he felt. However, one prevention is worth a pound of cure. A bee vail and a pair of rubber gloves of course would be a most effectual prevention, and to the timid we would say by all means wear them while managing bees, until you can manage them successfully without it. If you properly understand them you will be much less liable to have a big nose or head put on you. We seldom use either veil or gloves to

manage bees. If they sting remove it without squeezing the place stung. Saeezing forces the poison into the flesh. Use a solution of sulphate of zinc, which we keep in a bottle ready for self or visitors in case of accident. Two or three auplications will prevent swelling. It does not injure the skin by applying it to it. It can be purchased at any drug store, for five or ten cents per ounce. One ounce in a pint of water kept in a bottle for use will save many an unpleasant feeling, and the handling of bees will be done with pleasure instead of fear. This is more preferable than the patent preperation that lately came to our notice. which is offered to bee-keepers for one dollar for two ounces. Therefore save your dollar. Yours truly, J. W. WINDER.

Cincinnati, Ohio.

No true lover of bees, 1 am pursuaded, ever lighted the fatal match that was to destroy his little innocents with lived flames, and a smoke that strikes them dead with its intolerable stench, without much concern and uneasiness. — White.

[For the Bee World.] Bee Culture.

Editor Bee World:

WHE BEE WORLD now before me, is just as it should be, well gotten up, good paper, clear and large type, neat pamphlet form, with the edges cut, and several of the writers my old friends in former journals men well posted in apiculture.

I am tempted a review of the whole but friend Hester's article on first page so forcibly reminds me of several instances of ignorance and superstition in apiculture, that I think it will take all the space alotted the present piece.

Friend Hester succeeded in getting bees from one of this wise class of superstitionists. I couldn't, as you will see presently. When I married and went to house-keeping in 1856 there was but one old man in my neighborhood, who, it was said made bees pay and knew everything about them worth knowing-a wealthy farmer on a large farm. I visited his apiary several times to buy honey, as I was very fond of honey. His hives were all gums, from 2,500 to 6,500 cubic inches. I counted at one time 160 hives. The last time I visited him, as he took out his pocketbook to make change he showed me a large roll of bills, and says "my bees made it all." I asked him what he would charge me for a stand to start with. "No. sir," said he, shaking his head, "you cannot buy a stand of me. I never sell a stand." I never was a believer in luck, so this both disappointed and chagrined me, as I was anxious to get a stand to start with. However, I said no more to him; but some time after a friend told me the following of this old man :

One day while walking through the field with a friend, he stopped and killed a bee with his stick. On being asked his reasons, he said that bee did not belong to him, that he knew his own bees. Now this was before the Italian bees had been imported to this country; so it seems incredible that he should know his own bees. I rather think it was his superstition. Honey was no easy thing to buy at that time. This old man alwrys had his honey engaged before he robbed his bees.

The love of honey had put bees on my brain. So I tried at other places to buy a stand or two, but with no better success—nearly every one giving the same reason, "Bad luck to sell a hive.

At last in the fall of 1858, one of this class living near me died, leaving about forty stands of bees that was sold at public sale. I purchased two stands from which I got my start in bees.

In 1859 a special friend from our county seat visited my apiary, remained two days with me, and told me of one of those doctors of beeology in this city who had invented a bee-house which was nothing more than a hive set in a large store, box with a door to one end, and the box set on legs two feet high, and the legs set in ovster cans-kept filled with water. These he was manufacturing and selling at ten dollars a piece to every one in the city who had bees. His success with one of them the past two seasons, in getting from seventy-five to one hundred pounds of comb honey each season, had created quite a stir in the city. Also his big talk against me and all others who were then using the frame hives. and Italians as humbugs, that know nothing at all about bees, had gained him a few disciples.

My friend had a swarm promised him, and consulted me as to what hive to put them in. I told him to put them into the Langstroth, and in June following, after they had filled out all the frames I would call to see him and bring an Italian queen with me, and introduce her in the presence of their great, wise bee man, and so convince him by a demonstration that the Italians are a reality, and that I do know something about bees, or rather I would convince him of his own ignorance.

In due time I set a day and notified my friend to have the bee man ready at the appointed time and place. I went prompt to appointment, found the bee man with his disciples and several others, among which were a few ladies, to see what they had never saw done before, nor did any, except my friend believe it could be done. After letting them all satisfy their curiosity, in looking at the bright vellow queen in the cage, I opened the hive, found the black queen on the third frame, handed her to one of his disciples who says, "you are nothing but a bee-witch." "No," says the old boss. "Its all humbuggerry, that hive is ruined, and will go up if that queen is not put back." I placed the cage in, closed up-told my friend that she would be out of the cage among the bees in from twenty-four to forty-eight hours, and that in three months all of those bees would be dead, and the whole stand pure Italians. "Now," says the bee man, "Did I not say he knows nothing about bees-he says these bees will all be dead in three mouths, which is the same as to say that bees only live three months. Don't we all know better than that ?" T answered that bees hatched in October could live nine months, but at

that present time, three month was as long as they could live. He then walked off, not being willing to hear any more such *lies*. Walking up the street he stops and sits down with a group of citizens, such as the county judge, banker and doctor, and celebrated lawyer, and immediately began to unburden his mind, and tell them the big lie Bob Argo had told in saying a bee only lives three months in summer time. The lawyer asked him how long a bee lived. He answered that he did not know exactly, but he knew they lived about twelve years, and could prove it. That he transferred a stand a few days since, that he had hived just twelve years ago, and he knew many of them were exactly the same bees he saw go into the hive when he hived them. This of course created a laugh. for these men all knew better

The disciple that I had handed the queen to, said he could make a swarm with her better than I could; so he went home with her, tried, failed, and got her killed by the bees in the attempt. He hastened back to my friend with the dead queen in his hand, as proof that the bees would kill the Italian queen as soon as they got at her. My friend got scared, sought for me with the dead queen. I told him to fear nothing : all was right, that I did not expect the jack to do any better with her. By the way, while I was introducing the queen I looked at the boss and his The sight of them redisciples. minded me of a jackass show at an old fashioned Kentucky muster about thirty years ago.

The queen was accepted by the bees, and in three months they were all Italians just as I said, and a hundred can testify, including the great, wise bee man himself, who in course of time, became converted to the true knowledge of *bees* and hives, his bee houses having went under, and he, with most of his disciples, left the State.

I fear I have taken too much valuable space. R. M. ARGO, Lowell, Ky

It is commonly the practice to rub the inside of the hive with aromatic herbs, or solution of salt, or other substance. But the most experienced bee-master deems this altogether unnecessary, as it can be attended with no advantage whatever.—*Hacher*.

[For the Bee World.]* Misapprehension Corrected.

There is a singular idea prevailing among bee-keepers, that to secure a great many coloonies of bees, is success in the business. This is a mistake. It is not bees we want; it is the fruits of their labor, *honey* that we desire to obtain.

It is not a great number of workers in one field that can secure this; but a large force in one hive.

If we place as many hives in one field as can be supplied with food, they have more to store up as surplus for their keeper. If we place more in one field than can be supplied with food, a portion of them must perish.

If we place a large number of workers in one hive, they can supply the brood and store a large amount of surplus. 100, 200, 300 pounds in boxes have been reached by one colony in a season. In one season I placed four colonies in four new hives, and their product the second season was four new swarms and 500 pounds of honey in boxes. I have since had from one hive in one season 100 pounds, another season 140 pounds; another, 145 pounds, and in one season, 200 pounds.

My field has been but an ordinary one. I have no doubt but there are fields where this may be much exceeded. This is very easily accounted for, when we consider that as in the case where no swarm is given; the whole force of the first swarm and the after swarms until three or four weeks after they issued, continued their operations in the old hive. Take all that is made in the new hive, and it would make a handsome amount of surplus.

It is very important to success, that too many colonies of bees be not placed in the field.

The almost universal history of bee-keeping in the common swarming hive has been a few years of successful increase of colonies, and a fearful destruction of one-half, two-thirds, three-fourths, nine-tenths, and sometimes all the colonies in the apiary, and this loss is often proved. If we commence with one colony, and have one swarm from each colony annually, in five years they will reach 32, in six years 64, and in seven years 128.

If the old colonies give two swarms each, in four years, they reach 54; in five years 108. Thirty colonies is as many as can be sustained in any field that I have tried. In such fields those colonies that give one swarm must perish the eighth year a great part of them, and those that give two swarms must most of them perish the fourth year.

There will be a greater or less number perish, according to the excess of the colonies over the capacity of the field. The fifth year gives 32 colonies in the first class, two more than the supposed supply. The operation will be some of the strongest colonies will give some surplus; but a number of the weakest colonies must be fed or starve to death. If we suppose the field to sustain 100 colonies, the colonies giving one swarm must reach a starving point in seven years; and those giving two swarms each in five years. Famine is attended with, or followed by other deseases. Some of the combs are all daubed up with facees; but the real cause of failure was lack of food.

How much better to use hives that from the abundant room given, have not the disposition to swarm, but will give from 100 to 200 pounds of surplus. But a busy man must judge for himself Jasper Hazen.

Mr. Editor, at the age of four-score and three years I have changed my residence from Albany, New York, to Woodstock, Vermont. All communications to me should be addressed accordingly. JASPER HAZEN.

Woodstock, Vermont.

[For the Bee World.] / Bee Notes. Editor Bee World:

WORLD came safely to hand, and it was indeed a pleasant surprise.— 1st. In that through it, I learned of your whereabouts and 2d, it was to me a source of no small interest and pleasure, to learn that you had undertaken the publication of a Journal of Apiculture in the "Sunny South."

I cannot help congratulating vou upon having undertaken so excellent an enterprise, and from the increase in the number of swarms that has taken place in the South, since the close of the war, as stated in the BEE WORLD, I take it that the people will be thoroughly awake to the value of any information relating to bee culture, and especially in the modern and scientific aspect. There has probably never been any industry upon which more light has been thrown in the same length of time than has been thrown upon bee-keeping within a few years. About three years ago I became interested in bee-keeping as a science, and began to read and study and practice bee-keeping, according to the most approved methods, and though I consider myself a little more than a novice at this time. I would not then have believed that so much could even be known, as I have since learned, about scientific and practical apiculture.

If any one at that time, had told me that in so short a time, I should when the bees were in full working, be able to open the then "mysterious hive," take out every comb, find the queen, see the number of queen cells,

note the amount of comb in its various stages, distinguish between drone and worker comb, and in fact know the exact condition of the interior of the hive, I should, to say the least have listened to him with doubt and wonder.

But I have not only learned all these things, but a multitude of others concerning the natural history and daily operations of the little honey gathers. One of the important things learned, is how to control swarming at will, either to increase swarming to any number, within reasonable bounds or to prevent it entirely, as circumstances may direct.

But this has not been my experience alone, but as it is well known to you it has been the experience of hundreds, and perhaps thousands in this and adjoining States.

Our State bee-keepers Association of which you were formerly President is flourishing well, and will hold its next session at Kalamazoo the first Wednesday in May 1874. Much beneficial knowledge has resulted from the meetings of this Association, and we still think it has a mission of great usefulness to perform.

But my letter has become some what lengthy, therefore I will simply say, may the best of success attend an enterprise so needed.

J. W. PORTER. Spring Lake, Mich., Dec., 31st, 1874.

ALWAYS have the cheerful ray of the morning sun fall upon your hives; but contrive to throw a shade upon their front for a few hours in the middle of the day, when the weather is very hot. Such a shade will be grateful to your bees.—Nutt.

[For the Bee World.] Apiary Notes for Spring.

Lose no time in examining the condition of all your stocks. Many colonies that come safely through the winter starve to death just a few weeks before the honey harvest. Bees when breeding, consume their stores very fast, and if their supplies have been scanty in the fall, ten chances to one, they will need assistance before they can gather any honey from the flowers. If you wish to save such stocks you must feed them regularly. To be certain, give them a trifle more than they consume. Feed all colonies to promote breeding. A couple of ounces of sugar syrup every other evening will be amply sufficient.

If the colony is weak in bees, and is in a moveable comb hive, with all the frames filled with comb, it is very important that all the animal heat generated by the bees should be economized. For this purpose, take a piece of flannel sufficiently large to cover the tops of the frames occupied by the cluster of bees, and also to drop down outside of the first unoccupied frame to the bottom board. It thus also performs the office of division board. The unoccupied comb had better be removed from the hive, and keept in some dry place.

If the moth should get about it you must fumigate it with sulphur. As the bees increase in number, and can cover more comb, return the frames. Besides the flannel the frames should be covered with a heavy quilt, made to fit closely around the sides of the hive.

Keep the bottom boards clean. Brush out all droppings and accumulations. Scrape off all superfluous propolis sticking about the frames. This is very easily removed in cold weather, but is very tenacious when the weather is warm.

Glued up honey quilts may also be cleaned by rubbing when the propolis is hard and stiff.

Get a supply of hives ready at hand to put your increase of stocks in. This will save time and trouble. Have your honey boxes ready; and, as a rule, put them on your strong colonies when the apple comes into bloom. It is of no use to put them on weak stocks, for such will not work in boxes when there is work to do in the body of the hive. It should ever be borne in mind that all our honey profits in bee-keeping come from those hives crowded with bees.

As it will be impossible for every Southern bee-keeper to exclusively adopt the moveable comb hive, the coming season. I would suggest that they make their box hives 15 inches high by 12 inches square, and cut several two inch holes in the top, over which place honey boxes. This is far preferable to the common way of robbing by knocking off the top, and cutting out the honey, at the risk of drowning hundreds of the bees, injuring the board and exposing the stock to the attack of robber bees.

When a colony takes to robbing, they are very difficult to control. An ounce of prevention is here worth more than a pound of cure. At seasons when bees are not gathering anything, the greatest care should be used in exposing sweets about the apiary. Hives should be opened only very early in the morning, or late in the evening when there is a scarcity of forage. Robber bees can generally be very easily detected when seeking an entrance to a hive: but sometimes they enter very adroitly, and in a similar manner to the regular occupants, particularly after they get the same scent. A very good plan, which the writer has practiced in such cases with much success, is, first to close up the entrance to the robbed hive with wire cloth; then go to the hive of robbers, and open it, and sprinkle frames, combs, and bees well with some scented water, made by adding a few drops of the essence of peppermint, sasafras, etc. In the course of an hour I return to the first hive and release the prisoners. But always endeavor to excite their "combativeness" by a little thumping on the hive. When you get them up to "fighting heat" they will make every scented bee stand back.

Augusta, Ga.

J. P. H. BROWN.

HIVES with numerous glass windows, and gilt ornament, look pretty indoors, but they very soon lose their usefulness.—*Milton*.

> [For the Bee World.] Alsyke Clover.

Friend Moon :

EEING "Alsyke Clover" was much discussed at the bee-keepers Convention held at Louisville last month. I have thought my experience with it might be of some benefit to some of your Southern readers.

I have sowed it in land tired from long tillage in corn and in very strong or rich land with elay subsoil.

It grows best in rich soil—begins to bloom about a week or ten days before white clover- -continues in bloom some length of time—produces about the same quanity of honey, and I think some more.

Blooms very little first year-great profusion of blooms second yearthird year mixed with white cloverfourth year very little Alsyke can be seen-plowed up in the fall on rich land, such as would produce hemp, or one hundred bushels of corn per acre, grows about two feet high, on land that would produce fifty bushels of corn, about one foot or less-branches out-have counted often over sixty blooms from one stool at one time, has three or six tap roots about six or ten inches long, with many fibers which holds it fast in the ground, and frost proof.

Stock are so found of it that they will not eat red clover sown in same fields as long as they can get a spear of Alsyke,

When cut and cured makes good hay, but not half as much of it as red clover.

I had a sample sent me from Canada, that measured six feet long, three feet in northern Illinois, and two feet in Kentucky. And, as it originated in that far off cold country, Sweeden, I think the farther South it goes the

less value as feed for stock or bees. I sent some seed to a lady in Texas, who wrote to me afterwards that it never come up, suppose the climate to hot and dry.

H. NESBIT. Cynthiana, Ky., Feb. 2d, 1874.

QUEENS are not equally fruitful. While some breed slowly or not at all, others will speedily increase in prodigious numbers.— *Keys*.

[For the Bee World.]

Bee Journals and Sociability.

Mr. Editor:

I want to talk to you a little while about bee journalism, and the sociability of their editors,

Like all other literary or scientific journals, they require some fixed principles. They require to be issued promptly on the day set for their publication. Promptness is an essential feature to give a journal success. They should be filled with scientific truths pertaining to bee culture, or the experience of the best writers on bee-keeping. They should give all the light that can be elicited on the subject of bee pasturage. Should exhibit all the improvements that can be made in bee hives or other improvements connected therewith, for the ease and facility of handling the bees and combs.

They should speak the mind of the beekeepers on the best modes of obtaining the largest quantity of surplus honey, whether in boxes or by the use of the extractor; and the improvements in these. They should describe truthfully the nature and habits of bees, at least as far as known. Every writer for a bee journal should have this motto, light, truth, and science, as their guide, and should strictly confine themselves to whatever gives light, displays the truth, and tends to scientific culture.

They should give all knowledge that can be given on the best modes of wintering bees, and elicit the true cause and treatment of bee diseases, (if I may so speak,) or any cause of mortality among them. The why or wherefore of the loss of bees by flight in the swarming season, or at any other time, from being queenless, or the moth, worms, etc. The bee journals should expose every species of trickery and deceit connected with the writings of some of our would-be bee-keepers. Some of them have been in the habit of introducing their hives or other wares into market, by writing articles in their praise, and then signing some other persons name to them —thus giving deceitful representations, and by such trickery deceive many honest beekeepers. I repeat then, that the bee journals should expose all such transactions. In style our bee journals should be models of neatness and correctness of thought, and of truthful character.

The neatness of their dress should compare favorably with all literary journals. Their typographical execution should be quite faultless-in fact they should be a model of praise in every bee-keeper's mouth, so that they will be led to exclaim "This is my bee journal!" We insist then, that the model bee journal should ever be on the side of truth, never sacrificing it for error, but always correcting the errors. In style it should be an impartial exponent of true bee culture, without fear or favor among the people. All bee-keepers should be allowed to communicate their experience in any, or upon all points connected with bee culture, for the reason that we may compare any or all points of difference, and arrive at the truth.

Now Mr. Editor, you see what a field of labor I have laid open before you. It means work, if you make all of us poor writers speak what we mean, and write nothing but what will throw out a halo of light, or give some truth or add a leaf to science. I say it means work in a noble, and responsible calling, requiring an editor of long and practical experience in bee culture. One able to prove out, or at least point out every error in communications or articles of bee literature. Lopping off all personal aspersions against brother bee-keepers. These destroy the good style and worth of any bee journal. It will further impose upon the editor the necessity of have ing a good list of contributors that can wield the pen with spirit and life in delineating the different departments in bee-keeping.

Here Mr. Editor, I begin to tax your sociability. Near this point, you will discover that you will be required to talk freely with your correspondents. You will have to speak

plainly and squarely for the truth, even if some articles are consigned to the "waste basket," although I hope few will be doomed to that fate, among enlightened bee-keepers.

The editor should never, (except it be for good reasons,) allow articles to appear over fictitious names, neither should editors themselves trespass upon this rule to gain selfish ends. Nor do we approve of that narrow, selfish, and groveling spirit that closes the mouths of so many of the editors of our bee journals, preventing them from cultivating friendly sociability. What have they to loose by giving the names and address of all the bee journals in America? Why should they suppress any? Do they think we shall become too wise?

We begin to conclude that this course shows their extreme selfishness, and not that sociability which ought to enter into the character of every bee-keeper, and especially into that of editors. Shall we therefore, continue to countenance such proceeding, or demand of them the light we need?

In conclusion, Mr. Editor of the BEE WODLD, I would say step right forward and make your journal the model of promptness, truth, light, science, neatness, sociability, and chastity, for every bee-keeper in this wide world of ours. Let all fall into line who will.

JEWELL DAVIS.

Charleston, Ill. Bees. "By turns they watch, by turns survey the skies, To dodge its threatning rain, or tempest rise.

[For the Bee World.] Ventilation of the Hive.

HE hive is always warm and the bees lessen the heat by ventilation. This branch of duty devolves on workers alone. They unite their wings by means of their marginal hooks into one piece, and then flap them up and down like a fan. This operation presents something which resembles a designed combination of efforts, for it is not carried on indis-

MOON'S BEE WORLD.

criminality in all parts of the hive .--The fanners, for the most part, station themselves at the bottom of the hive. and are usually ranged in files. Some are stationed outside of the hive: these always turn their heads towards the entrance; others are stationed within, and turn their heads in the opposite direction. The number seldom exceeds twenty at a time; they releive each other often, and the operation is never remitted. If either the hand or wind gauger be held at the entrance of a bee-hive, a distinct impression of a current of air, now acting, now subsiding is produced .--The heat amounts to 104°. It is usaully in spring from 90° to 97°.

TRASCIBILITY.

The sting by which this little insect defends itself and its property, from its natural eneimes, is composed of three parts, the sheath and two darts, which are extremely small and penetrating. Both the darts are furnished with small points or barbs like that of a fish hook, which, by causing the wound inflicted by the sting to rankle, renders it more painful.-Still the effect of the sting itself would be but slight, if the insect were not supplided with a poisonous matter, which it injects into the wound. The sheath, which has a sharp point, makes the first impression; this is followed by that of the darts, and the venomous liquor is forced in. The sheath sticks so fast to the wound that the insect is obliged to leave it behind, this considerably augments the inflamation of the woud annd to the bee itself the mulitation proves fatal. Were it not for the protection of its sting, the bee would have too many rivals in sharing the produce of its labor. Lazy animals fond of honey and hating labor, would intrude upon the sweets of the hive; and for want of armed guardians to protect it, would become the prey of worthless depredators.

Leeser tells us, that in 1825, during the confession occasioned by a time of war, a mob of peasants, assembling in Hoherstein, attempted to piliage the house of the minister of Elende, who, having employed in vain all of his eloquence to persuade them from there design, ordered his doraestics to fetch his bee-hives, and throw them into the middle of the infureated multitude. The effects answered his expectations. they were immediately put to flight, and happy were those that escaped unstung. It sometimes happens that a young swarm chooses to enter a hive already occupied, when a most desperate conflict ensues, which will last for hours, and even days, and the space around will be covered with the slain.

ROBBING.

It must be confessed that however inclined to industrious habits, the bee will turn theif. if it cannot obtain food by its own labor. In hives that are ill-managed and not properly supplied with food, the bees instead of continuing a well-constituted civil society, becomes a formidably organized band of robbers, which levy contributions upon the neighboring hives. At first a few enter the hive by stealth, their number are then gradually augment-

MOON'S BEE WORLD.

mented, and at length grow more bold, an attack *en-masse* is made, and bloody battles ensues. When the earnage is ended, and one of the queens are killed the bees unite under the same queen, and the vacated hive is now ransacked, and its treasurers conveyed to the other hive. This is the case only when the robbers are able to subdue the hive they attack, otherwise they are either driven off or killed.

ECONOMY OF BEES

It seems as if the bees are such rigid economists, that whatever is useless must be got rid of. Hence the massacre of drones, they are born in April and May, (and often before this) and are killed in August. The bees chace them from corner to corner of the hive, till at length the whole are huddled to gether when they are killed and draged outside. If however, the fecundation of the queen has been retarted, so that nothing but drones are produced, they are not molested, neither are they touched in hives, deprived of their queen. Hence the fury of the bees against drones is connected with some principle of utility; not only drones, but even workers are occasionally slaughtered by their comrades; some conjecture this to take place on account of their old age.

It is not however, by force alone that these creatures defend their hives, they possess invention enough to rear regular fortifications for protection.— Huber once discovered that great ravages had been committed upon his own hives, and he also learned that a similar calamity had befallen those of his neighbors, at length it was found

that the destruction which had taken place was caused by that gigantic moth, called the sphinx atropos, or deaths head. How an animal apparently so defenceless should dare to enter, and then do what it has found to have done is still a matter of surprise-It is clear that in daylight, which is unnatural to the sphinx, the bees can kill it, at least they did so in an experiment made by Huber.

As the enterprises of the sphinx became more and more fatal to the bees. Huber determined to construct agrating which would admit a bee, but not a moth. He did so and the devastation ceased. But he found that in other hives not protected by buman ingenuity the bees had adopted a very similar expedient for their own defence.

When the entrance of their hives is itself restricted or care is taken to contract it soon enough to prevent the devastation of their enemies, bees dispense with walling themselves in.— Here then, we have the invention and adoption of means to a proposed end.

CONNOISSEUR.

[For the Bee World.] Bee Items.

Editor Bee World:

E have had the pleasure of perusing the first number of the BEE WORLD, and we are happy to say that it contains many very interesting articles upon the subject of bee culture. Bee culture has long been neglected in the South. The South is the home of the honey bee. This is the first and only journal ever published in the South. Everybody should take an interest in it. What is like having things at home ?—nothing. You can obtain journals from the North, but the necessary care to insure successful bee-keeping there very much differs from ours in the South, and would be here considered a useless expense. We like both the style and manner in which the journal is conducted. It is certainly a creditable one, and we trust will be the means of doing much good, in removing the ignorance which now prevails among many bee-keepers in the South.

Mr. Editor, with your experience in this noble work we look forward with much pleasuse of seeing apiculture taking a prominent position and competing with her sister States. We are also happy to see the many congratulations, and eulogies the press is bestowing upon you—hope they may ever have the same good reason, not only to congratulate you but ever be found as ready to aid us in the work before," us. Success to the enterprise. A. D. M. Round Mountain, Ala.

> [For the Bee World.] Introducing Queens.

Editor Bee World: Editor Bee World: For Italian queens the coming season from all parts of the country, I will give a process of introducing queens, which I have tried for the last two seasons with good success. First open the hive and secure and cage the queen to be removed; leave her caged with her own colony for six or eight hours, or secure and cage her in

the evening. Next morning remove the caged queen with as little disturbance to the bees as possible. Take out the queen and put in the same cage the queen to be introduced, Then cut out a small piece of honey to cork the cage with, and return to the hive. In due time the bees will iberate the queen, when she will be thankfully received. By this process the bees are only queenless for eight or twelve hours, which is a great saving of time over the slow process of caging queens from three to six days. I have been importing and breeding queens for the market for the last twelve years, and have introduced hundreds by various processes with success, but the above plan is simple, and as reliable as any plan I ever tried.

Try it, brother bee-keepers, and report through the BEE WORLD, and my word for it you will succeed ninety-nine times in a hundred; or at least that has been my experience. My theory is this: The cage becomes scented with the original queen; and by exchanging the queens the workers are not aware of the change, and as the workers liberate the queen themselves when all is quiet, there is not the danger of the workers attacking, or pinching the strange queen.

We are having rather a mild and open winter, and the bees are wintering fine on their summer stands so far. Stocks are well supplied with honey of the best quality. I don't fear the *bee dysentery* this winter, and hope the disease may never return. I congratulate the bee-keeping fraternity in the sunny South, in having a journal devoted to Southern apiculture, as the management must necessarily be different in a warm climate from our cold and changeble climate North. Brother bee-keepers South, sustaiu the BEE WORLD—it will do yon good. Now, Mr Editor, I wish you success, and may the "Moon" never cease to give light.

You may hear from me again if acceptable. A. GRAY. Glen Apiaries, Reily, Ohio.

First in caging the queen to be taken out is certainly a good plan; as soon as she is imprisoned she becomes excited. The scent from which the bees distinguish each other, is more or less left in the cage, by the excitement which more or less effects the queen to be introduced. Again the bees biting the honey and liberating her when all is quiet, is still another advantage. When we open a bee hive to liberate a queen it more or less excites them, and frequently they vent their spite on the new step-mother.

The above plan is certainly a good and easy one. [ED.]

[For the Bee World.]

Bees in Texas,

EES did poorly here last season, no swarms and only average 25 pounds per colony. Bee-keeping here is on the primitive system, but I hope to introduce the Dixie Hive, made by L. S. Hereford of Baton Rouge, La. Our bees have been bringing in pollen for a few days past, and are in fine condition. We are having Spring like weather, red elms are in full bloom. Shall drop you a line occasionally,

A. H. K. BUYANT. Kemp, Texas, Jan., 31st, 1874. [For the Bee World.]

Our Southern Bee Jonrnal. Editor Bee World:

REPOTHING can be more admira-Sigg ble than to have a good Southern bee journal. Our Southern friends in bee culture need a journal of their own devoted exclusively to that subject, and not be compelled to to depend entirely on Northern bee literature for information, and as they have aided us in sustaining our Northern journals, we can do nothing less then reciprocate the favor, and thus by mutual co-operation promote the interests of bee-keepers in both sections of our great country. And, since bee-keeping differs quite materially in the two sections. It is to the interest of all, to learn the proper management of bees in all parts of our country.

By enlisting a goodly number of practical and talented bee-keepers, as correspondents to the BEE WORLD, and the untiring interest of its editor in its behalf, but little can stand in the way of making it one of the best bee journals in America.

Punctuality in its issue at its regular periods of time, is an essential feature to its success. Its typographical work should also be done well, so that it may stand in the praise of every reader of good taste in that line as well as for the correct information of all bee-keepers. Then too, when we get up that *new dress* for it—the picture of the WORLD, and all the bees about it, we shall have something pleasing to the eye outside as well as something good and enticing to

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the mind inside, for every bee-keeper. Our Southern bee-keepers should then at once subscribe for the BEE WORLD, and at the same time, write for it, illustrating all the varied features of bee-keeping in the South.

Come right up to the work promptly, friends. JEWELL DAVIS. Charleston. Ill.

Edition :

[For the Bee World.]

GHE BEE WORLD has been receiv-2 ed, it gives us many valuable lessons. I saw you at Cleveland and had a long talk with you, concerning what killed so many bees during the winter of '70. I think we agreed as to the cause of this fearful complaint which sweep off so many. I am opposed to upward ventilation, many bees are lost by listening to so many theoretical writers. I have no doubt but dysentery may be produced in more than one way, cold weather may add some thing to it but bees that have good honey will be able to stand cold weather. I have increased my bees in two years to 65, by saving my old comb, the bees are in fair condition for wintering. I see you have gone South, a place where I long have thought of going, as I am no friend of cold weather. Wishing the BEE WORLD much success I remain yours as ever,

GEO. STIENBRING. Shreve, Wayne County, Ohio.

> [For the Bee World.] Ants and Cockroaches.

Mr. Editor: N my correspondence and the bee journals there is much complaint against ants in bee hives, while there

is nothing said of cockroaches. I have ants enough in my apiary ; but the cockroaches are ten times as troublesome. The ant does not steal honey out of the hive, nor trouble the bees to my knowledge, but the cockroaches do both. All the ants want is a warm and dry place, for a nest on top of the honey board where they can epjoy the warmth of the bees below, and this is but a portion of the year, from May to October, while the cockroaches are present the year When you go to open a round. stand with an ants' nest on the honey board, it is no small job to brush them off, and when you raise the board a great many get inside and worry the bees very much for a few minutes. Those who will take the trouble can keep the ants away by rubbing the outside of the hive with green elders or turpentine, or coperas, but none of this will keep the cockroaches away.

I find the cockroaches very thick in my apiary all summer, and in winter, they are on top to enjoy the warmth of the bees, and inside of weak stands. That they do steal honey and live on it through the winter there is no questioning. In proof of their fondness for honey, I have often set out mugs and bowls with honey and water to drown moth flies at night, but the result would be about one hundred drowned cockroaches to one moth fly. Also the sweetened water that I use in introducing queens, wintering bees, etc. I can set the cups nowhere in the apiary at night, but that next morning it will be perfectly clean, and cockroaches found in it.

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I have tried a great many devices to get rid of them, but all in vain. The best I ever tried was to go through the hives in a very cold day, and brush off the cockroaches to freeze which they readily do, but there is an evil in this plan: it disturbs the bees which should not be disturbed in cold frozen days. I have found a still better plan. I am in the poultry business, and have put a trio of Buff Cochins in the bee vard, and trained them to follow me around in warm days, and eat the cockroaches as fast as I can brush them off. This I find to be a good plan with no evil in it. I have never had a fowl to eat a live bee. I have seen fowls go to the entrance of a hive, and pick up the worms without disturbing the bees. I have also seen them go round a hive looking on the sides for moth flies, and I believe this is one reason why the moth is no trouble to me. R. M. ARGO.

Lowell, Ky.

Mr. Editor:

[For the Bee World.]

If your correspondent at Hernando, Missis. sippi, had commenced his bee-keeping by studying first, and learning the A B C's in beekeeping—not skipping to BAKER at the start, after two years experience he would not have been *Buckeyed*. Your experience W. R., is "good for the people," so "don't remain idle."

Before hive inventors find out you have constructed and are using a hive of home make, you had better not say too much in its praise, lest you see more trouble with it than you did with the Buckeye. Are you aware of the number of letters patent granted to hive inventors? W. P. H.

Murfresboro, Tenn.

WE send as usual to each subscriber, a printed receipt for their money. [For the Bee World.] Smoking Bees.

Editor Bee World:

them to become more docile and manageble. Well, is this true that it will have this effect upon them? Yes, indirectly, it is true. It frightens them, and causes them to fill themselves with honey they become more docile and manageble.

What should we use to smoke them with? Some recommend tobacco others puff ball—some prefer cotton rags, while others choose rotton wood. I neither like tobacco myself, nor do I like to have my bees become lovers of it. Some say it makes their bees more irritable, (crosser I suppose they mean.) If so, why use it then, to make them more peaceble? Certainly, we who do not smoke tobacco, can be easily persuaded to let it alone.

Puff ball has its serious objections too, if not used with care. It sends the bees, under its influence to the land where they hum no more, and the labors of this life are with them forever passed.

Cotton rags are quite admissible, and the snoke from them can be made more pleasant, both to the bees and the operator, and when we get some better way of administering the smoke from these to the bees, and at the same time convenient to the bee-keeper, and always ready, it may be a better institution. Many devices have already been proposed to accomplish this end, but I need not name any of them now, since none of them are the method wanted.

Mr. Quinby informs me that he has a new method of applying smoke to bees but he does not give the method, or the material used. We think it will be universally used. I suppose he will soon let us know what it is, how it is done, and what he uses. Of late I have become partial to the use of rotten wood for smoking bees, find it suits me better than the cotton rags, and the smoke from the rotten wood can be applied by blowing the smoke from the burning wood into the entrance of the hive, or among the frames if the hive is open. But using this smoke by blowing wind from the lungs is sometimes wearisome and also annoying to the eyes.

Well to prevent this provide yourself with a small hand bellows, with small pipe for the wind to pass out, and then two wires bent in such a shape as that when fastened to the underside of the bellows they will reach about two inches in front of the end of the pipe, and in such a manner as that the two wires thus prepared will hold the piece of burning wood so near between the end of the pipe and the place where you wish the smoke to enter, that when the bellows is operated the air forced out will carry smoke to the place designed. It will be seen that if so arranged the bellows can be laid down with your wood burning, and taken up again, as long as the wood continues to burn, and if throughly dry will burn until all is consumed, unless put out. I use the rotten bass wood and hickory mostly. The wires hold the wood far enough from the bellows to prevent it from being burned. The wires may be bent into any shape you wish, in order to answer this purpose when not in use, the bellows should be hung up in a dry place.

JEWELL DAVIS. Charleston, Ill., Jan. 1st, 1874.

> iFor the Bee World.] Bee Hives.

Editor Bee World:

S no two persons possess the same combination of temperaments nor blending of mental faculties, it could not be supposed that all beekeepers would adopt or use the same style of frame or hive. It is this mental and physical diversity or disposition that prompts one person to prefer open frames, another tight fiting, while some recommend no frames at all.-Mr. Adair, for instance likes his close fiting sections better than any other form or arrangement. and no doubt can work them to his great satisfaction, while on the other hand, Mr. Root and Mr. Argo, both equally as experienaced as Mr. Adair prefer the open loose langstroth frame. Mr. Quinby an eminent apiarian, uses I believe, still a different sort of frame. Now upon the principal of "practice makes perfect," each of the above individnals can no doubt, accomplish more with their bees by the use of their respective styles of frames and hives, than they could with others, with which they had no acquaintance.-Quite as much is owing to the fact and skill of the apirian is using the frames and hive as upon its particular shape or style.

I use in my apiary an open frame

of the Langstroth size but closed at the extreme ends which rests upon the edge of a strip of metal. I handled this frame very successfully, without crushing a bee. As the frames are kept at an equal distance apart, the combs are made strait, and will nicely fit or exchange with any of my hives. All the frames are of the same size and will fit any hives. After a style of a frame is adopted it is very important to have them all alike, otherwise their advantages will not be reaped.

I have had more or less trouble with the common open frames in not always getting the comb strait. The frames not having any thing to keep them equally distant apart, would often in handling or in moving a hive, get the ends either too close or too far apart which would cause the comb to be irregular, some ends too thick and others too thin. Frames with such crooked combs cannot be exchanged with frames in other hives without triming the comb down to a proper thickness.

It is well for bee-keepers in the South to know that the Langstroth patent expired in last October, and is now public property. This patent covered everything in connection with movable frames. Nearly all the claims of the so-called patent beehives are for some adjustment or arrangement which in most cases is perfectly worthless. In many cases the titles are not clear, and could not be maintained in any, court, while in others, the clap-trap contrivances have proved so perfectly useless that the makers of the so-called hives have

discarded the patented parts, while the poor gullable public are still made to pay five or ten dollars for the farm right to use. To use what? Something that does not exist.

I believe there is a dollar hive advertised. You ask what it is. Well it is only a very common pine box, unpainted, without bottom board, and without any frames at all. You can set any negro carpenter to put up as good a box for twenty-flve cents. You are expected to pay extra for the frames, which, with probably metalic corners, and honey boxes, in case you desire any, will bring all your dollar hives^{*} to three or four dollars. J. P. H. BROWN.

Augusta, Ga.

THE AMERICAN BEE JOURNAL for February has come to hand with new dress, and printed on tinted paper, much improved; published by the American Publishing Co., and edited by W. F. Clark, Chicago, Ill. Price \$2,00 a year, in advance.

E. Kretchmer & Co's Price List of aparian supplies has been received. It contains twenty-four pages of useful reading matter—will be sent free to any one desiring it. Address E. Kretchmer, Coburg, Iowa.

PERSONS sending for the BEE WORLD should be careful to give the address plain, Also county and State. Thereby avoid mistakes.

WE have received reports from almost every State in the Union, concerning the condition of bees, which thus far is very flattering indeed.



[For the Bee World.]

Editor Bee World : HE rapid progress that has been made in apiculture for the past few years has been remarkable, the increase in swarms, the production of honey has been marvelous, to say the least of it, when we take into consideration the great loss of bees, that this country has sustained within a few years, yet apiculture has moved steady The floral treasurers of the counon. try seemed to be adequit to the great demand made upon them, they have vielded moderately well, those that have used the extractors, have received a good crop, and many have come to the conclusion that there is a science in bee-keeping that will pay, yes the apiarian finds his success to a great extent, very much depends upon the knowledge he posesses of that insect, "the honey bee," and the natural laws by which they are regulated. We should examine all swarms at this period of the year, and more especialin the South, where bees have commenced to work, to see that all have a supply of honey, when they commence to rear brood, they then commence to draw heavily upon their stores to feed their young. When they commence

rearing brood they continue as the weather grows warmer, providing they have honey to feed their young, very frequently a large brood is started and a few days of cold weather they will consume all their honey or so much that they have not enough to carry through what they have commenced, the result is they will destroy a large portion of their brood to save themselves, when a little food given them will save them. They should be examined often and feed them if they need it, remember a few dimes spent will save you dollars. Food for the bees, take five pounds of good coffee sugar to two quarts of water, put in a kettle and bring it to a boil, when cold its fit for use, this can be fed in various ways, if you have no feeder take a tumbler or a cup of any description fill it with the syrup, tie thick peice of cotton cloth over the mouth of the cup, turn the cup bottom upwards over the bees, they will soon draw or take all the honey to their combs, a little food will stimulate them to increasing rapidly, feed rye or oat meal if you have it this will serve as a substitute for pollen which is most used in rearing brood, with enlightened bee culture a good movable comb frame hive, and the hon-Bee-keeping can be ev extractor. made a profitable occupation.

EVA.

To agents in sending subscription to BEE WORLD, will send \$1,75, retaining twenty-five cents as commission. Address all business matter to BEE WORLD, Rome, Ga.

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MOON'S BEE WORLD.

Editor's Table.



FEBRUARY, 1874.

Questions.

On page 46 in January number, H. Nesbit asks "Why did this queen leave and not return again?"

First, it is barely possible she was slightly injured, and become exhausted, and was lost in her flight. What looks most reasonable, and probably was the cause, the queen was one of those nervous, excitable creatures, like many of the fowl creation-the wild turkey, partridge, and even many of our domestic fowls-if disturbed when sitting, they frequently leave their nests, and not return. They are so excitable, and this is often the case with some queens. We have had several such cases; have had them to leave the comb while holding it. They seemed to be frightened nearly to death, and would fly away, and not return. When we understand the dispositions of queens, we can then account for these freaks. Some queens it is very difficult to handle them at all. Their dispositions are not unlike many of the human family, or even some of the fowl creation. When this little delicate queen was caught by our friend and escaped, then returned, and the second attempt to capture her, only frightened her the more. We have had several to leave when handling them, and was satisfied it was only through fear they go to other swarms, and are destroyed.

SECOND QUESTION.—The black queen was removed and the Italian queen inserted, and they let her starve. The time the queen was in the hive not given. The black queen was returned, and about two weeks after, examined and found fresh laid eggs, and the old queen and a voung one.

When the old queen was first removed, they reared another, which must have escaped your notice. She was undoubtedly reared from larvæ several davs old. The workers was so attached to their new mother that they protected her from being slain by the old one. They were kept seperate, and when you opened the hive it confused them and the royal bloods come together. This is no new thing. We have witnessed in observatory hives their great protection for the queen. Some queens will commence to lay when only from four to five days old, while others begin to lay from six to ten days old. These queens if they had not been disturbed would have soon come together, and one of them been destroyed. We have known them in such cases, when they had plenty of bees to throw off a swarm. As to fertile queens, they will not remain together very long in one hive .- [Ed.]

Bee Journals.

We commenced the publication of the BEE WORLD just in the midst of one of the greatest financial convulsions that this country ever witnessed, and thus far our encouragement has been more than we anticipated. In fact, we fear that some of our Northern bee journals have already become a little jealous of us, and try to spit a little of their venom out in their notices of us. We feel that this is unkind, particularly when we take into consideration that science and knowledge know no iealousies. Science recognizes no section of country. No nationalities but embrace the world. Apicultural science is the recorded experience of all observers of the bee form suitable down to the present, classified and arranged with reference to general facts and principles. A truth brought to light by a Northern bee-keeper is still a truth to a bee keeper of the South.; and it is to the dissemination of this science, and these truths, that the BEE WORLD is devoted. We ask to be sustained by the thinking and progressive beekeepers of this country; for we are determined to make our journal worthy of their patronage.

We have a kindly feeling toward every bee journal that is a true exponent of the science of apiculture. Such we esteem, and wish every success. But unfortunately we have a few that are thrust upon the public in a similar manner to the vile publications of the quack doctor. It is "Come to me and get cured." The ill will of this class cannot affect us. The poet has it:

"T'is dogs' delight to bark and bite." And we may add: Let Novices snap and snarl,

For 'tis their nature too.

Many of our Northern bee-keepers would like to know how the bees are getting along here in the Sunny South, up to the present time they are in fine condition, they have consumed but very little of their honey which is something very remarkable, especially when bees fly out every day or so during winter, we examined swarms the 24th of January. that contained near four frames of brood, these swarms were wintered on their summer stands without any pretection whatever, they have been carrying in pollen for some weeks. very much resembling bees in mid May in the North. The Elms, Maples and Plumbs, are in bloom, but few days and the Peach will be in full bloom, can it be doubted that the South is the home of the "honey bee." Not any one but those who have wintered bees both North and South, can well appreciate the superior advantage the South posesses in the management of bees over that of the cold greenland North. We have examined swarms every week during winter that were wintering on their summerstands, have always found them dry and lively as in May. Some have supposed that bees in the South where it was moderately warm would not store up much honey, this is a mistake, especially in this climate or latitude.

QUESTIONS.

Some have asked us which would be best for them to buy dollar paeens, or price asked by many of the old reliable breeders, this depends much upon what you want, you may get a number one queen for the dollar, and you may not, if you wish to raise a number one stock, that you may know to be pure buy of those who will warrant their queens to yon, if they are worth any thing they are worth what they ask for them, buying queens is much like buying any other stock, it depends most what you want of them, when a man buys blooded stock, he aims to procure the best blood he can get, he is par-

ticular and will not take any other, he discriminates very closely, he wants size symetry style color and vigor, for such he is willing to pay a good price, this would be our motto when we buy we want the best, and are willing to pay more so that we are sure we have got it. We hope we shall have a class of breaders that will strive to excell each other in breading a genuine article, that all those that want such can be sure and get them, for our part we want a number one queen or not any.

The inquiry comes to us from various sources, "What is the South as a honey country compared with the North?"

The South may be classed as A No. 1. for honey. It is no uncommon thing to take one hundred pounds of comb-honey from a single hive. We have known one hundred and seventy pounds taken from the box hive. But when you ask us how this country will compare with the North, we are somewhat at a loss to say. Judging from reports we saw somewhere, a young bee-keeper near Medina, Ohio, had taken so much honey from his bees that he had borrowed nearly, if not all the wash-tubs and boilers in the neighborhood, and then could hardly get vessels sufficient to take care of it. We believe this large amount was taken out by the extractor. Whether hand power was sufficient, or the wind-mill was attached, we are unable to sav. However, we will say the South is a fine honey country, has a fine people and one of the best climates in the world.

The January number of the "BEE WORLD." completed the first volume of the North Amer ican Bee Journal, many subscribers time expired with that number, we send this number to each of our subscribers, hoping they may renew thereby sustain a bee journal that is devoted and publishes the interest of the South, what say you bee-keepers, the BEE WORLD is an independent journal, it will contain news boht North and South. We have a corps of correspondents both North and South that will ever be found ready and willing to carry forward and place before the bee-keepers of this country evepertaining to the interest ofbeery truth keeping every true lover of this noble science is invited to correspond for the BEE WORLD, let the general good of the people be your motto, make your articles as brief as possible, and contain your meaning. The shorter the articles the greater variety of useful reading you will get.

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Queen Raising.

We learn that N. C. Mitchell of Indianapolis, proposes to raise 5000 queens the present season, we sincerely hope he may succeed, this we wish for several reasons.

1st. That he raises enough to pay up old contracts, men who sent their money years ago, to him for queens, now complain bitterly that they cannot get neither their queens, money, or even an answer to their letters, if this be correct, which we fear it is from the letters before us, its certainly to be regretted. Last season he advertised to raise and send queens from his apiary in Cincinnati, also, from his apiary in Indianapolis, we wrote to some beekeepers concerning the apiarys, but they were unable to give us any information whatever, if this is a mistake, we hope to be corrected.-Persons buying queens, wants either the queens or the money, and when neither can be had, gives much trouble.

The Bee World.

Is now published at Rome, Ga., at \$2.00 per year. we shall endeavor to make it a valuable guide to every bee-keeper and evry specie of humbugry and trickery connected with this rural branch, we shall expose through the colums of the BEE WORLD, in doing this we shall make it a welcome visitor to all true and honest apiarians, further, we shall ever give the names of correspondents as given to us. Here is a point where we have heard much complaint from some of our bee journals for instance, "John Do, Kane County, Ill., or Jim Quick, Kansas, etc., etc. Many have supposed that there was no such persons, others say its a specie of selfishness, let this be as it may it certainly looks bad indeed," especially when we take into consideration that the object of a bee journal is, or should be, to carry light, truth and knowledge to every bee-keeper in the land, does it do this? no, often ideas are advanced that are not fully set fourth .-Suppose the bee-keeper has obtained an unusual amount of honey from his bees. and here is another bee-keeper who is anxious to get at the secret, the editor has bearly hinted at in the journal. Well what does he do, he has subscribed for a bee journal, and behold the correspondent lives perhaps in Kansas or Illinois, and perhaps in Missouri. This is all

can get from his journal, a valuable journal

that is to bee-keepers, would not give a pinch of snuff for them, we want to know who or where the man can be found. We do know of one or two of the greatest humbugs that ever was palmed off on community through just such a course, therefore friends of bee culture if you have the general good of bee-keeping at heart, show it thro' the columns of the BEE WORLD, by signing your names, that your friend beekeepers, may know that such persons do exist. and that it is not the intolerable selfishness of the editors as so many suppose. If a bee journal is to carry light and truth to the world let it carry the documents to show it, therefore give facts and names let light and truth prevail and the victory is yours.

W. R. Baker, of Hernando, Miss., writes that they were having a mild winter thus far. Their bees were gathering pollen from the elm and maple. He commenced the winter with 23 swarms, lost one from starvation, the remainder were in fine condition. He wishes to know if it would be a good plan to feed sugar syrup early. We say yes. By all means feed at once. By proper feeding you can stimulate your bees to breeding rapidly and bring them to a swarming pitch in from four to six weeks. Feed for the first two weeks about one-fourth of a teacupful of syrup per day, if the swarm is very populous; eed one-half teacupful. Be careful not to crowd the combs with food it will prevent the queen from depositing her usual amount of eggs.

L. G. J., of Silver Run, Ala., asks: "Will bees make honey as fast in side boxes as they will on the top of the hive. Our experience has been that they would not from this fact: that it seems more natural for bees to run up; again, heat raises and they keep where the central heat of the hive is the most uniform. We have found when using hives of about one foot or fourteen inches high for the swarms, there were no trouble to get the bees to work in side boxes. Again, if the boxes are inside of good case such as in the Kretchmer hive, there will be but little, if any, danger about having the bees work in side boxes. "

Melvin Parse, of Pine Bluff, Ark., writes, Feb. 6th: "Bees are in fine condition and gathering pollen rapidly from flowers. Mr. Parse will have fine Italian queens out early. Here will be a rare opportunity to obtain nice early queens.

THANKS to D. Brock, General Superintent dent of Elizabethtown and Paducah Railroad, for a season pass over their road.

ALSO to A. E. Touzalin, of Topeka, Kansas, for a pass over the Atchison, Topeka and Santa Fe Railroad.

Question: What is the best and most successful method to secure straight combs? We have tried many and adopted the following: Take a small piece of beeswax, and draw along under the edge of top bar, of each frame, when you hive your bees. Raise the back edge of the hive about four inches by placing a block under the edge; the hive now inclines to the front; leave the hive in this position for four to six days, and you will get straight combs every time.

Several have asked what causes the bees to destroy the young. This often occurs by the moth worm; but the main cause of such distruction is the scarcity of honey. They frequently commence a large brood; a cold rain or wind and perhaps a frost follows, when they have got a larger family than they can provide for, and something must be done. They then begin to drag out young bees that are from one-half to two-thirds grown.

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