

Progressive bee-keeper. Vol. II, No. 5 May 1892

Unionville, Mo.: Bee-keeper Publishing Co., May 1892

https://digital.library.wisc.edu/1711.dl/FYWRLSPER2OAZ8K

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

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

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

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



50 CTS. PER YEAR.

ISSUED MONTHLY.

PROGRESSIVE BEE-KEEPER.

MAY 1892.



Entered at the Unionville postoffice for transmission through the mails as second class matter. by the

BEE-KEEPER PUBLISHING CO. UNIONVILLE, MO. THE PROGRESSIVE BEE-KEEPER.



HILL'S BEE-FEEDER AND BEE-SMOKER !



The Smoker burns chips or hard wood without any special preparation. Very reliable. Greatest Smoking capacity. Easiest to start and cheapest because it saves capacity.

The Best Bee-Feeder. Most convenient for the bees. No drowning ar daubing bees The feed is taken by the bees without leaving the cluster From two to seven feeders fall may be given a colony at one time which will be stored in the combs in ten or twelve hours.

Smoker, 3 inch barrel, freight or express, each \$1.20; by mail, \$1.40; per dozen, \$10.80. Feeders, one quart, freight or express, per pair, 30c; by mail, 40c; per dozen, \$1.60. Address A. G. Hill, Kendallville, Ind., H. M. Hill, Paola, Kansas, E. F. Quigley, Unionville, Mo., G. B. 1 ewis Co., Watertown, Wis.; Dadant & Son, Hamilton, Ill.; H. McK. Wilson & Co., 202 Market St. St. Louis; T. G. Newman & Son, 246 E. Madison St. Objective W. B. Schwarz, W. S. D. St. Son, 51.60.



St., Chicago: W. H. Bright, Mzaeppa, Minn.; W. S. Bellows, Ladora, Iowa Co. Iowa: Gregory Bros. & Son. Ottum-wa, Iowa; F. H. Dunn, Yorkville, Ill., and E. Kretchmer, Red Oak, Iowa; Levering Bros., Wiota, Iowa; Miller Bros., Bluffton, Missouri; Chicago Bee-Keepers Supply Co., Topeka, Kansas.

Our New Catalogue, of Over 60 Illustrated Pages, Is Now Ready

Bee Supplies. We have the most extensive steam power factory in the West used exclusively for the manufacture of Bee Supplies. We can furnish at wholesale or retail, anything practically constructed, needed in the Aplary, at the Lowert Prices. Satisfaction guaranteed. Our New Factory, four times larger than beretofore, is now running, and we can furnish promptly Alternating Hives, Plain 1. Hives, Doverailed Hives, Simplicity Hives, imported the Story Chaff Hives, the Beet One-Piece Sections, and everything pertaining to Practical Bee-Culture. Send for our new Catalogue, mailed free to any Bee-Keeper. Address

SPECIAL DISCOUNT TO DEALERS. E. Kretchmer, Red Oak. Iowa.



Sections. Etc. BEST GOODS AT LOWEST PRICES.

We make 15,000 sections per hour, and can fill all orders promptly. Write for free, illustrated catalog.

> G. B. LEWIS CO., Watertown, Wisconsin.

PROGRESSIVE BEE-KEEPER

VOL. II.

UNIONVILLE, MO., MAY 1892.

NO. 5.

THE STATE CONVENTION.

Minutes of the Sixth Semi-Annual Convention of the Missouri State Bee Keepers' Association, held at Warrensburg, Missouri, April 6 and 7, 1892.

FIRST DAY-WEDNESDAY.

The convention was called to order at 2 o'clock p. m. by the President, G. P. Morton.

The secretary not being present, A. A. Weaver was chosen secretary protem.

The secretary's report was read and accepted.

The following new members were enrolled: •

M. H. Hensing, Georgetown.

A. Markey, Warrensburg.

M. G. Mullens, Centerview.

S. H. Davis, Gunn City.

G. T. Lewis, Centerview.

Mrs. Celusta Lewis, Centerview, (honorary.)

G. W. O'Bannon, Crayton.

S. E. Taylor, Sprague.

Robert Bagsby, Pleasant Hill.

Mrs. Laura Bagsby, Pleasant Hill, (honorary.)

D. C. Coleman, Leavenworth, Kans.

J. M. Moore, Holden, Mo.

The president's address was read. It was moved that the president's address be referred to a committee of three for examination and report, the committee to be appointed by the chair.

The motion prevailed and the chair appointed Messrs. R. B. Leahy, G. H. Ashworth and L. W. Baldwin.

APICULTURAL POSSIBILITIES AND DIF-FICULTIES.

Essay by W. S. Dorn Blaser, Higginsville, Missouri, was read as follows and discussed at some length.

The good book says that "all things are possible unto them that believe." What a wide range of possibilities opens before us, if we did not encounter a difficulty right in the start—that of unbelief.

I suppose a great many things are possible in bee keeping, in which we have little or no faith to-day. This lack of faith or unbelief seems to be the great difficulty.

It may be possible to breed bees without stings. Now a great difficulty ever before us is this little matter of a bee sting. I say little matter, for what a tiny, little thing is a sting, but what a great dread, fear, nervousness and trepidation that little sting does inspire, so great that we are apt to magnify it times and times, and imagine sometimes that a bee has a dozen stings and is inclined to use them all at once; yes, we loose sight of everything and imagine that there are a a great big box full of stings, nothing but stings, cooped up there, ready to fly all over us, jab into us, and lift us right over into next week. If we could only get ourselves to believe that bees are not all sting, this little difficulty might vanish and leave us a race of stingless bees.

Then, I suppose it is possible to produce a swarm catcher, to attach to a hive. I do

not mean Bro. Baldwin's "good, fast mule," but some kind of a contrivance that will regulate the time for a swarm to come out and hold them in check until we are all ready for them. I might say, something on the principle of a time lock to a safe. It is a difficult thing to sit in church on Sunday morning and imagine that about two dozen colonies are swarming. You can enjoy that sermon one bit. And it is equally difficult to sit in the apiary watching for swarms, when you just know that you are missing the best sermon ever preached. The great difficulty will be to get the bees to observe the time.

But, then, I suppose it is possible to prevent swarming altogether. The great difficulty here is that we don't know how.

I suppose it will be possible to establish a standard rule for grading honey, and that this rule will, at some future day, be universally adopted; but, the ever present difficulty now is that there are two sides arguing the question and getting farther from an agreement every day.

I suppose it is possible to domesticate bumble bees, but the great difficulty is in finding some one hardy enough to undertake it.

I suppose it is possible to produce artificial comb honey, but the great difficulty is in getting people to believe it.

I suppose all things are possible in bee keeping, but the great difficulty is in getting ourselves to believe it. I even suppose that it is possible our honored president may some day join the benedicts, but-I'll not name any difficulty.

THE GRADING OF HONEY.

Essay by C. C. Clemons, of Kansas City, Missouri, was read as follows:

MR. CHAIRMAN AND MEMBERS OF THE MISSOURI STATE BEE-KEEPERS ASS'N.

When your secretary first informed me that I would be expected to prepare and read a paper before this association on the subject of grading honey, my first impulse was to decline, not because I did not wish to write on such a sweet and important subject, but owing to its importance, I thought the subject should have been assigned to some producer of large experience, who could handle and present such a subject intelligently. You have many such men among you.

that was about honey. And while reading it, I imagined my hearers thought very much like the preacher's congregation when he said he had been called by the Lord. They thought the Lord should have called a congregation to listen to him.

But, taking time to consider, as I was spending a few months in the land of bees and flowers, seeking health and killing time, I concluded to offer a few suggestions as a dealer, viewing the subject from that standpoint, believing this to be the object of your secretary in assigning the subject to me.

We, in common with all dealers and beekeepers, are interested in this important question. And it is our hope at no very distant day, to have a system of grading, simple and applicable to all parts of the country. Therefore, I believe a National Convention should be held; all the honey producing states represented by their best and most practical bee men. Such a convention, no doubt, could arrange a system of grading that would best serve the interests of all concerned.

It is true, different sections of the country differ in their grading, because they produce a different quality or flavor of honey, and their markets require a little different grading, but not enough to make a national system of grading objectionable. I think the general good resulting from this system would more than compensate for any little local differences.

Kansas City markets prefer as few grades as possibe. We would never use the word "fancy" in grading honey, as the word implies a great deal; and frequently gets people into trouble. We seldom use it in our business and never in dealing with our brother commission men, fot it is seldom, if ever, a carload of anything, sold as "fancy," reaching its destination in an unfavorable market, proves to be "fancy." You will find the same difficulty in selling honey, as it would be almost impossible to fill an order for a car of "fancy" honey. And the bee men would soon learn to say, as commission merchants do when they receive an order for a car load of fancy apples, potatoes, or anything else under the word "fancy," we are just out; sorry we cannot fill your order." Then quote them a "choice" grade, as this term gives us a little show as well as the buyer. For instance, you sell a party car of "fancy" honey at a certain a I never wrote but one essay in my life, and price, each grade to come up to the standard of grading recently proposed by some state associations. You exercise great care in filling the order, and ship the honey in good faith. It arrives in good condition, the market has declined, or has not as the case may be; but the buyer is a little sick of his purchase, and he begins examining with a view of kicking (as we call it.) First crate he opens, a few sections show slight stains, although the honey is perfectly white, every section well filled and capped, and regular weight. He opens another crate and finds one or two cells not filled; another crate varies from one to two onces in weight, and so on through the different grades. Not one of his objections sufficient to lower the value of the honey in the market. Still it does not come up to the grade, consequently the first thing you get after arrival at destination, is a vigorous kick, demanding a rebate, or honey there subject to your order. You either have to make the allowance, or loose all your time and expense of shipping and having returned: or do the wise thing, by turning it over to the generous and ever obliging com-So to avoid misundermission merchant. standing and save trouble and litigation, have as few grades as possible. Don't get them too high, but make them simple and comprehensive.

Most of our honey producers near Kansas City make two grades of their white honey. And I believe their No. 1 honey will compare favorably with any of the so-called "fancy" grades. There is nothing too good for our western bee men, especially in the way of good prices, but I do not believe they favor high or fancy grading.

I would propose four grades of comb honey, two of white and two of amber, and three grades of extracted, as follows:

NO. 1, WHITE COMB

Should be all white, good flavor, combs straight, even thickness, firmly attached to sections. Cells well filled, with white cappings, except those next to the wood. Wood slightly soiled with travel stains not barred from this grade.

NO. 2, WHITE COMB

Should be white, good flavor, white or light amber cappings. Sections not less than three-fourths filled and sealed.

NO. 1, AMBER COMB

Should include all amber honey of good flavor, combs straight and even thickness, firmly attached to the sections. Cells well filled and sealed, except those next to the

wood. Wood slightly solled from travel stains not barred from this grade.

NO. 2, AMBER COMB

Should include all honey of good flavor, irregular combs and any color. All sections at least three-fourths filled.

EXTRACTED WHITE

Should be light, good flavor and clean.

Should be light, good flavor and clean.

DARK

Should include all honey of good flavor and too dark to grade amber.

You will observe I specify good flavor in all grades. So the dealer in ordering honey would expect good flavor of whatever variety of honey he received. While the flavors may differ according to the blossom, it matters not whether white clover, white sage, bass wood, spanish needle, or from any other source, if of good flavor according to the variety, would fill the bill. If any particular variety is wanted, this would be specified in ordering.

In presenting the foregoing suggestions on grading honey, I have acted conscientiously in trying to present something that will aid in bringing seller and buyer on a plain where dealings may occur, with justice and satisfaction to both.

Such rules for grading as I have noticed in the bee papers, appear to discriminate largely against the producer or seller, and give every advantage to the buyer, especially unscrupulous buyers, who always seek, and know how to use every advantage. Therefore, I think the rules should be simple, broad, guarding well the interests of the seller. without imposition to the buyer. There may be unscrupulous buyers and sellers both. Hence the necessity of having a system that will protect the honest producer, seller and buyer. I do not approve of having many grades, or high grades, believing it will generally result in trouble and dissatisfaction in nearly all transactions between the producer and dealer. As it would be almost impossible for the producer to reach the requirement, hence a large per cent of fine honey justly entitled to grade No. 1, would be placed in No. 2, thereby lowering the market valuation on same. The slight advace in price which could perhaps be obtained in a few markets for limited quantities of the extra fancy, would not compensate for the loss on a large per cent of equally as fine quality. and just as salable in the general market of the country, ruling it as No. 2.

The grading as herein suggested will permit all good merchantable honey, with only such restrictions as will protect the producer, and work no imposition to the dealer.

Any production that fails to meet the requirement of No. 4, should not be permitted under the rule, but sold on its merit.

Judging from the quantity of unsalable stuff produced, last season, we suppose the bees became so imbued with the true American spirit, that they worked at night. But thanks to the progressive age in which we live, a certain distinguished gentleman proposed a remedy by crossing the bee with the lightning bug_{π} so she may continue her work by night with more advantageous results.

Perhaps a word about crating honey would not be out of place here. As I was asked only a short time since by a prominent bee man what I thought about crating honey just as it comes from the hive, which he was in the habit of doing, I told him it was customery in all lines of business, when preparing goods for market, to arrange them so as to be seen to the best advantage. And I did not think it dishonest in crating honey to expose the best sections, provided the quality and condition would bring it all under one grade.

A colored man was asked why he placed the best looking apples on top of the measure. His answer was, for the same reason you build the front of your house of stone, and the back with brick; it looks better, but is no better.

In conclusion J would recommend a national system of grading. Simplify by having as few grades as possible, plain and broad, with such restrictions as will induce the bee men to try to have all their output as near as possible reach the first grade.

Now, if you are wise and wish to be happy and wealthy, turn out good honey, and ship it all to your commission merchant.

I thank you for your attention."

The subject was discussed at some length and some attention given to the size and weight of the sections.

Moved, that a committee be appointed to examine the essay and report at the evening session. Carried.

After a short recess, the presi- tect through the winter.

dent appointed the following as a committee on resolutions: J. S. Atkins, J. H. Jones and C. C. Clemons.

G. H. Ashworth, J. S. Atkins and L. W. Baldwin were appointed a committee to answer questions placed in the question box.

SPRING DWINDLING.

Essay by G. P. Morton, Prairie Home, Missouri, was as follows:

"Spring dwindling is more a condition than a disease, and may be largely overcome by changing the condition of the colony instead of treating it for disorder. Though it may come from disease, if a colony is badly diseased, it is hard to keep it strong with its own increase at any time.

This dwindling condition may come from disease, loss of queen, starvation, and from robbing. But when we speak of it as spring dwindling, it is traceable to two causes more than all others, viz: going into winter with too few bees in numbers and those worn out with age and service, and too small an amount of honey for winter store. I am safe in saying that 90 per cent of what I would term natural spring dwindling comes from the last two causes.

Now, we know the cause, it is easy to apply the remedy. In preparing your bees for winter you have neglected the first requisite if you do not raise the hive full of young bees the last thing you do before putting them into winter quarters. If these young bees are in a good hive, well protected, they will live through the winter and until a crop of young bees comes in the spring to take their place in the hive Provided, always, they are furnished with abundance of stores to do this. The theory of getting through by the skin of the teeth will not do in bee keeping.

We must use such methods and give enough food to give the bees perfect confidence to go ahead and prepare for the future.

This essay condensed embraces these points.

See that every colony is provided with a vigorous, prolific queen.

Breed full stock of young bees in the fall. Supply with abundance of stores.

Use spring protection if you do not protect through the winter. If these points are closely observed, and just a little attention given the bees in the spring, you need have no fears of spring dwindling.

After a discussion of the essay, the question box was consulted and the following questions answered:

Q.—To which is apiculture most profitable—the honey producer or supply dealer?

A — The honey producer.

Q.—What is a suitable location for successful honey production?

A.—Where there is plenty of white clover and linden.

Q.—Uan comb honey be raised without separators and be classed first grade?

A.-Not practical.

NIGHT SESSION.

The committee on president's message reported, by having the message read by paragraphs and passed on by the convention, as follows:

1st. The arrangement for the World's Fair exhibit was left to the executive committee.

2nd. Experimental station was laid over for executive committee's report.

3rd. Amendment to the constitution to have one meeting a year instead of two. The motion to amend the constitution was lost.

4th. Classification of freights on extracted honey. Decided to postpone indefinitely.

5th. Affiliation with the North American Bee Keepers Association. Laid over until fall meeting.

6th. Consolidation of the Missouri Bee Keepers Association with the Horticultural Society. It was decided not to consolidate. Adjourned to 9 a. m. April 7. SECOND DAY—THURSDAY. MORNING SESSION.

The convention was called to order at 10 a. m.

Moved, that a part of the time taken up by the regular program be set apart for the ladies of the World's Fair committee. Carried.

The committee on Mr. Clemons' essay on Grading Honey reported by recommending the adoption of the system recommended in the essay. The report was accepted and the committee discharged.

THE FUTURE OUTLOOK FOR HONEY PRODUCTION.

Essay by E. T. Flanagan, Belleville, Illinois, was read by the secretary:

"Were I to speak from my own experience of the last few years, I would certainly have to give a gloomy view of the subject. All observing bee keepers know that the area of honey producing flowers is being yearly restricted; the underdraining of low lands, the draining of sloughs, ponds and even lakes, is certainly, and surely, curtailing the production of honey bearing flowers, and owing to the more thorough tillage of our arable lands, the old time crops of smart-weed, spanish needle and other fall flowers, we used to depend on for a fall flow of honey, are now in many sections of the country a thing of the past. Add to this the uncertainty of white clover yielding honey, even where it blooms most profusely and the scarcity of bass wood, and even where it abounds the short duration of the honey flow, and you have a dark view of the future outlook for the production of honey.

Shall I say anything of the severe and protracted drouths that have prevailed so extensively throughout the west for the past few years? Or the extremely low prices both comb and extracted honey have brought, though the amount offered for sale has been greatly reduced? Or the competition (to the lower grades especially of extracted honey) caused by the low price of sugar, making the production of the lower grades of honey, either comb or extracted unprofitable?

If these are facts, and they can hardly be contradicted, and if they generally prevail, what are the

REMEDIES PROPOSED.

This I leave you to discuss and settle to your satisfaction, giving briefly a few thoughts of my own.

There are few localities where the small bee keeper, or the farmer, may not keep a few colonies of bees, and raise enough honey for his own family use, and I would strongly advise them to do it, for if they depend on purchasing it, nine times out of ten they will go without it. It is well known that a few colonies will do in an average year fairly well. in almost any locality, but if an attempt is made to increase the number of colonies to any extent, disaster is sure to follow; and even the keeping of a few colonies is given up in disgust. I would therefore insist that unless the locality is an exceptionally good one, but few colonies be kept, by any one person or family, except the

SPECIALIST.

For, if a locality is found, capable of supporting profitably as many as 100 colonies in one yard or apiary, I would as strongly advise the ones so situated to devote their whole time to the production of honey, for I have found by practical experience that it is almost an impossibility to give that close application to details that successful honey production demands, if time, labor and ability have to be given to some other pursuit in connection with it.

HONEY IS A LUXURY

and not a necessity of life, and to command paying prices it must be handled in such a neat, cleanly and attractive manner as to attract the attention of those who are able and willing to pay a fair or even fancy price for a first class article, and to produce such an article, in paying quantities, a beekeeper must be a specialist, and a master of his craft. Too much honey of a low grade is now raised, and being of unattractive appearance and quality it cannot bring a renumerative price. In nearly every case it costs more to raise it, than can be obtained for it, and I contend that the future production of first class honey must be made by the man who, having a good locality, and the requisite knowledge, ability and "knack" devotes his whole time to it, in one word is a specialist. Am I right or wrong?"

some length, the weight of the dis- president (after we know that we

cussion being that the future outlook for honey production is favorable.

Mr. P. P. Collier was, on motion, appointed to serve on the executive committee on the World's Fair subject, the committee to report at 3 p. m.

It was moved that the convention be held over until Friday, and a telegram to this effect be sent to Mr. Gwinn of the World's Fair commission. The motion prevailed.

AFTERNOON SESSION.

The location of the next meeting was declared the first order of business. Independence and Appleton City were proposed, and on a vote Independence was selected.

On motion, the time for holding the fall meeting was placed between the 1st and the 15th of October.

The report of the executive committee was read as follows:

"The committee recommends that we ask the State to give an appropriation of \$5,000 for an exhibit at the World's Fair of the products of the apiary, such as honey, wax, foundation, honey vinegar, bees, hives, sections, honey extractors, wax extractors, etc.

Also recommend that we pay about 20 cents per pound for the amount of comb honey, and 10 cents per pound for extracted honey necessary to make the display, honey to be shipped to Kansas City or St. Louis for inspection and acceptance.

Further recommend that the The subject was discussed at association authorize your worthy will get an appropriation sufficient to justify an effort in preparing an exhibit) to proceed to investigate where he can get the necessary products for the display, and that the association bear the expense of the correspondence.

Also, that the association empower him to call a meeting of the executive committee at any time her deems necessary.

> John Conser. P. P. Collier. C. C. Clemons. J. S. Atkins. G. P. Morton.

The report was, on motion, adopted.

The financial report of the secretary was read, and on motion, it was ordered that the amount due him be paid. A special contribution amounting to \$7.50 was taken to pay the account.

The following questions were taken from the question box and answered:

Q.—What can be done to prevent the use of propolis by the bees?

A.—But little, as our best honey producers are great propolizers.

Q.—What is the best method to prevent increase?

A.—Let the colony swarm once and double back all after swarms.

Q.—What objection have the honey producers to paying 10 per cent. commission for selling their honey.

B.—No objection when commission men give it their special attention.

SOME LIGHT ON THE WINTER PROBLEM. Essay by J. W. Rouse, of Mexico, Missouri, was read as follows: "I have been requested by your worthy secretary to give a paper on the subject as stated. I have been with the members of the State Board of Agriculture in some of their meetings the past winter, and was frequently asked in regard to wintering bees in a cellar. In every case I have advised against doing so.

I have no doubt that if the conditions are right in every particular that cellar wintering of bees would be much the best and most economical. In the first place the bees should have good, wholesome food to winter well in the cellar, and then the cellar should not get too low in temperature, as that would cause the bees to consume too much stores. As they can not take a cleansing flight while confined in the cellar they would very likely contract disease and perish. Again, if the temperature gets too high, it makes the bees very uneasy, and might terminate in the same results as in the other condition described. I am sure that many apiarists having large numbers of bees do not fully understand all the conditions necessary to winter their bees successfully in the cellar, as many of them report great loss, and no doubt a very great many do not make any report.

Bees, to winter well anywhere, should have good, wholesome food, but if wintered outdoors, where they can have an occasional cleansing flight, they can be wintered with better success with inferior or less wholesome food than in a cellar, provided they have some winter protection. A chaff hive is a splendid hive, if rightly made, to winter bees in outdoors, or out of a cellar, but they are so costly that most bee keepers will not procure them, and they are very cumbersome and unfit for use in the summer season. Many use an outside case to go over the hive, which is good, but these cases have to be removed and taken care of during the summer and are of no use until winter comes again. There is a hive made that comes nearer meeting all the requirements to winter bees successfully on the summer stands than anything that has yet come under my notice, namely the Telescope hive.

It is a hive costing very little more than a plain hive and is used as a single wall hive in summer, and by removing the surplus cases, the top body telescopes down over the brood chamber, making a double wall hive for winter. The top chamber or telescope hood should be made at least two inches deeper than the brood chamber, and then a intelligent oversight, have been numerous cushion made of domestic and filled with oats, chaff, or even straw cut up fine, made to fit nice and snug all around, and laid over the top of the frames and then let the telescope hood down over all. With plenty of young bees and even a moderately fair quality of stores, if there are plenty of them, the bees are in a very fair way of wintering well.

This paper is intended for the amateur or beginner. The older and experienced bee keeper will, of course, follow his or her own experience. I believe this is enough to fairly start the discussion on this important question, and I hope to hear from others.

The subject was discussed at length, being condensed by J. H. Jones, of Buckner, as follows: "Prepare your bees well in early fall by feeding, if necessary, with good, wholesome food, and pack well with good packing all around and on top."

The following questions were taken from the question box and answered:

Q.-Should beginners buy bees in box hives, and if so, how many?

A.—Buy the best bees and the best hives you can get.

Q.-What superiority do the Carniolans possess over other bees?

Nothing offered.

"HIVES AND NEW METHODS AGAINST SWARMING AND ITS CAUSES."

"Essay by John Conser, Sedalia, Missouri, was read as follows:

"I am well aware that this is a broad subject, and would cover large space to give a true synopsis of all the secrets not thoroughly understood by many. Whether my ideas will be of any benefit to my hearers here I will leave to yourselves, as bee keepers, to judge. During the last thirty or forty years great discoveries have been made in the natural history and general management of bees, and while the habits and instincts of the honey bee are the same to-day as thousands of years ago, the methods employed to develop and utilize their value, and enable the bee keeper to prosecute his business with and very valuable, because, mainly practical in their application to the ends sought, namely, the improvement of the stock; to acquire the knowledge of the habits of the bee, the better to utilize their labor, hence greater profits, the latter mainly the greater desideratum of the genus mind.

The invention of the movable comb frame hive, introduced by Dr. Langsworth, about 1850, opened up a wide field of study; in fact it was the invention of the age as regards intelligent bee keeping. Upon it has hinged most of the progress that has been made, since by its use we are enabled to go inside the hive and prove those things at which naturalists have hinted. It enables us to practice artificial multiplication of swarms, or prevent natural swarming when desirable.

That bees deprived in any way of their queen had the means to rear another, had long been known, but until lately the knowledge was of little practical value. Now we are enabled to rear queens at will, to become acquainted with their good or bad qualities, and to breed and perpetrate the one or discard the other. And also, if another race of bees are thought to be superior to the ones we are breeding, the movable frame enables us to introduce foreign stock without loss.

Science has demonstrated that to elaborate and build comb causes the bees much labor, and that it is at the expense of a large quantity of honey. Enterprising bee keepers sought to obviate, in some measure, this outlay, and the result was the extractor, whereby the newly closed cells of honey are uncapped, and the frames with combs attached are taken from the hive, the bees brushed off and when placed in the machine and rapidly revolved, emptying the honey from the cells. The combs are then replaced in the hive to be refilled. Thirty years ago, had some timid apiarist ventured to suggest the possibility of making artificial comb, which the bees would readily accept and utilize the same as their own, he would have been a fit subject for a lunatic asylum; but, nearly as long ago as that, the idea took root in the brain of the late Sam'l. Wagner and the result was the production of Comb Foundation that can be attached to the frames and placed within the hive and as readily used by the bees for all purposes as their own. Scientific apiculture is, comparatively, of to-day's creation, yet its pos-

sibilities are encouraging enough to warrant all the careful thought, business acumen and energy, that the best of us can offer. Fortunately, many of the problems obscure so few years ago as to be within the memory of almost all present, are solved, and instead of the doubt, uncertainty and mystery of the past, the greater part of the conditions requisite to success are well known and easily complied with. Yet there are a great many of our best implements that have been tested but little. Bee keepers are cautioned to go slow on new things. We are frequently questioned what should be the coming hive. for all practical purposes. If I would be allowed to give my views on what a hive should be, and how constructed, I would have a hive so simply constructed that it could be put to gether by almost any person. It should be outside dimensions, 20 inches long, 16 inches wide and 10 inches high, tight bottom, plain top, cleated on under side; the frames should be suspended from rabbits, bee space all around. thick top bars, one-half bee space on top below top of brood chamber. The hive or brood chamber should be double walled on sides, dead air spaces behind divisions so made that they could be shifted to any desired space; cases resting on top of hive onefourth inch from brood frames, cases so con structed that the bees are excluded from all parts except top and bottom, to be tiered up to any number, separators used or not as desired. The hive should be eight frame, standard size, to be contracted, expanded and changed without stopping the bees from work. It also should be a fixed frame (or a loose frame when desired by simply one turn of the hand). In this condition it could be blown over on the side and the combs would all be intact; or it could be put into a wagon and hauled over rough roads, and all would be right when set out. The hive should be a non-swarming hive also, with all the above advantages. The hive I speak of is now before the public. Ah! methinks I hear some one say "your hive is patented, and we are cautioned against using patent hives. The large supply dealers do not recommend them." Dear friends, what have we got to-day that is useful and has cheapened the expenses of getting a nice article of honey, that is not or has not been patented. The hive Langsworth, the extractor, the frame, section case, honey knife, smoker, escape, section press, foundation mill, all are patented.

fact that bee-keepers had settled down to the opinion that no one should seek a patent on any invention pertaining to apiculture. I would ask, "why apicultural inventions are singled out from all other inventions as exceptions?" What are the qualities possessed by them that entitle their business to be singled out and distinguished from all other occupations? For, as a general rule, I take it that it is conceded that the patent laws are desirable and beneficial. Whence, then, the destinction? Is it because we are a worse class of men, and are more liable to use patent rights-to impose upon others? I think we would resent that idea. Is it because we are supposed to be more stupid, and therefore easily imposed upon? We would, also, I think, quickly scout that notion. Is it because we are better men both morally and intellectually, so that we to a man are not only ready and eager to accord to every one his right, but also have severally sufficient knowledge, acumen, time for investigation and a judicial cast of mind to enable each one to determine what is the exact right? Then we, as good modest men, should be the last to make the claim. I am at a loss for an adequate explanation, but the last supposition as being the more probable, suggested the following reflections:

A good man may indeed in some circumstances properly say that he means right, and will do right as he sees it; but what an amazing amount of conceit must one be endowed with to enable him to proclaim that even when his own interests are involved, he is always able to discern and do the exact right: or in other words, he may be safely made to judge in his own case.

Yet the whole moral patent idea is without other substantial support than this modest claim. It is an honor to be an inventor. but he may let his invention sleep; he may not know its value; may have but a faint conception of its possibilities. But to be a patentee is better. That means not only that a candle has been lighted, but that it has been taken from under the bushel. It implies not only an invention, but that the inventor has discerned its possibilities and value.

Again, if an article is so simple in its construction and methods of using the same, the experienced bee-keeper has a very good idea of its value in getting a good return for little labor and expense. If a man must pay even so small a sum as five or ten dollars for the Not very long ago it was stated in one of so small a sum as five or ten dollars for the our apicultural publications as an assured privilege of making and using some very im-

portant article, it induces him to more thoroughly investigate in adopting it, and giving it a fair trial before condeming it, after he has got it.

SWARMING AND ITS CAUSES.

This topic seems to be agitating the minds of the wide-awake apiarist, of to day, and well it might. Considering the close competition and prevailing low prices of honey, it behooves us to make every corner cut in producing the most honey with the least labor and capital expended. It is unneccessary to state that the quality must be gilt-edged to compete now-a days, for every live apiarist has discovered that ere this. But to the subject. It is a fact beyond dispute that if the bees of a colony can be kept together with all its increase of young bees and made to work in the sections from the commencement of the harvest, and produce an im pulse for gathering honey the whole season through without any inclination to swarm, more honey could be obtained by such a nonswarming plan than is possible to obtain by letting the bees increase naturally and dividing. But some will say such a thing is impossible; that the greatest entomologist and the most learned apiarists in the worl-i have not discovered it, and should a common beekeeper proclaim that he could accomplish it. he would at once be put down as a fraud trying to swindle the fraternity out of a few dollars. In this day of frauds and humbugs we can not be to careful. While this is all true we should not cry down a thing that might be worth an investigation. Again, it is stated bees will swarm in any hive, because it is nature's way to perpetuate their race; but the apiarist who works his bees for extracted honey, giving them plenty of empty combs to fill with brood and honey at the commencement of the season and continues to do the same during the honey flow does not have any swarming. It is frequently questioned what we shall do to prevent swarming when running for comb honey, as all comb honey producers have more or less swarming. Most of the correspondents to the Journals answer "give the bees plenty of foon to store their honey." That is not a direct answer to the problem. My answer would be give plenty of combs for the queen to do Her nousehold antries, and the Bees will not swarm. " Then why do bees swarm? Simply because the queen has hos empty combs to deposit her eggsa as nus a lisure o Mastexperienced bee keepers know bees secretary and treasurer in care of

will swarm from a barrel one-third full of comb and the balance of the barrell empty almost as readily as they do from our hives run for comb honey: therefore, an empty space is not a preventive against swarming entirely.

We are frequently asked by the novice, as well as by the skilled bee-keeper, what we shall do to prevent the bees getting an impulse for swarming of swarming out. A great specialists say "allow the bees to swarm, manyhive them in a new hive and after two or three days take away all queen cells and put the swarm back to where they swarmed from." This is a method not to be relied upon entirely. Also, three days loss at this time are equivalent to fifteen or twenty pounds of honey. Frequently the bees go to sulking and hang out on their hive six or eight days right in the height of the honey season, and gather very little honey, and when they have cells capped the second time swarm out again. Other bee-keepers say, "take away the queen with two or three frames of brood and start a nucleas swarm." What is the result of this method? Cells are started and when the young queens are hatching we have swarming to our heart's content. In taking away their brood to start muclei we cripple the colony so much, and in the fall we have plenty of queenless muclei in what should have been our big colonies, and the result is large loss in wintering with small colonies to commence the next spring with. No, we do not want methods, but those giving us large colonies in the spring. Those are the stocks that get us our bread and butter.

In conclusion I will say that if I have advanced any idea not thoroughly understood it will be a pleasure to me to explain.

This subject was discussed to some extent, after which Mr. J. West Goodwin, of the Sedalia Bazoo, addressed the Convention on pioneer bee keeping.

It was decided on motion to furnish Mr. Goodwin a copy of the membership Histasof the Associahas not here the former of honey, that is not ry has not here article of honey, that is not ry has not here the taute of a nice haves worth, the tautedry, the frame, section case, honey funife. KOLSERE ONLAND, Monter 100 Several letters addressed to to the

the association were opened and read.

"AN APICULTURAL EXHIBIT AT THE WORLD'S FAIR."

Essay by W. S. Dorn Blaser, was read as follows:

It is very desirable that an exhibit of bees, queens and apicultural implements be made at the World's Columbian Exposition at Chicago in 1893. There are a number of good reasons for this, and why the bee keepers of this state should not only take an interest personally in the matter, but this association, as an association should take the initiative, and by systematic efforts push the matter to a successful issue.

One of the reasons I might present first, is state pride. The grand old state of Missouri, though often called "poor, old Missouri," is not behind hand in the products of the apiary, and for the use of the apiarist; in the growth of natural as well as cultivated honey producing plants; in improvements, developements, and ultimate success in this new and interesting industry. We have a right to be proud of the advancement made by our state in apiculture, and this pride should prompt us to make an exhibit.

But while pride goes a long way in dictating actions, there are other weighty reasons for us to consider. There are bee-keepers and bee-keepers. The first of these are up with and carefully watching the times. They continually look along the line. If one steps forward with a new idea, or improvement, they take up that idea or improvement, sift it, and if useful, adopt it. They succeed and are proud and happy in their success. The other class are grumblingly and croakingly living in the times of thirty to fifty years ago. They talk about their bee gums and king bees, and sneer and laugh at the new fangled ideas, the absurd conglomeration of combs, sections, etc. These need instruction, and exhibition is designed to educate. But, there is another class needing instruction-the great mass of the people. the consumers-and it is far more beneficial to instruct them than the bee gum bee-keepers. I need not say why, for any sensible man will readily see the reason.

Other reasons may be given, but I will let the discussion draw them out. Now what should the exhibit contain? Here, of course, will be encountered the great diversity of orinion. It might be grand to have an im-

mense display of honey of various kinds; an extensive display of bees, and voluminous additions in the shape of implements. But these might also be expensive, and after all, it is not the most imposing displays that give the greatest amount of instruction. The object of the exhibit must be kept in sight, and the display made with the ever present idea to attain that object. If the object can be obtained in an inexpensive way, that way should be selected for no other reason than that of economy.

Would you have a suggestion? I would go back forty or fifty years and side by side I would display the old with the new methods; I would have a collection of bees, representing all the races found in the state; I would have a collection of honey plants-all the honey producing plants indigenous to the state-so arranged that their growth and nature may be seen and examined; I would have a collection of all the various implements used in the industry past and present, and-more especially those manufactured in the state. I would arrange all this so as to afford the best means to instruct, not merely in the methods of handling bees, and the production of honey, but the absolute purity of apiarian products.

Such an exhibit might be made with a limited appropriation. Could I go farther, I would then add the manufacture of supplies, queen rearing, and other means of instruction, all to make the display as imposing and prominent as the means would allow, with, however, the main object in sight to afford all the instructions possible."

The essay was discussed and referred to the executive committee.

"APICULTURAL LITERATURE; ITS IN-FLUENCE AND EFFECTS."

Essay by Dr. Wm. F. Clark. Guelph, Ontario, Canada, was read as follows:

"The word "literature" is a comprehensive one. It includes books as well as periodicals. Apiculture can boast a library of books devoted to the scientific and practical phases of the pursuit. "Langstroth on the Honey Bee," and Quinley's "Mysteries of Bee Keeping," were the pioneer works on the subject, so far as this continent is concerned, and, in their newest editions, continue in the front rank. To them have been added several other publications, notably. Root's "A. B. C. of Bee Keeping;" Cook's Manual of the Apiary;" Newman's "Bees and Honey;" Clute's "Blessed Bees;" a clever book too little known among bee-keepers: and other treaties on special phases of the pursuit, by Dr. Miller, H. Alley, and others. In what may be called its permanent literature, apiculture is well provided for. If, in addition to books of American Authorship, we consider the list of similar works produced in England and other European countries, we shall not only find that there is no scarcity, but, in a literary point of view, no inferiority. These publications are both abundant in quantity and of high quality.

I wish that as much could be said of our periodical literature. I have put myself on record as having asserted, much to the disgust of some of "ye editors," that not one of our bee journals is up to the literary standard of our best daily and weekly newspapers. However much any one may be offended, I cannot take it back, because it is true. The American Bee Journal, which, as the oldest, has had the most time to improve, is not so well edited now as it was in the earlier period of its history, when it was so ably conducted by its founder, Samuel Wagner. There are often grammatical slips and inaccuracies in it; it is too lotty, arrogant and dictatorial in tone; too narrow in spirit, and too intent on glorifying the wonderful man who fills the editorial chair. Gleanings contains many valuable articles, but has too much the impress of A. I. Root's unique personality; is narrow and fanatical in some things; intensely selfish in spirit; and celebrates, with a monotonous frequency, the transcendent virtues and marvellous victories over the world, flesh and the devil of the man who alternately figures in its columns as"Saint" and "Uncle Amos." The Bee Keep ers Guide,"is good as far as it goes; rather limited inextent; blemished with some literary defects; too bitterly anti-Root in spirit, and too much devoted to the business interest of its editor and proprietor.

The Bee Keepers' Review, started by Mr. W. Z. Hutchinson, comes nearest to my ideal of what a bee journal should be, than any other as yet extant on this continent. It is not without its faults, but they are mainly those which time and experience will correct. Mr. Hutchinson does not get offended when these are pointed out, as certain toploftical editors are apt to do, but courts criticism and hails correction, deeming it a friendly act to point out an error in opinion. expression, or grammar. He is both courageous and courteous. So far as I have observed he has never snubbed anyone, or "sat down" on anyone. He is willing to give each and all a fair hearing. An accomplished bee-keeper; a natural-born editor, who takes to literary work as a duck takes to water; a man with the enthusiasm of both his callings-beekeeping and literature-I see in Mr. Hutchinson the rising star of bee journalism; am glad he is already so highly appreciated, and hope—as I believe—that his shadow will never grow less. In the Bee Keepers Review we have the ablest, broadest, most intelligent, manliest and freest exponent of apicultural ideas that has yet appeared in the Western World. These expressions of opinion are spontaneous, unbought, disinterested, and made from no other motive than the promotion of the greatest good of the greatest number of bee-keepers. I have singled out journals, presumably more or less known to western men and women, and my observations concerning them will sufficiently indicate my views on the influence of apicultural literature, to provoke some discussion on the subject."

This essay and its subject were discussed at length, and decided that apicultural literature is essential to successful bee-keeping, and its influence extensive for good or ill.

It was moved, and the motion prevailed, that a school for beginners be established in all future meetings of the association.

Moved that future conventions of the association be held three days instead of two. Carried.

Moved that a part of the second day of conventions be set apart for school for beginners, said school to have preference over all other business on that day. Carried.

"A STATE APPROPRIATION for the collection of statistics and dissemination of information on apiculture."

80

Essay by Hon. J. M. Hambaugh, (member of İllinois Legislature) Spring, Illinois, was read as follows:

"It is with pleasure I have the honor of addressing you in accord with the kind request of your worthy secretary upon the subject of "a State Appropriation for the Collection of Statistics and dissemination of Information in Apiculture." Truly this is a subject that commends itself to the consideration of every fair-minded man who has the weal of his fellow man sincerely at heart.

It is universally conceded that apiculture is one of the legitimate industries of our land, and while it may not rank as high in a financial point of view as some of our sister industries in point of finances invested and annually received and disbursed, yet, when the relationship of our industry is considered with that of horticulture, floriculture, and the many seeds and grasses of our country, to say nothing of the commercial product furnished our markets in the way of honey and bees-wax, we will find, when unbiased investigation is given, the subject of apiculture is one of the most important on the category of industries. All subject matter given in the direction of the dissemination of knowledge upon this important subject will be a boon to humanity, and should be given the widest possible circulation. I am not sure that any argument could be presented. that would insure the clemency and favorable consideration of our law makers upon the simple grounds of the importance of the pursuit in the visible financial consideration of the industry considered within the scope of its own product. It is by no means a new theory that the sexual transmissions of plant life is carried on largely by the visitations of insects during the time of their blooming, but that the education of the masses upon this important subject in the past has been sadly neglected is very apparent, and as we advance in wisdom and intelligence these once mooted questions will become standard facts, and the vocation of bee-keeping will be nurtured as one of the leading and most useful industries in our land.

In order to present this matter in its most impressive form to the members of your General Assembly, you must enlist one of its members in your service who is "thoroughly conversant with the routine of legislative work, and who will be painstaking in every

particular. He must know there is no flaw in his bill as presented, and when it is once consigned to the committee on appropriations, he must be able to show by outside pressure that the bee-keepers are in earnest. There should be a committee appointed by your state society, composed of the representative bee-keepers of your state, to go before that committee in behalf of the bill. The bee-keepers composing the constituency of the various members of the committee on appropriations should also write letters to their members soliciting their vote in its favor. Another very important matter will be to secure the, services of the members of the State Horticultural Society, and have them make an appeal, in person if possible, and if not, by letter, to the committee, which you will find will bear great weight for favorable consideration in the minds of the various members composing that body. It is an'important point to secure as early action as possible on the part of the committee, and should you succeed in having it returned back to the house or senate (as the case may be) with the recommendation "that it do pass," you can consider half the battle won. It should be remembered, however, that every bill presented must go through the same routine in each branch of the legislature: hence the necessity of early action on the part of the committee and having it placed upon the calender. All appropriation bills are granted the right of way over all other bills, hence there is but little danger but some disposition will be made should it ever get out of the committee room."

The subject was discussed to some extent and deferred to fall meeting for further consideration.

The question of an experimental station was discussed at some length and deferred for further consideration at fall meeting.

AFTERNOON SESSION.

The subject of hindrances to bee culture was taken up and discussed at some length. Points such as the following, were offered and discussed: Foul brood; bee paralysis; lack of attention; poor seasons; lack of knowledge; low prices of honey; etc.

The committee on resolutions BEES AND THEIR RESPECTS. presented the following report:

Your committee on Resolutions begs leave to make the following report:

Resolved, that we tender our sincere thanks to the proprietor and management of the Minnewawa Hotel at Pertle Springs for their kind and courteous attention and accommodations to us while with them; and we find that the enviable reputation of the springs as a summer and health resort is not in the least exaggerated.

Resolved. That we tender our thanks to the citizens of Warrensburg and vicinity and the press, for the interest manifested and courtesies extended to our convention while in session.

Resolved, That we tender our thanks to Col. J. West Goodwin. editor of the Sedalia Bazoo, for his presence and well worded address before the convention.

Resolved, that we extend our thanks and gratitude to the Missouri State Board of Agriculture for their kind consideration in publishing our annual report of 1890 and 1891, and for binding same in separate form.

C. C. CLEMONS.

J. S. ATKINS.

J. H. JONES.

The report was unanimously adopted. Adjourned.

New subscribers and old ones renewing can have a warranted golden queen in June with a years subscription to P. B. K. for \$1.15. Have your order booked at once.

C. L. STRICKLAND.

Some bee-keepers may believe that their bees show them guite a degree of individual respect. At the present moment I can not believe such to be the case, for to have bees showing you respect as their special master, would be placing the power of instinct on the plain of reason. That, in this peculiar case, I think, would be perfectly unreasonable. How are you going to teach a creature perfectly destitute of reasoning, as is the case with the bee. The conclusive evidence that bees do not reason is because they have not the faculty; but rather the power of instinct furnishes them information for the preservation of the class in all form. Now certain specific laws govern the bee for their universal preservation-from these they never depart, but under climatic and other minor conditions bees act very differently.

Now to be a bee master you must understand these conditions and under what circumstances some of the conditions will manifest themselves. You know, at times, bees can be handled with impunity: this act manifests the existence of a certain condition not atmospherical. At other times some agency to modify their spirit will have to be used. Simply take an apiary when the bees are in an oppressive condition, then if the keeper thinks his bees will show him respect let him, or her, stalk among them unprotected and see what kind of re-

THE PROGRESSIVE BEE-KEEPER.

ceive. Bee-keepers are supposed want to save that money for someto know what attitudes are the saf- thing else if possible. Well, now, est among the bees. Talk about I believe I have struck oil, or in bossing bees, you simply comply with the governing conditions and your bees will comply with your desire. But mark you, through no diagram, and I give it to the brothrespect on their part. Would smoke subdue bees? If it was not for the result that it causes, not in this world. What is the result? It alarms them, as a natural consequence they fill themselves with honey and become gentle-on their part a compliance with a natural law only.

Some bees are more gentle than others, but these very same bees will sting you, or the Prince of Wales, if you, by chance or otherwise, interfere with their form of government, or inherent condition mark that. The most gentle bees can be made cross by a continual handling in a manner antagonistical to the natural requirement, no order of compulsion will do this: but compliance on the keeper's part must predominate. When you wish to boss bees, simply and gently comply with the laws governing the insect and they are at vour service. Otherwise it cannot be, for love, patience or war.-Peabody. Kansas.

ASHWORTH'S DREAM.

G. H. ASHWORTH.

It seems to me that there is more thought bestowed on the subject of controlling increase than all others, and while the queen and swarm controller is a success it will throw all the working bees in-

spect superior to others they re- costs \$1.25 per colony and we all other words, have solved the problem. You will see my plan and manipulation from the following er bee-keepers to test this season. and report through the journals.



You can see three Hives in the diagram. Nos. 1 and 3 are small hives, say eight frames with entrance at one end. No. 2 is a 12 frame hive with entrance at each end. E. E. E. and E. the entrance ends of the hives are all made and painted just alike. The closed ends are painted red or brown, and the entrance ends white. Now. we have the hives in position and the bees at work in good shape. As soon as the honey begins to come in and the hives are filled up with bees and lots of brood, we will take the queen away from No. 2 and make a swarm or sell her. The fifth day go through No. 2 and exterminate all queen cells; in two or three days more put your super on No. 2, then when you find that the bees are gathering honey nicely, about 10 or 11 o'clock change ends with Nos. 1 and 3.-This move

THE PROGRESSIVE BEE-KEEPER

to No. 2. Let them stand so till Nos. 1 and 3 begin to work nicely, change ends of Nos. 1 and 3 to first position and so on through the honey flow, giving No. 2 plenty of section room and a strong force of vigorous workers.

When the swarming season is over, even up the colonies in stores and give No. 2 a queen and if we want to increase our stock. new is the time to do it.

This is my dream; if it works as I have good reason to believe it will, we will have no use for the automatic, steamwinding, self hives. nor none of the controlling or expanding by means of hatching boxes and tubes with patent cut-offs and all this sort of clap trap fixtures.

It will cost you nothing to try the plan and report the results. But, be sure you understand the plan of management.-Sedalia, Missouri.

THE AMATEUR BEE KEEPER.

By J. W. Rouse is a neat little book of 60 pages, designed expressly for the amateur and beginner in bee keeping. It coves the whole ground, in language easily understood, giving full instructions on all points, and avoiding technicalities and scientific researches. The price of the book is only 25 cents postpaid. It is profusely illustrated. For sale at this office.



To order the best made Goods. For Fine Sections. Foun-dation, Perforated Zinc, Queen-Excluders, and the best Hive for Comb Honey now before the public, order of Dr. Tinker, Prices Greatly Reduced. Z Address DR. G. L. TINKER, for catalogue,

New Philadelphia, Ohio.

DO YOU WANT

Good, gentle and prolific bees? Then get an Albino, or White-Banded Italian Queen. These bees took the premium, both for bees and honey, at the Missouri premium, both fo State Fair in 1891.

A. L. KILDOW, Sheffield, Illinois.



pleasant pastime by use of the B. Taylor Handy Swarm Catcher. (Patent ellowed Ayril 23, 1892.) 1000 taken by or e party on May 19. One order shipped to Scotland May 23. Sure to come into general use. Price §3. each mailed and painted. Six for mailed and painted. Six for

\$15. in the flat. Our catalogue tells all about it. Write for it. We make the best bee hive on earth. WESTERN M'FG. CO., SPRING VALLEY, MINN.



Also Bee Hives, Sections, Smokers, Extractors, Bee Veils and all Bee Supplies most needed. Circular and samples free. Address,

Chas. Dadant & Son, Hamilton, Hancock county, Illinois.

Please mention this paper.

SECTIONS.

Prime White, one piece, 44x44x1%, \$1.75 per 560; \$3.25 per 1000; \$6.25 per 2000; \$9.00 per 3000. Write for prices on large lots.

FOUNDATION.

Dadant's make, medium brood, per lb, 48 cents; extra thin surplus, per lb, 68 cents. Write for prices on large lots.

DOVE TAILED HIVES.

DOVE TAILED HIVES. The "Higginsville" (shipped from Higginsville, Mo.) 1/3 story for comb honey, flat......5, \$4 50; 10, \$8 00 ² Other styles furnished. We handle all other supplies such as wire, wire nails, **T** tins, new style tin rabbits. tin and wood separators, bee escapes, smokers, honey knives, feeders, perforated zinc, drone traps and vells. Our prices are the same as A. I. Root's, or Leahy Mfg. Co. Price list ready. Address, **E. F. QUIGLEY, Unionville, Missouri.**

WANTED-We want Bee-Keepers desiring neatly and finely printed Stationery to write the PROGRESSIVE BEE-KEEPER for prices. Our job printer has had sixteen years' experience and is a dandy.

and Italian Queens. 101110

Headquarters for the Albino bees. If you desire pleasure in working among bees and want large yields of Honey; then buy those beautiful tested Albino Queens from my One Hundred Dollar Queen. Untested Albino Queens from same Queen m season, also tested Albino Queens from same Queen m Season, also tested and untested Italian Queens in season. For circulars, Address

D. A. PIKE.

Smithsbury, Washington, Co., Md. Please mention this paper.

FRIENDS, TRY ONE

Of our Italian queens, 3 or 5 banded stock. Send ad-dress for free catalogue of bee-keepers supplies to Jas. W. S. RUPE, Mt. Vernon, Illinois, or JOHN H. RUPE, Williamsburg, Kansas.

GOLDEN CARNI-ITALIANS.

The largest, most beautiful, gentle and industrious bees, try them and be convinced. Queens \$1.00 each. Sample bees 10 cts. Send for circular giving full de-scription. J. A. ROE, Union City, Ind. scription.

THE PROGRESSIVE BEE-KEEPER.

5-BANDED ITALIANS!

The following is clipped from the A. B. J., page 119, and 34 of the Queens mentioned were reared by us. "I have 24 colonies of bees, and I tell you they are 5-banded Golden Italians—and they are the best workers of all bees I ever saw. They are also the pretiets bees, and the yellowest drones I ever saw. They will work on red clover, and if there is any honey to be had, they will have it if they have to steal it. I know they robbed me of 40 pounds of honey after the honey-flow stopped. I pur-chased 5 warranted queens has year, and they were all just as the queen-breeder represented.—R. D. Davis, Commercial Point, Ohio, Jan 8, 1892."

We have established an aplary in Texas to supply our customers with

EARLY QUEENS! One Warranteed Queen, March and April......\$1 25 6 00

May Six "Your Queens have given the best results of any re-ceived this season.-E. F. QUIGLEY, Oct. 13, 1891."

"Will order some early Queens of you .- E. F. QUIGLEY

Jan. 30, 1892.

SEE! MCircular Free.

S. F. & I. TREGO. Swedoua, Illinois.

Please mention this paper.

TEXAS TO THE FRONT!

I have a fine lot of Tested Queens, 3 banded Italians that I offer at \$150 each in March and April. I make this offer to get the use of my 4 frame nuclei. Untested, either 3 or 5 bunded races, March, April and May, 1.00 each; #fter. 75c; \$4.20 for six; or \$8 per dozen. Contracts made with dealers to ship certain number weekly. A few fine breeders, 3-banded, \$4 each; 5-banded, \$5.00. I have changed my postoffice address from Farmersville to Floyd, Texas; Money Order office, Greenville.

Floyd, Hunt Co., Tex.

JENNIE ATCHLEY.

BUSINESS QUEENS

Improve your stock, get the best. I have them, reared from "Golden Italian Honey Queens," Albino, and im-ported Mothers, all reared by the best Natural Method, under the most favorable condition, at \$1.00 each, 6 for \$4.50-safe arrival guaranteed. 10 per cent off for all orders booked before Apirl 1st. Pay when Queens are ready, in May and June. Queens in July and August 75 cents each.

E. R. GARRETT, Appleton City, Missouri.

Please mention PROGRESSIVE BEE-KEEPER.



From May 20th to June 20th each \$1.50. After the 1st of June there will be two breeding yards and Carniolan or Italians, will be sold each,.....

~ \$2.00 After the 20th June tested queens will be sold from either yard at \$1.00. For explanation send for circular JOHN ANDREWS,

Patten Mills, Washington, Co., N Y Mention the PROGERSSIVE BEE-KEEPER.

SEND YOUR NAME

on a postal card for our Catalogue of Hives. Smokers, Crates. Cans, Extractors, Comb Foundation, etc. Big discount for early orders. Send quick.

J. W. ROUSE & CO. Mexico, Missouri.

send 25 cents for the Amateur Bee-Keeper, a book designed for beginners by J. W. Rouse, tells about Hives. Transfering, Swarming, Introducing Queens, how to get out Bees-Wax, etc., Illustrated. Sent postage paid on receipt of price.

Please mention this paper.





Eight years careful breeding. 1048 Queens sold and never heard of but two mismated. Queens large pro-lific and yellow Warranted 1.00; 6 for 151. 0-1 ers booked now. Ten per cent off for cash before Feb. 1. W. H. Laws, Lavaca, Ark.

THE NEBRASKA BEE-KEEPER!

A Wide Awake Journal devoted to Bees, HONEY and the Home Garden. 50 cents per year. Published by

STILSON & SONS.

who manufacture and deal in Apiary Goods, Bees and Honey, and sell Garden Seeds of our own raising. Lists Address, BEE-KEEPER. free. York, Nebraska,

Please mention this paper.

DOVETAILED HIVES. QUEENS Ready to mail. Safe arrival guaranteed. Finest breeding Queens, \$4.00. Tested \$2.00. 3 for \$5.00. Untested in April, 1.00; 5 for 5.00 or 9 00 for 12. Send for circulars of

Hives, Root Manufacture.

Smokers. Foundation, Extractors, Etc. Make money orders payable at Clifton. Address

COLWICK & COLWICK. Norse, Bosque county, Texas

WHAT do you need for the coming season. We tailed hives, enow white sections, comb founda-tion, brood frames, separators, T tins, new tin rabbits, perforated zinc, smokers and feeders, veils, queen cages, drone traps, bee secapes, wire nails, new wire tacks, honey and wax extractors, uncapping knives, shipping cases, honey cans, bees and queens. Price list shipping cases, honey cans, bees and queens. Price li free. E. F. QUIGLEY, Unionville, Mo.

THE CANADIAN BEE JOURNAL. POULTRY JOURNAL, Edited by D. A. Jones. Edited by John Gray.

\$1.00 A YEAR.

\$1.00 A YEAR.

These are published separately, alternate weeks; edited oy live, practical men and contributed to by the best writers. Both journals are interesting and alike valuable to expert or novice. Both improved and illustrated. Address. BEETON, ONT., Canada.

THE PROGRESSIVE BEE-KEEPER.

